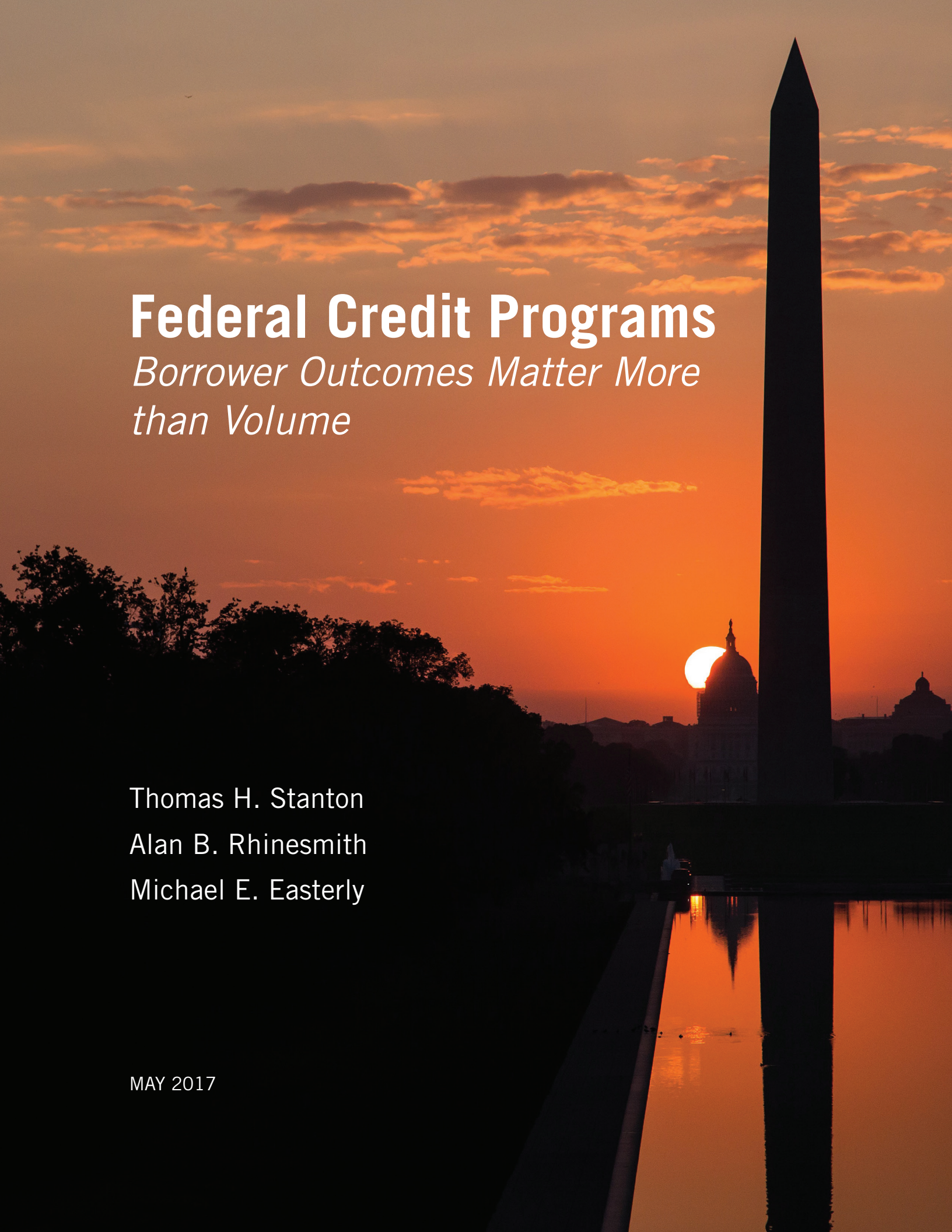

Federal Credit Programs

Borrower Outcomes Matter More than Volume

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Contents

Summary

- **There are disturbing signs that the country is overly burdened with federal debt.** The Department of Education projects that lifetime defaults on this year's set of loans to undergraduates will exceed 25 percent. Meanwhile, one in five disadvantaged FHA borrowers (with a FICO score of 620) defaults on his or her single-family mortgage loan. High default rates can harm many borrowers that a program is designed to help. Today's high volumes of federal credit raise the question whether, at least for some categories of borrower, perhaps too much credit is being extended.

- **Despite such concerns, credit programs continue to grow in volume.** Federal credit programs need to focus on outcomes so that they can strike a balance between providing credit for those who need it and not harming borrowers by burdening them with debt they cannot pay back. When properly targeted, credit programs provide many benefits, filling in where private lenders may not be serving the market well, overcoming discrimination, and conveying a subsidy for especially important classes of borrower (veterans) or public purposes (education). *It is time to change the focus from volume of credit an agency extends to the outcomes it achieves.*

- **Defaults cause great harm to borrowers.** Borrowers with student loans cannot avail themselves of bankruptcy protections that allow debtors to reduce their debts to manageable proportions. Bankruptcy laws also disadvantage individual mortgage borrowers by precluding writing down a mortgage when the home has lost value. Although credit can provide needed support for small businesses, students, and homebuyers, for example, while not overburdening these borrowers with too much debt, it can be hard for some programs to hit that "sweet spot." By focusing on their riskiest loans to measure borrower benefits and costs—and adjusting their standards up or down—credit program managers can help assure that the benefits to creditworthy borrowers outweigh the costs to those who default. (Some programs, most notably student loans, may not have authority to do this, except indirectly.)

- **Ensuring that lenders and other program partners originate and service loans properly is one major factor in preventing unnecessary defaults.** Laws, regulations, and operating procedures that set clear standards and permit application of a series of graduated sanctions for poor performers are also needed.

- **Some programs collect and use data about borrower outcomes, but most do not.** Good-quality information is necessary to help with design and management of federal credit programs. Combining this information with other datasets, such as at

Census or the IRS, can help to reveal outcomes, in terms such as income, wealth, children's education, of programs such as student loans, home mortgage loans, or small business loans. Some agencies may need added authority to be able to collect such outcome-related information.

- **Pricing credit according to risk and having lenders bear some of the default risk are additional reforms worth serious consideration.** Pricing credit according to risk could send a signal to less creditworthy borrowers about the need to save before they incur debt burdens that they may not be able to handle. The lower default rate of VA home loans compared to FHA-insured mortgages suggests the value of giving lenders "skin in the game" so that they—rather than primarily borrowers and taxpayers—bear greater costs of defaults. Counseling borrowers, both before they take on debt and in case they begin to become delinquent, can also help to avert defaults.

- **Many credit agencies find themselves in a squeeze between increasing volumes of credit they provide and seriously constrained administrative budgets.** Risk-based budgeting is a way for credit agencies to prioritize their resources to protect their core missions. Less important activities need to be pared back if necessary.

- **Budgets for administrative costs should be combined with credit subsidy amounts.** This would create an incentive for federal agencies to make cost-effective investments in staff, systems, and processes, if these could be offset by savings from lower defaults.

- **Credit programs need to place increased emphasis upon evaluation, experimentation and pilot programs.** Good evaluation can help policymakers and managers determine need and target programs to the most beneficial outcomes for taxpayers and borrowers. Although some increase in authority may be required, experiments and pilot programs are another way for credit agencies to focus their efforts on achieving the most beneficial results.

- **Treasury and OMB have important roles to play in assuring credit agencies have the authority needed to evaluate and manage their programs effectively.** Perhaps the most important value that Treasury and OMB can add to federal credit programs is to provide cross-cutting administrative guidance and support legislation that provides agencies authority to collect and evaluate outcome-related information, engage in experimentation and pilot programs, and improve oversight of lenders and other program partners. The Federal Credit Policy Council could also be strengthened as a forum for credit agencies to exchange information about promising practices.

This report and working papers will be posted at www.thomas-stanton.com.

I. Introduction

Federal credit programs have grown to massive size. There are disturbing signs that some borrowers are becoming overly burdened with federal debt. Federal credit programs need to focus on outcomes so that they can strike a balance between providing credit for those who need it but not harming borrowers by burdening them with debt they cannot pay back.

The federal government extends credit through loans and loan guarantees to help support important sectors of the economy. Among the largest federal credit programs are those serving homebuyers, students, and rural borrowers. Federal credit helps millions of people buy homes, often their first homes, fund their educations, and own their own farms. Communities benefit from federal loans for infrastructure or disaster recovery, and businesses—often small businesses—can establish themselves and grow thanks to federal loan guarantees.

Yet there is cause for concern. Figure 1, below, shows a doubling of federal direct loans and loan guarantees, from $ 1.5 trillion in 2007 to $ 3.4 trillion today, or over $ 10,000 for every man, woman, and child in America. The federal government extends this credit through over 100 different programs administered by some 20 different agencies.[1] There is a wide range of federal credit outstanding, in terms of purposes of each program and effects on borrowers. Today's high volumes of federal credit raise the question whether, at least for some categories of borrower, perhaps too much credit is being extended.[2,3]

This report looks across federal credit agencies and programs to assess strengths and limitations of credit as a policy tool, as well as

[1] As tabulated in the *Federal Credit Supplement to the Budget of the U.S. Government*, FY 2017. Government loan and loan guarantee programs are in addition to credit support provided through other mechanisms such as the tax exemption for state and local bonds and government backing of Government-Sponsored Enterprises (GSEs) such as Fannie Mae and Freddie Mac.

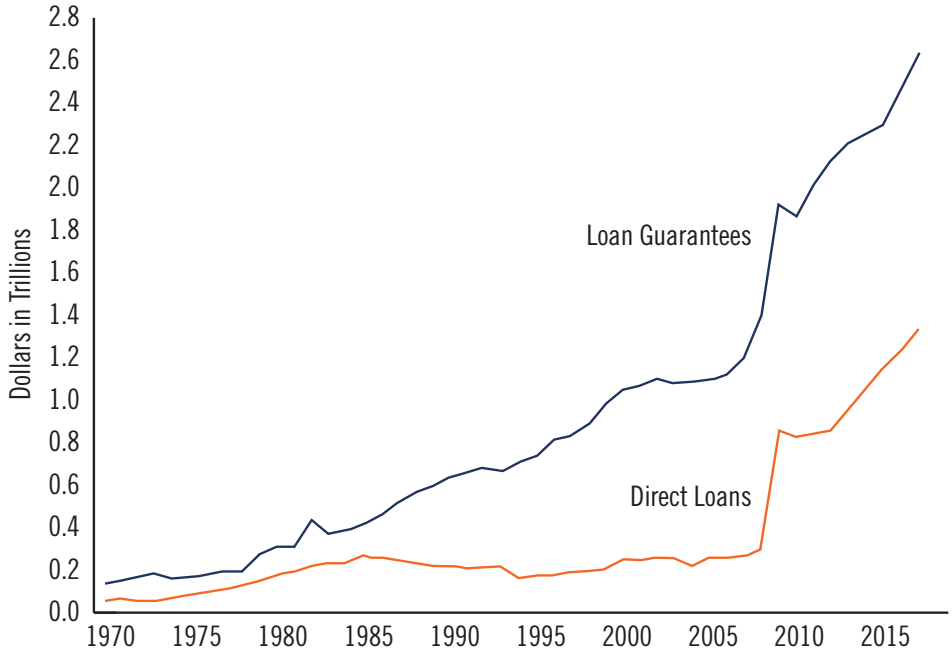
[2] This is not to downplay the importance of volume of federal credit in some circumstances. For instance, as discussed in Part II, after the financial crisis of 2008-09, and in the absence of stronger fiscal stimulus, federal credit programs played a valuable countercyclical role.

[3] By contrast to the expansion of individual indebtedness from federal programs, overall household indebtedness seems sustainable, especially at today's low interest rates. Household debt relative to gross domestic product peaked in early 2008 at nearly 100 percent and has since fallen steadily to just under 80 percent today. Even with the recent decline, however, total household debt remains at historically high levels.

promising practices and lessons learned that can help to inform policymakers, budget officials, and program managers. The conclusion of this report is easily summarized: federal credit programs need to focus on outcomes rather than outputs. Instead of measuring success by the volume of credit they provide, programs need to ask: how much did our work improve circumstances for our borrowers? Above all, programs need to avoid extending credit to borrowers who cannot handle their debt burdens; this requires attention to the benefits and costs of credit for the least creditworthy borrowers that a program serves. These borrowers have the greatest likelihood of defaulting and suffering the harm that defaults can cause. While borrower defaults provide a useful proxy for assessing costs to program borrowers, agencies also need improved access to outcome information, such as projected incomes of students who incur indebtedness to attend different kinds of educational institution and projected family health, education, and income of borrowers of differing creditworthiness who take out federally supported mortgages. Generating and applying such information may involve strengthening agency capacity to conduct program evaluations and cross-agency collaboration, such as between credit agencies and the Census Bureau.

The authors are grateful to the Laura and John Arnold Foundation, and our project officer Kathy Stack, for the generous grant provided to the American Society of Public Administration that allowed us to undertake

Figure 1. Face Value of Federal Credit Outstanding



Source: "Face Value of Federal Credit Outstanding," Chart 20-1 of the *Budget of the United States Government, FY 2017, Analytical Perspectives*, p. 329.

the research for this report. In preparing this report the authors have:

1. Conducted over 40 interviews with federal credit managers, financial officers, and others with extensive knowledge of federal credit programs;
2. Reviewed literature and prepared background papers on the history, the economics, and the budget and federal credit programs;
3. Prepared an interim report; and
4. Convened a one-day roundtable meeting of selected credit program officials from nine different federal agencies and departments and two experts from the MIT Golub Center for Finance and Policy and our Arnold Foundation project officer. The roundtable and its robust discussion helped us to gain insight about the recommendations of our interim report and allowed for the exchange of promising practices among the participants.[4]

We are grateful to all of the people who kindly contributed their knowledge and insights in interviews, and who participated in the credit roundtable. We would like to express special thanks to Douglas Criscitello, Charles Tansey, Robert Van Order, and a reviewer of an earlier draft of the executive summary. While this report builds on their collective expertise, we hasten to add that we three authors are solely responsible for the information and recommendations that we present.

Several themes emerge from our research. Each relates to the importance of a programmatic emphasis on borrower outcomes:

1. Because defaults harm borrowers that credit programs seek to serve, agencies should focus on borrower outcomes rather than merely the volume of credit.
2. To be most effective, federal credit programs should focus on borrowers who (a) are not well served by the private credit market but (b) have the capacity or potential capacity to repay loans that they take out.
3. While loan defaults are a useful measure of borrower harm, agencies need to adopt more sophisticated approaches to evaluating both the benefits and costs of programs for particular kinds of borrowers that they serve.
4. Federal credit agencies need to innovate, both to keep up with technological and market developments, and to develop alternative ways to assist their constituencies.
5. Budget pressures increasingly deprive federal credit managers of sufficient resources to prudently manage the volume of credit. Focus on borrower outcomes rather than volume of credit can help to alleviate some of these pressures.

The larger political context of federal credit programs cannot be ignored. Implementation of federal credit programs relies heavily on private sector intermediaries, such as lenders

[4] There is precedent for nonfederal forums to encourage the exchanging of promising practices; federal credit program conferences took place in 2006 and 2015, sponsored by Deloitte and PwC respectively.

in a guaranteed loan program, contractors in a direct loan program or specialized intermediaries such as schools in the student loan program. Sometimes, and especially when borrowers are relatively weak politically, these intermediaries and other special interests can wield more policy influence than the borrowers themselves. The result can be distortion of a program towards serving interests of intermediaries, even at a cost of serving interests of borrowers. This is part of the political process.[5] The problem becomes more acute, however, when it causes significant harm to beneficiaries that programs are supposed to help.

Emphasis on borrower outcomes can make a major difference in a program's benefit-cost equation. Especially important is the need to generate and publish information about outcomes. Whether or not policymakers ultimately make program adjustments, it is important that they support the ability of agencies to collect and inform decisions with data about outcomes. Sometimes influential stakeholders encourage legislation or other limitations on the ability of agencies to collect or publish data about outcomes that could help borrowers. Agencies may need support from Treasury and the Office of Management and Budget (OMB) to help overcome impediments to collecting useful data.

This final report is structured as follows: this section provides the introduction. Section II provides background on federal credit programs including purposes that credit programs serve most effectively and the need to strike a balance between extending too much and too little credit. Section III recommends ways of improving borrower outcomes, by targeting credit to the most useful purposes and protecting borrowers, especially the least creditworthy borrowers, from the harm that defaults can cause. Agencies need to adjust credit criteria to increase overall benefits to borrowers while reducing harm from taking on too much debt. Section IV discusses ways to improve program outcomes, including addressing constraints on administrative budgets that threaten the ability of agencies to manage increasing volumes of credit they are called upon to provide. Section V suggests ways that Treasury and the Office of Management and Budget can increase support of federal credit programs by promoting the sharing of promising practices, providing new opportunities for shared services, and helping, if necessary through the legislative process, to improve access to data, program evaluation, and program performance. Section VI specifies actions that individual credit agencies, Treasury, OMB, and stakeholders, can take. Section VII concludes.

[5] Thus, Elizabeth Rhyne conducted a survey of supporters of the SBA's Section 7(a) business loan program for her doctoral dissertation at the Kennedy School of Government. She found that primary supporters of the program were the House and Senate Small Business Committees, followed by commercial banks that originated and serviced the SBA-guaranteed loans, with small business borrowers being a generally absent support group: "First, small business is not a well-directed political force. There are too many small businesses, with interests and political views too diverse…Second, to the extent that small business is an effective political force, it channels its energies largely towards ends other than support for SBA's credit programs." Elizabeth Holmes Rhyne, *Small Business, Banks, and SBA Loan Guarantees*, Quorum Books, 1988, pp. 21-22.

This report is accompanied by background papers on three subjects: (1) Economics of Federal Credit Programs, (2) History of Federal Credit Programs, and (3) Credit Programs and the Federal Budget Process. These papers are available on request from the authors of this report.

II. Background: How Federal Credit Programs Work

A. Public purposes of federal credit programs

When properly targeted, credit programs provide many benefits, filling in where private lenders may not be serving the market well, overcoming discrimination, and conveying benefits for especially important classes of borrower (veterans) or public purposes (education).

Figure 2, below, from the federal budget for the 2017 fiscal year, summarizes the volume of credit outstanding in each major federal credit program in the 2015 fiscal year, the latest year for which complete information is available. The largest direct loan program is the Federal Direct Student Loan Program, and the largest loan guarantee program is Federal Housing Administration (FHA) mortgage insurance, which backs a variety of types of mortgage loans. Because student loans and FHA single-family mortgage insurance are by far the largest, many examples in this report draw upon experiences of those programs.

Federal credit programs generally serve at least one of four public policy purposes. Three relate to different types of market imperfections while the last arises in situations where credit is a particularly advantageous public policy tool:

1. They address a particular market failure or gap, typically caused by asymmetries in information.
2. They improve resource allocation in the overall economy.
3. They help to overcome the effects of discrimination in the credit markets.
4. They provide a means to convey a subsidy to help achieve a particular public policy objective or assist a particular category of borrowers.

Individual federal credit programs can involve several purposes. Although they need not convey a subsidy to achieve one or more of the first three objectives, actual implementation of a program often involves subsidizing an activity as well as addressing a market imperfection. Consider each purpose in turn.

Addressing market gaps

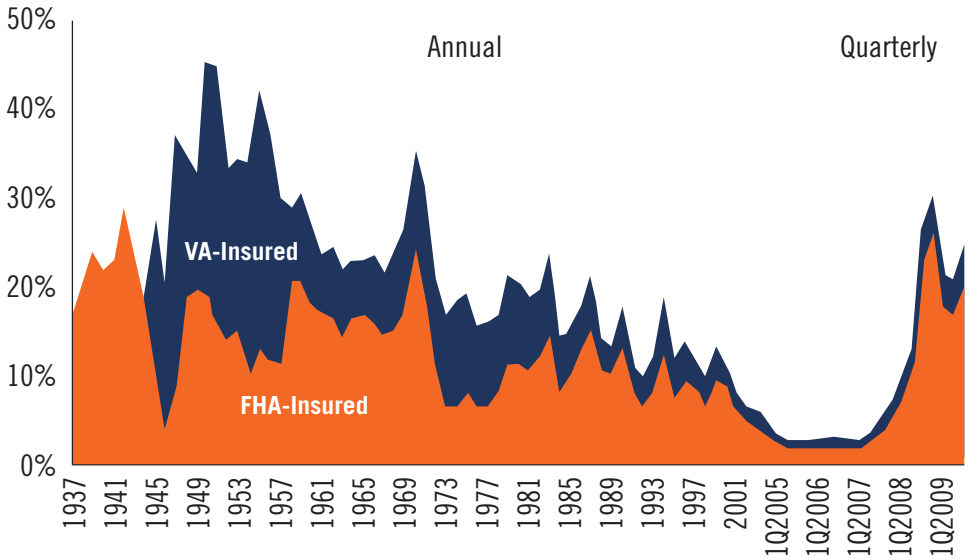
The need for federal intervention in the credit markets is often justified on the basis that

Figure 2. Outstanding Direct Loans and Loan Guarantees *(In billions of dollars)*

Program	Outstanding FY 2015
Direct Loans:[1]	
Federal Student Loans	839
Education Temporary Student Loan Purchase Authority	77
Rural Utilities Service and Rural Telephone Bank	52
Farm Service Agency, Rural Development, Rural Housing	55
Export-Import Bank	23
Advance Technology Vehicle Manufacturing, Title 17 Loans	16
Housing and Urban Development	19
State Housing Finance Authority Direct Loans	8
Transportation Infrastructure Finance and Innovation Act Loans	11
Disaster Assistance	6
International Assistance	3
Public Law 480	3
Troubled Asset Relief Program (TARP)[2]	1
Small Business Lending Fund (SBLF)[2]	2
Other direct loan programs[2]	29
Total direct loans	**1,145**
Guaranteed Loans:[1]	
FHA Mutual Mortgage Insurance Fund	1,123
Department of Veterans Affairs (VA) Mortgages	462
Federal Student Loan Guarantees	220
FHA General and Special Risk Insurance Fund	149
Farm Service Agency, Rural Development, Rural Housing	134
Small Business Administration (SBA) Business Loan Guarantees[3]	106
Export-Import Bank	62
International Assistance	24
Commodity Credit Corporation Export Loan Guarantees	3
Title 17 Loan Guarantees	3
Government National Mortgage Association (GNMA)[3]	……
Other guaranteed loan programs[2]	13
Total guaranteed loans	2,300
Total Federal credit	**3,445**

[1] Excludes loans and guarantees by deposit insurance agencies and programs not included under credit reform, such as Tennessee Valley Authority loan guarantees. Defaulted guaranteed loans that result in loans receivable are included in direct loan amounts.
[2] As authorized by the statute, table includes TARP and SBLF equity purchases, and International Monetary Fund (IMF) transactions resulting from the 2009 Supplemental Appropriations Act. IMF activity will no longer be reflected in this table as of the end of FY 2015.
[3] To avoid double-counting, outstandings for GNMA and SBA secondary market guarantees, and TARP FHA Letter of Credit program are excluded from the totals.
Source: "Estimated Future Cost of Outstanding Direct Loans and Loan Guarantees," Table 20-2 of the *Budget of the United States Government, FY 2017, Analytical Perspectives*, p. 330.

Figure 3. Countercyclical Role of FHA



Note: From U.S. Department of Housing and Urban Development (1935-1997), Freddie Mac, and Inside Mortgage Finance (1998-present), courtesy of Ed Golding.
Source: Robert Van Order and Anthony M. Yezer, "FHA: Recent History and Future Prospects," *Housing Policy Debate*, vol. 24, no. 3, pp. 644-650, at p. 645.

such markets are failing to perform a normal market function of supplying credit. One prominent example of such a situation arises when recessions or more severe economic contractions cause serious disruption in financial markets. During the Great Depression of the 1930s, for example, the Roosevelt Administration developed a combination of programs to help revive the mortgage market. The Federal Housing Administration's (FHA) single family mortgage insurance program was a prominent feature of this effort. Loss of confidence by private lenders meant that the private sector was failing to serve the credit needs of thousands of prospective homebuyers who in fact had the creditworthiness to repay mortgage loans. FHA stepped into the breach by providing federal mortgage insurance and thereby restoring lenders' confidence that they could lend to creditworthy borrowers with the assurance of being repaid.

The FHA mortgage insurance program has continued to be an important element in the government's efforts to combat credit contractions since the 1930's. Figure 3, below, shows changes in FHA and VA market share of mortgage lending from the 1930s to the recent financial crisis. Of particular note is the way that FHA market share receded in the 2000s as the housing bubble inflated and private subprime mortgages took market share from FHA. When the bubble burst, FHA again increased market share to support the home mortgage market.

More generally a market gap or imperfection can arise when creditworthy borrowers cannot

obtain access to credit on terms consistent with their level of credit risk. Economists explain this type of market imperfection in terms of asymmetric information: borrowers may have more information about their ability and willingness to repay a loan than the lender is able to obtain or verify.[6] In such situations, government intervention to make or guarantee lending may lead to economic outcomes whose value to society as a whole exceeds the cost to taxpayers in supporting the credit.

One commonly cited example of this form of market failure or "credit gap" occurs in the case of small business lending. Banks may have difficulty assessing the riskiness of a loan to a small business or it may be too expensive to conduct such analyses relative to the size of the loan. Small, untried businesses may lack the financial track record needed to ensure their creditworthiness. By guaranteeing loans for a large number of small businesses each year, the Small Business Administration (SBA) can achieve economies of scale, meaning that fixed administrative costs of making small business loans are spread over a sufficient volume to minimize the cost per loan. This, in turn, leads to a total loan portfolio composed of loans that pay off with an average loss rate that is within an acceptable range and budget impact. Once a small business establishes its track record and creditworthiness with an SBA loan, it then can graduate to obtain loans from a commercial lender.

Another example relates to higher education. Private financial institutions have a demonstrated record of not being willing to lend to borrowers who lack a credit record or collateral that can be feasibly repossessed in the event of default. But that is precisely the situation that confronts a young student who, after years of advanced education and training and when he or she embarks on a career with good income prospects, may be quite able to repay a loan. Yet private lenders are unable to ascertain which students will prove to have such reassuring prospects. Of course, supporting college education loans can entail other public purposes as well, such as assuring a highly trained workforce and increasing our country's overall standard of living.

Federal support for agriculture and rural loans was initially justified on the grounds that, especially in sparsely populated parts of rural America, there existed a scarcity of lenders. This problem, however, may have been exacerbated by state and federal laws that limited branch banking. The widespread uptake of information technology combined with changing banking laws appears to have largely eliminated this particular market gap.

Improving resource allocation

Extension of credit can be an attractive means of addressing cases in which a market econ-

[6] Lenders could charge higher interest rates to reflect their incomplete understanding of the relative risk of lending to a particular class of borrowers. But at such higher interest rates only the very riskiest borrowers may be willing to take out a loan. This, in turn, would cause lenders to raise rates even further. The end result is that there may be no interest rate at which lenders and a particular class of borrowers are willing to engage in a credit transaction, despite the fact that at least a portion of the borrowers in the market should be able to obtain financing if lenders had a full and accurate understanding of the likelihood of repayment.

omy fails to invest sufficient resources. In such cases the social benefit of allocating additional resources to an activity exceeds the cost to taxpayers. Typical examples are infrastructure, education and alternative energy technologies. These are not necessarily cases of pure public goods in which there is a socially desired product or service that the market does not provide because it cannot charge a price to individual consumers, that is, the "free rider" phenomenon. But there is an element of public good in the justification for these types of programs because, if left to the market, the socially optimal amount of spending or investment will not occur.

Public infrastructure investments such as limited access highways and bridges are often cited examples of using credit to correct this particular type of market failure. Although technology is making it increasingly feasible to impose tolls on infrastructure users, there may be considerable reluctance by private investors to undertake many infrastructure projects, especially those that would produce benefits, such as reduced congestion and travel times, throughout a region and not just for those using a particular road or bridge.

Similarly, investments in higher education may produce broad social improvements for society as a whole, not merely for those who pursue advanced education. Yet, left to the private market, the total amount of investment in higher education by our country's citizens may be suboptimal not only because of the market gap issue discussed earlier, but also because society as a whole will benefit from an increasingly skilled workforce.

Investments in advanced research and technology present yet another example of a possible case of suboptimal investment by the private economy. For example, one program designed to overcome what policymakers believe is a market imperfection is the title XVII program of the US Department of Energy (DOE). The enabling legislation for this program, "Loan Guarantees for Projects That Employ Innovative Technologies," supports the extension of credit for such purposes as alternative energy technologies that the private markets might not provide, while also containing provisions intended to help protect taxpayers from losses.[7] To carry out its demonstration mission, the program has begun to collect data on questions such as how the credit market has developed and whether the government has ceased to be the only source of funding for its projects.

It should be acknowledged that achieving this resource allocation improvement objective using a loan or loan guarantee program can be difficult. While the public objective is to improve resource allocation by supporting an increment of additional investment and spending, a large portion of the lending involved—and, usually, a subsidy as well—may

[7] The intended demonstration nature of the program is seen in Section 1702(d) of the enabling legislation:
"(1) IN GENERAL.—No guarantee shall be made unless the Secretary determines that there is reasonable prospect of repayment of the principal and interest on the obligation by the borrower.
"(2) AMOUNT.—No guarantee shall be made unless the Secretary determines that the amount of the obligation (when combined with amounts available to the borrower from other sources) will be sufficient to carry out the project."

simply go to supporting the level of activity that would have occurred even in the absence of the government program.

Overcoming discrimination

The credit markets have had a checkered history with respect to discrimination, especially on racial or ethnic grounds. For decades, African American homebuyers had difficulty getting approved for mortgages because of racist practices in housing markets. Lenders would redline entire neighborhoods, especially in center cities, and refuse to make home loans in those areas.[8] Discrimination may continue, even in the absence of any discriminatory intent, once patterns become ingrained. In this case, simply banning discriminatory practices could potentially be less effective than overcoming redlining them through a government program.

Unfortunately, the government's track record in using federal lending to overcome discriminatory practices has been mixed. For many years, the FHA mortgage insurance program, for example, was administered in a manner that supported, rather than combatted, housing discrimination. In recent decades, however, FHA mortgage insurance has served to ensure loans will be made to minorities and in impoverished neighborhoods where conventional private lenders have been less willing to lend.

Similarly, SBA's 7(a) small business loan program and Section 504 commercial loan program have both made loans to minority and other disadvantaged borrowers at rates above those undertaken by comparable private sector lenders. SBA accomplishes its objectives of serving underserved markets and populations—including minority, veterans, and women—by making smaller loans and loans with lower fees than those typically made by the private sector.[9]

Conveying subsidies for particular public purposes

A final purpose for which the federal government extends support for credit transactions is to convey a subsidy to promote a particular objective or aid a particular segment of the economy. The classic public purpose of this kind is homeownership. The government promotes homeownership because policymakers contend that owning a single-family home can have valuable social benefits:

> "You want to reinforce family values in America, encourage two-parent households, get people to stay home? Make it easy for people to own their own homes and enjoy the rewards of family life and see their work rewarded. This is a big deal. This is about more than money and sticks and boards and windows. This is about the way we live as a people and what kind of society we're going to have."[10]

[8] See background paper on "History of Federal Credit Programs" for further detail.
[9] Small Business Administration, *FY 2017 Congressional Budget Justification and FY 2015 Annual Performance Report*, pp. 94-102.
[10] President William J. Clinton, "Remarks on the National Homeownership Strategy," June 5, 1995.

A particular argument for homeownership is that it represents a form of forced savings: While low-income borrowers would have a high propensity to spend on current needs, the single-family home is thought to provide one of the few avenues for them to build wealth.[11]

It should be noted that government support for homeownership through intervention in the credit markets extends beyond the FHA and VA mortgage guarantee programs. Generous tax benefits are provided for homeownership, and there are several small grant and direct subsidy programs as well. In addition, the federal government has used loan guarantees, deposit insurance, and support for large government-sponsored enterprises (GSEs) to assure the availability of 30-year fixed-rate mortgages in the United States. These mortgages are a particularly risky form of credit not found in most other countries and would likely not be widely available in the United States without government subsidies that are extended in several forms.

Another example of a credit purpose many contend is deserving comes from international trade. Thanks to trade agreements, countries are prohibited from providing many forms of direct subsidy for their exports. One form of subsidy that remains permitted is credit support. Thus, the Export-Import Bank of the United States (Ex-Im) helps to fund transactions that, while they could be funded without government support, use federal credit to counter credit subsidies from other nations competing to supply products such as airplane fleets.

Both the Export-Import Bank and the SBA also support credit to borrowers or transactions that are too small for private-sector providers in the credit markets. In these cases policy makers have determined that government support for credit to small businesses and small exporters is desirable to overcome the limitations that private market lenders would otherwise impose.

Yet another class of borrower that policymakers consider especially deserving is the veteran population. The VA home loan program is designed to assist veterans by providing a guarantee on a home loan that allows a veteran to purchase a home without making a down payment. The belief is that veterans who have risked all in service to our country deserve to have a chance to establish themselves afterwards in a home. The VA loan benefit is part of a series of benefits that we provide to our veterans.

Similarly, many other federal loan and loan guarantee programs entail the provision of some degree of subsidy even if they at the same time are aimed at addressing or mitigating a particular form of market imperfection. As discussed later in this report, the federal

[11] Christopher E. Herbert, Daniel T. McCue, and Rocio Sanchez-Moyano, "Is Homeownership Still an Effective Means of Building Wealth for Low-income and Minority Households? (Was it Ever?)," Chapter 2 in Eric S. Belsky, Christopher E. Herbert, and Jennifer H. Molinsky, *Homeownership Built to Last: Balancing Access, Affordability, and Risk after the Housing Crisis*, Brookings Institution Press, 2014. For a non-credit approach to wealth building, see, Department of Labor, Employee Benefits Security Administration, 29 CFR Part 2510, "Savings Arrangements Established by States for Non-Governmental Employees," *Federal Register*, Vol. 81, No. 168, August 30, 2016, pp. 59464-59477.

budget now provides at least some formal recognition of the subsidy, if any, involved in the operations of federal supported lending, thanks to the revision of the treatment of federal credit programs in the federal budget beginning in 1992. Nevertheless, even when a federal credit program is officially scored or recorded in the budget as not entailing any amount of subsidy, there may be reason to ask whether the program will cause losses for which federal taxpayers must provide public resources.[12]

B. Striking a balance between extending too much and too little credit

Credit can be hard to manage because, unlike other tools of government such as grants or tax expenditures, credit must be repaid. Defaults can cause great hardship for borrowers, their families, and their communities. There is a "sweet spot" where federal credit can provide needed support for small businesses, students, homebuyers, and other borrowers, while not overburdening them with too much debt. It can be hard for some programs to hit that "sweet spot."

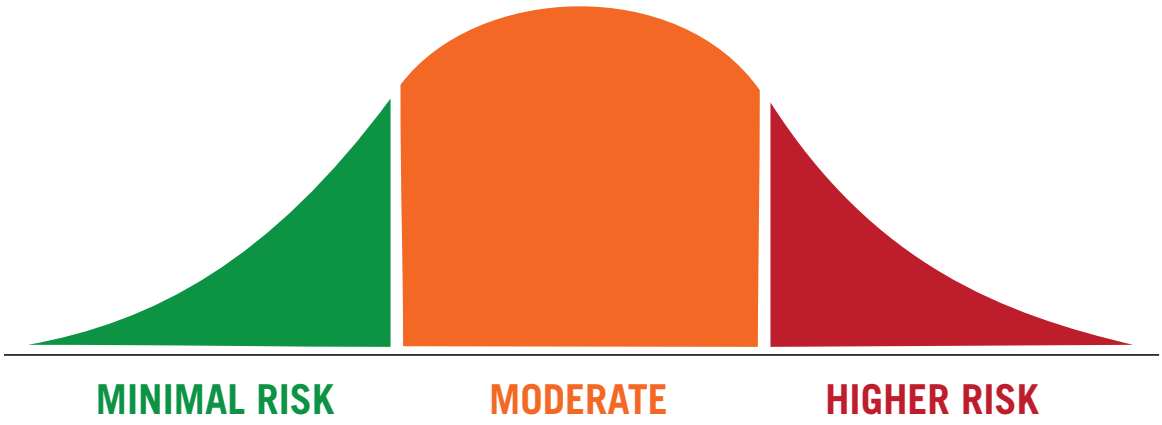
As policymakers seek to address each of the public purposes discussed above, credit can be an unusually difficult tool of government to manage compared to other tools such as grants or tax expenditures.[13] In contrast to a grant, which is a one-way outlay of funds, credit is an outlay of funds *that requires repayment*. Repayment means that a credit program can appear to be less expensive in the public policy making process while providing the same initial amount of resources to the intended beneficiary. However, human nature being what it is, a credit program tends to find it much easier to lend money to a borrower than to collect the repayment. Too often policymakers encourage agencies to extend credit to people who—despite their great need, or perhaps because of it—are unlikely to be able to repay the loan. This can cause significant defaults and hardship for borrowers who succumb to the attraction of what looks like a solution to their problems.

The middle section of Figure 4 below, illustrates the "sweet spot" for a federal credit program. Ideally government should lend to more risky borrowers than the private sector would serve on reasonable terms, but avoid supplying credit to borrowers who are unlikely to be able to repay their loans. The "sweet spot" also includes creditworthy smaller businesses who, especially since the tightening of private credit markets after the financial crisis, may not be well served because of the higher operating costs that private lenders face when lending to smaller rather than larger borrowers.

On the right side of the curve, a government credit program can cause harm by lending large amounts of money to people who cannot afford to pay it back. This occurred in substantial form in the late 1960s and early 1970s, when the FHA began lending exces-

[12] For further discussion, see the background paper on "Credit Programs and the Federal Budget Process."
[13] Lester M. Salamon, ed., *The Tools of Government: A Guide to the New Governance*, Oxford University Press, 2002.

Figure 4. Targeting Federal Credit



Source: MIT Golub Center for Finance and Policy, "Mission & Metrics: Finance Training for Federal Credit Program Professionals," July 2016.

sive amounts of subsidized credit to households in center cities of the United States. The result was large-scale default by poor families who had never been counseled how to manage their meager finances, major cost to federal taxpayers, and devastation to American center cities.[14] The harm overlending causes to communities is a recurring issue, as happened again with an excessive supply of private credit in the financial crisis, leading to concentrations of foreclosed properties that undermined the quality of localities and caught neighborhoods in a downward spiral of plummeting house prices.[15]

People who lack prospects of being creditworthy, such as prospective students in low-quality schools or disadvantaged homebuyers, too often find that their borrowing has led them to encumber their future incomes with debt from an inappropriate educational institution or home purchase. Such borrowers undergo additional harm if, after a default, they are foreclosed on or otherwise

[14] See, e.g., U.S. Department of Housing and Urban Development, *Housing in the Seventies: National Housing Policy Review*, 1974; Leonard Downie, Jr. *Mortgage on America*, Praeger Publishers, 1974; Brian D. Boyer, *Cities Destroyed for Cash: The FHA Scandal at HUD*, Follett Publishing, 1973; Calvin Bradford, "Financing Homeownership: The Federal Role in Neighborhood Decline," *Urban Affairs Quarterly*, March 1979, pp. 313-335.

[15] As the Consumer Financial Protection Bureau has found: "Many recent studies document the negative effect of a foreclosed property on the homeowners in its vicinity. There are several reasons for this effect. Among them are displacement of demand that otherwise would have increased the neighborhood prices, reduced valuations of future sales if the buyers and/or the appraisers are using the sold foreclosed property as a comparable, vandalism, and disinvestment. Using the data on house transactions in Massachusetts from 1987 to 2009, a foreclosure lowers the price of a house within 0.05 miles by 1 percent. According to Fannie Mae data for the Chicago MSA, a foreclosure within 0.9 kilometers can decrease the price of a house by as much as 8.7 percent; however, the magnitude decreases to under 2 percent within five years of the foreclosure. Research using Maryland data for 2006–2009 finds that a foreclosure results in a 28 percent increase in the default risk to its nearest neighbors. Other papers document various magnitudes of the negative effect on nearby properties." (citations omitted).) Bureau of Consumer Financial Protection, 12 CFR Part 1024, Mortgage Servicing Rules Under the Real Estate Settlement Act, (Regulation X); Final Rule, *Federal Register* / Vol. 78, No. 31, / Thursday, February 14, 2013, at p. 10854.

hounded by the collection process. Shortcomings of laws that preclude going bankrupt on federal or private student loans mean that excessive indebtedness by borrowers of student loans can be especially harmful, as it becomes impossible to shed their unmanageable debt and start over, as the bankruptcy code allows in other cases. Another bankruptcy provision prevents reduction in mortgage principal to correspond to the value of a home that has lost substantial value. This prevents many overly indebted borrowers from reducing their unmanageable housing debt and regaining financial footing.

Federal credit agencies vary widely in their attention to a balance between extending too much credit and too little. The federal student loan program lacks balance by design: undergraduate loans are a categorical entitlement, and the Department of Education must fund all applicants so long as they meet eligibility requirements. Thus, the program extends credit to undergraduate students up to the statutory maximum, without regard to their income, current indebtedness, or likely job prospects.

Other credit agencies, which are authorized to underwrite credit they extend, may articulate program objectives without regard to borrower outcomes. Thus, the SBA sets forth four performance goals for its lending programs, none of which relate to borrower outcomes.[16] By contrast, FHA balances its output objectives with an outcome measure, the "Percent of loans endorsed with credit score <680 without a 90 day delinquency during the first three years," and several measures for housing counseling and outcomes of counseling for borrowers.[17]

Turn then to the left side of the curve in Figure 4. Here the story is more complicated. For example, government policy can be wasteful and counterproductive even if it seeks to lend to borrowers who are low risk and would otherwise have reasonable access to commercial lending markets. Thus, in an apparent effort to serve more middle-class borrowers, policymakers have expanded the FHA single-family loan limits to a top mortgage size of $636,150. However, because of the way this exposes FHA to increased adverse selection (that is "cherry picking" by the private sector), defaults have actually increased:

> "Our research so far has shown that higher-balance FHA loans have been defaulting at rates approximately 20% higher than loans that were within the historical scope of the FHA. … By continuing to insure mortgages for the highest-income borrowers, the FHA is undertaking risks that it has not undertaken very often and for which its risk-management capacity may not be sufficient. In particular…, the FHA is subject to adverse selection by the private sector. This is likely to be more se-

[16] Small Business Administration, "Summary of Performance and Financial Information: Fiscal Year 2015," pp. 4–5.
[17] Department of Housing and Urban Development, "FY 2015 Annual Performance Report and FY 2017 Annual Performance Plan," p. 17.

rious in markets with which it has less experience."[18]

Other difficulties arise when government programs, by lending to low-risk borrowers, displace private credit. Sometimes fees in a government program may be structured to create a cross-subsidy to borrowers who are less creditworthy. While some policymakers find this to be an acceptable, even desirable, trade-off, others have concerns. Cross-subsidization disadvantages some borrowers, as when some creditworthy borrowers in the SBA business loan program may pay more for their credit than if they accessed the commercial credit market. In the case of FHA, burdens of the cross-subsidy largely fall, not on taxpayers as a whole, but rather on the pool of generally less affluent but still creditworthy homebuyers who avail themselves of the FHA program rather than accumulating a larger down payment or obtaining private mortgage insurance. Cross-subsidies are hidden, so that borrowers who pay too much for their credit never realize that they are being taxed. The argument against cross-subsidies is that taxes should be borne broadly and that the cost of accomplishing any particular public program objective (for instance, promoting homeownership) should be transparent and fully disclosed in the budget, not buried in the fees that a credit program charges.

Another disadvantage of poor targeting occurs when credit, and especially subsidized credit, becomes capitalized into the price of the product or activity that the credit supports. Thus, trillions of dollars of government-backed mortgage credit encourage significant increases in home prices in areas where buildable land is limited, while over a trillion dollars of federal student loans can encourage increases in school tuition for students who face limited enrollment opportunities. That these effects sometimes are hard to measure does not detract from their consequences, which—because the higher prices affect everyone in the relevant market—can be especially burdensome for less affluent people in these markets, whether borrowers or not.

Another issue involves the long-term displacement of private lending in a market. Key lender interest groups may favor the financial security of participating in a government guaranteed loan program under a largely defined framework rather than being subject to the rigor of greater competition in a private market. Once established, stakeholder interests may make it difficult for government to recede from playing a large role in a particular credit market, even where it appears the private sector has the capacity and experience necessary to provide credit by itself. A prominent example currently applies to the housing sector. Although the government's share has

[18] Robert Van Order and Anthony M. Yezer, "FHA: Recent History and Future Prospects," *Housing Policy Debate*, vol. 24, no. 3, pp. 644-650, at p. 647. See also, Chen L. Miller, "Two Essays on Real Estate Finance: 1) Effects of FHA Loan Limit Increases by ESA 2008: Housing Demand and Adverse Selection; and 2) Comparison of Two Affordable Housing Finance Channels," PhD Dissertation, George Washington University School of Business, January 31, 2017; for a discussion of this effect before the financial crisis, see, e.g., Dwight M. Jaffee and John M. Quigley, "Housing Policy, Mortgage Policy, and the Federal Housing Administration," chapter 5 in Deborah Lucas, *Measuring and Managing Federal Financial Risk*, University of Chicago Press, 2010, pp. 97-130.

declined since the financial crisis, the home mortgage market remains locked in the grips of government-backed credit programs—including the two failed government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac still in government hands, plus FHA and VA—accounting for two-thirds of total home mortgage originations.[19]

C. Budgeting for federal loans and loan guarantees

The Federal Credit Reform Act helped to reduce borrower defaults by creating an incentive for policymakers to spread federal credit among more borrowers rather than giving a deeper subsidy to fewer borrowers. However, some budget problems remain that deserve attention.

While this report suggests areas needing improvement, one also needs to recognize the considerable progress that credit programs have made in reining in high levels of default that existed a few decades ago. Since its enactment, the Federal Credit Reform Act of 1990 (FCRA) has encouraged dramatic improvements in accountability and creditworthiness of most federal loan and loan guarantee portfolios. Instead of measuring program costs on a cash basis, which resulted in losses from loan guarantees, for example, being booked only after default when a lender made a claim on the federal guarantee, Credit Reform measures the present value of income (from fees and recoveries on defaulted loans) and expenses (outlays for loans that default) and creates a credit subsidy estimate from the net value.[20]

Credit Reform thus means that policymakers have a choice: for a given level of appropriations, they can either provide deeply subsidized credit to fewer borrowers or less subsidized credit to a larger number of borrowers. This trade-off has encouraged policymakers to shift federal credit programs to emphasize less risky, that is, less subsidized, loans so that they can spread the benefits of federal credit to an increased number of constituents. Many agencies run credit programs that are recorded in the federal budget as having a "zero" or even negative credit subsidy—they are running a surplus; in other words, expected losses from delinquency and default (on a present-value basis) are equal to or below expected returns from fees and recoveries on defaulted loans. This has meant great improvement in focusing federal credit programs to avoid the right side of the curve (or in balancing with borrowers from the left side) in Figure 4, above.[21] But it has also meant that federal credit programs have been able to grow rapidly and serve borrowers for whom federal rather than private credit may not be the better option. The availability of negative subsidies produced by certain major federal credit programs to offset federal spending on other (usually non-credit)

[19] See Urban Institute, Housing Finance at a Glance: A Monthly Chartbook, February 2017 (online at http://www.urban.org/research/publication/housing-finance-glance-monthly-chartbook-february-2017/view/full_report)
[20] See the background paper on "Credit Programs and the Federal Budget Process" for a more complete explanation of the credit subsidy calculation process. The present value is calculated using Treasury rates as the discounting factor.
[21] Student loans are an outlier in this respect. As entitlements, they benefit from automatic (so-called "mandatory") appropriations that spare the program from discipline that the FCRA otherwise imposes.

programs has provided a perhaps perverse incentive in the budget process to increase these programs beyond the levels that public policy objectives might otherwise justify.

Past substantial improvement being noted, further improvements in budget scorekeeping can provide additional benefits. While programs with low default rates can find it easy to charge fees that help to score a zero or negative credit subsidy, there is a downside as well. That is that an unexpected risk, such as a decline in borrower creditworthiness caused by a downturn in the relevant part of the economy, can cause credit subsidies suddenly to turn positive, thereby constraining the number of borrowers who can be served by a given credit level of appropriations at a time when credit is especially needed for countercyclical stabilization.[22]

This problem is compounded if an agency lacks a strong linkage between information used to manage the program and information used to calculate credit subsidy estimates. Also, if lenders or program managers neglect to report defaults promptly, for example, then a program may be abusing the reestimation process that Congress provided under the FCRA. What may be needed is a process for external review of the data by a respected and credible outside source. Here, the FHA provides a good model. The Federal Housing Act (as amended) requires FHA to commission an annual independent actuarial report on its single-family loan program.[23] The result has been higher-quality information, and increased discipline in the FHA loan program, and greater capacity to anticipate surprises. By law, the FHA must also maintain a two-percent reserve.[24] Coming close to tapping the FHA reserve provides good feedback about increased risk that FHA may be taking on.[25]

D. Evaluating outcomes: data and analysis

Federal credit programs vary widely in the quality of data they use to manage their programs. Many loan guarantee programs lack information about defaults because they merely record claims by lenders who seek reimbursement for losses that they suffer from defaulted loans. While some programs collect and use data about borrower outcomes, most do not.

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[22] This "unexpected risk" element of credit programs is often cited as one of two shortcomings in the implementation of the FCRA (the other, discussed below in the text, is the treatment of administrative expenses). The Congressional Budget Office, some economists, and other observers have argued that the issue of "unexpected risk" could be addressed by employing a market, or "fair value," interest rate in credit subsidy calculations, rather than using the government's lower (risk- free) interest rate in such calculations. See the background paper on "Credit Programs and the Federal Budget Process."

[23] 12 U.S.C. Sec. 1708 (a)(4) "Annual independent actuarial study": "The Secretary shall provide for an independent actuarial study of the Fund to be conducted annually, which shall analyze the financial position of the Fund. The Secretary shall submit a report annually to the Congress describing the results of such study and assessing the financial status of the Fund. The report shall recommend adjustments to underwriting standards, program participation, or premiums, if necessary, to ensure that the Fund remains financially sound. The report shall also include an evaluation of the quality control procedures and accuracy of information utilized in the process of underwriting loans guaranteed by the Fund. Such evaluation shall include a review of the risk characteristics of loans based not only on borrower information and performance, but on risks associated with loans originated or funded by various entities or financial institutions."

[24] 12 U.S. Code § 1711, "General Surplus and Participating Reserve Accounts."

[25] Robert Van Order and Anthony M. Yezer, "FHA: Recent History and Future Prospects," *Housing Policy Debate*, vol. 24, no. 3, 2014, pp. 644-650, at p. 646.

Data quality varies considerably across federal credit programs. One factor is the nature of the loan program. Some programs generate relatively few very large loans, while other programs involve large numbers of very small loans. Programs with relatively few large loans include the Department of Transportation's TIFIA infrastructure program, or large loan programs of the Export-Import Bank of the United States and Overseas Private Investment Corporation, or the Department of Energy Title XVII alternative energy loans. Because they keep close track of each individual loan, such programs tend to have very good data. Loan underwriting is detailed and thorough, loans are carefully monitored, and outcomes can be easy to determine.

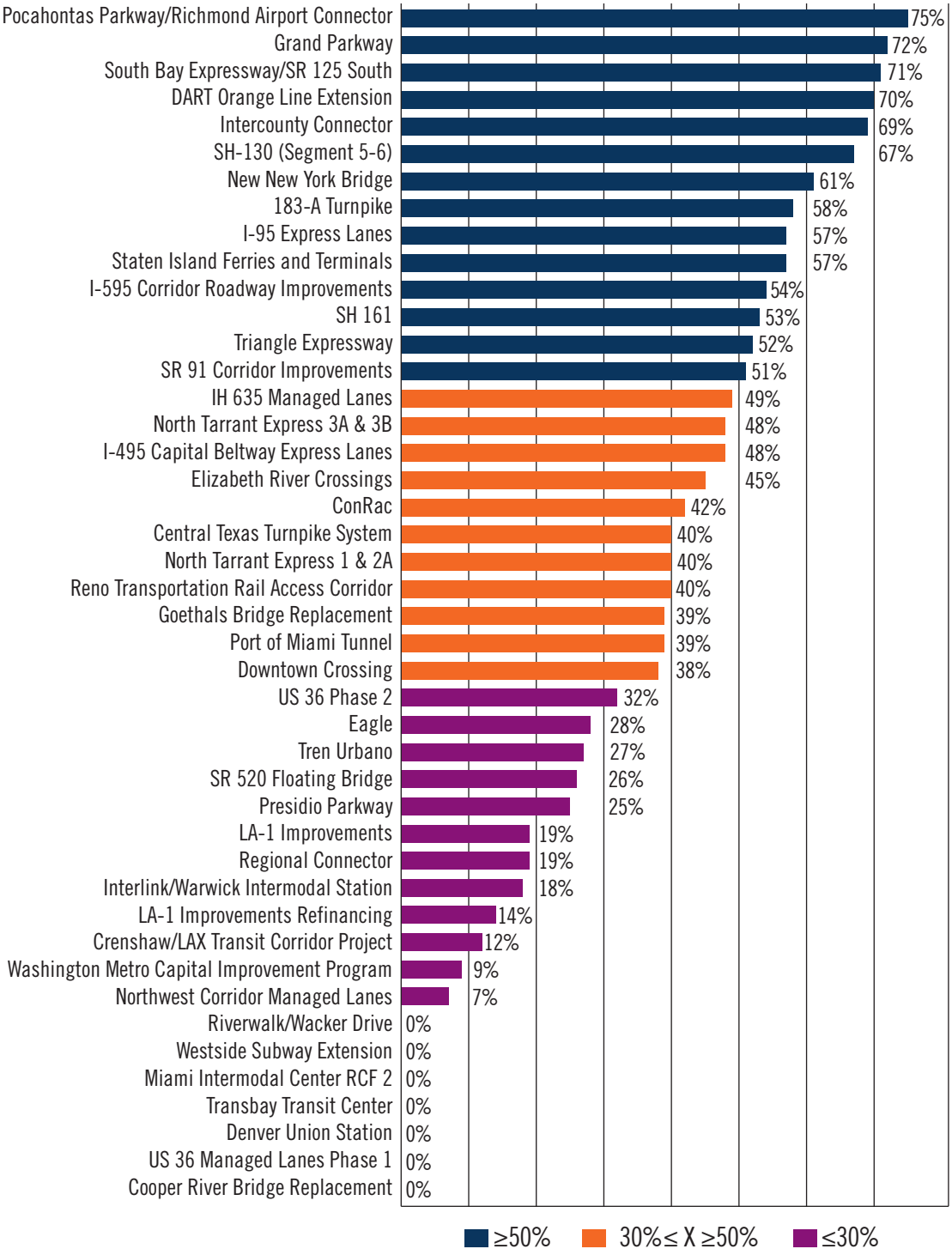
Consider, for example, the Transportation Infrastructure Finance and Innovation Act (TIFIA) loan program. TIFIA tracks and ranks projects according to the amount of private financing that a project is able to attract. Figure 5 below shows TIFIA projects ranked by this measure in 2014. TIFIA has now begun to assess TIFIA-supported infrastructure projects in terms of a more significant outcome measure: each project's effects on transportation. The next TIFIA annual Report to Congress is expected to present those outcomes.

By contrast, there can be considerable variation in data quality for programs with large numbers of smaller-sized loans.[26] Some programs have adopted sophisticated portfolio monitoring systems, sometimes in response to unexpected losses and often in response to the incentive that the Credit Reform Act creates to reduce defaults. An example of the former is Ginnie Mae, a wholly owned government corporation located within the Department of Housing and Urban Development. Ginnie Mae manages a very large portfolio of over $1.6 trillion of mortgages that are pooled and used to create securities that it guarantees. In 1989, an issuer of Ginnie Mae mortgage-backed securities failed, exposing the government to potentially billions of dollars of losses. The agency then moved promptly to build two management information systems, to track the performance of servicers, frequently issuers of its mortgage pools, and the lenders who originated the mortgages in those pools. These systems are now combined into the Ginnie Mae Portfolio Analysis Database System (GPADS), an off-site tool that helps track counterparty risk using portfolio statistics and comparing issuers with broader peer group activity. Other credit agencies also have developed effective portfolio monitoring systems.

However, portfolio management tools are not always useful for evaluating program outcomes. Loan guarantee programs, for example, may maintain records only on claims rather than defaults. A claim results when a lender takes a loss on a federally guaranteed loan and turns to the credit agency for compensation. However, defaults occur more frequently than claims. For instance, if a borrower becomes seriously delinquent on an FHA-in

[26] This might appear counter-intuitive since, from a statistical perspective, more observations (i.e., loans) should tend to improve the accuracy of information. However, in the case of some programs with large numbers of loans, the underlying data may not be gathered or preserved in a form that allows for systematic evaluation of outcomes.

Figure 5. Attracting Private Capital to TIFIA Projects



Source: TIFIA 2014 Report to Congress

sured home mortgage, the lender may offer a short sale to avoid a potentially more costly foreclosure. Although the borrower may have become 90-days delinquent, which is the usual measure of a default, and may have lost the home, FHA might not record a claim on the insurance fund, and the portfolio information would understate negative borrower outcomes. Research for this report sought to use default data from both FHA and SBA to generate two different outcome measures, but foundered because only claims data were readily available.

FHA outcome measures are unrealistically favorable in another way as well. Research suggests that FHA does not distinguish between new mortgages and refinancing in its calculations. Thus, a borrower who takes out an FHA mortgage, (1) refinances into a new mortgage, and then (2) defaults would be counted as having one successful outcome and one default—leading FHA to calculate a 50 percent success rate when the borrower in reality has only postponed eventual failure.[27]

By contrast, direct loan programs may have access to information about loan defaults. The Department of Education increasingly makes default and school graduation rate data available—and easily accessible—in a College Scorecard so that multiple users can consider and possibly publish such information by themselves.[28] The Department also has released the underlying data to the public, and users are already taking advantage. Individuals and organizations have repackaged the data for easier use, published returns on investment for colleges by matriculated students' income level, and used the data to evaluate the performance of accrediting agencies.[29]

The publication of College Scorecard data illustrates the principle that data quality improves along with the number of people who use it. The president of a for-profit college noticed discrepancies between College Scorecard statistics and other numbers the Department of Education had published. Even though the Scorecard's numbers made repayment rates for his institution's students look better, he submitted a public comment letter on a new regulation and pointed out anomalies in the reported data for three-, five-, and seven-year repayment rates.[30]

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[27] Andrew Caplin, Anna Cororaton, and Joseph Tracy, "Is the FHA Creating Sustainable Homeownership?" *Real Estate Economics* 43, no. 4 (November 1, 2015): 959–60.

[28] The Department of Education partnered with the US Digital Service to develop the College Scorecard, a web-based repository of data on higher education outcomes. Prospective students can look up graduation rates, 10-year incomes, and student loan repayment rates, enabling them to make better-informed decisions about their educations. The Scorecard complies with government privacy protections because data are aggregated at the institutional level. See, https://collegescorecard.ed.gov/.

[29] Ben Hamner, "Exploring the US College Scorecard Data," *Kaggle*, accessed February 2, 2017, https://www.kaggle.com/benhamner/d/kaggle/college-scorecard/exploring-the-us-college-scorecard-data; "Good Colleges For Low Income Students," *PayScale*, accessed February 2, 2017, http://www.payscale.com/college-roi/roi-by-income-level; Annie Waldman, "Methodology: How We Analyzed College Accreditation Data," *ProPublica*, November 3, 2015, https://www.propublica.org/article/methodology-how-we-analyzed-college-accreditation-data.

[30] Danielle Douglas-Gabriel, "This College President Found an Error in the College Scorecard. So Why Did It Take 5 Months to Fix?" *Washington Post*, January 26, 2017, https://www.washingtonpost.com/news/grade-point/wp/2017/01/26/this-college-president-found-an-error-in-the-college-scorecard-so-why-did-it-five-months-to-fix/.

Yet, the federal student loan program is limited in the amount of outcome-related data that it can generate. Stakeholders supported enactment of a 2008 law that precludes the federal government from maintaining loan-level databases that track individual student outcomes over time.[31] While this law nominally appears to protect student privacy, its major thrust is to prevent the Department of Education from maintaining individual outcome ("unit record") data, revealing for example, the schools where the incidence of overly indebted nongraduating students is greatest.[32] If protecting student privacy had been the true goal, more narrowly focused legislation would have sufficed without denying the Department of Education and outside researchers the ability to track loan-level outcomes.

The law has had significant consequences for the ability of the Department of Education to evaluate outcomes and, to the extent authority is available, to manage them:

> "Significant data gaps exist in the higher education sector, including data related to loan performance, student outcomes, and certain key demographic, labor, and wage data about student loan borrowers. Evidence suggests that some borrowers who default share certain characteristics, including attendance at proprietary schools or failure to complete a program of study. Improved access to key data is needed, including access to data related to predictors of future borrower distress, performance of borrowers in alternative repayment arrangements, and the efficacy of various interventions, and should inform policymakers and market participants seeking to target resources and reduce defaults."[33]

Similarly, the SBA commissioned the Urban Institute to assess "potential duplication of SBA's main financial assistance programs by state or local programs, establishing a baseline measure of SBA customer satisfaction, and interviewing participating lenders about their underwriting practices."[34] Unfortunately, however, there were legal impediments

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[31] The law is posted on the website of the National Association of Independent Colleges and Universities (NAICU), https://www.naicu.edu/docLib/20081030_HEA101-studentunit.pdf, accessed 01-08-2017. In relevant part, the law reads: "… nothing in this Act shall be construed to authorize the development, implementation, or maintenance of a Federal database of personally identifiable information on individuals receiving assistance under this Act, attending institutions receiving assistance under this Act, or otherwise involved in any studies or other collections of data under this Act, including a student unit record system, an education bar code system, or any other system that tracks individual students over time." For background on lobbying that led to the law, see e.g., Clare McCann and Amy Laitinen, "College Blackout: How the Higher Education Lobby Fought to Keep Students in the Dark," New America Foundation, 2014, http://preview.staging.newamerica.org/downloads/CollegeBlackoutFINAL.pdf.

[32] To some extent the Department of Education has been able to use other types of data, based on sampling, to work around the limits of the legislation. See, e.g., the Gainful Employment Regulations, 34 CFR Part 668, *Federal Register*, vol. 76 no. 113, June 13, 2011, pp. 34386-34559.

[33] Consumer Financial Protection Bureau, "Student loan servicing: Analysis of public input and recommendations for reform," September 2015, p. 3.

[34] US Government Accountability Office, *Small Business Administration: Additional Measures Needed to Assess 7(a) Loan Program's Performance*, GAO-07-769, July 2007; Shelli B. Rossman and Brett Theodos, with Rachel Brash, Megan Gallagher, Christopher Hayes, and Kenneth Temkin, "Key Findings from The Evaluation of the Small Business Administration's Loan and Investment Programs," Urban Institute, January 2008, available at http://www.urban.org/search?search_api_views_fulltext=%2C%20Key%20Findings%20from%20The%20Evaluation%20of%20the%20Small%20Business%20Administration%E2%80%99s%20Loan%20and%20Investment%20Programs.

that precluded undertaking a comparison between businesses receiving and those not receiving SBA credit to evaluate the difference in outcomes.[35]

In summary then, while federal credit programs have been increasing the amount of information relevant to portfolio management, there is considerable room for improving the extent that loan and loan guarantee programs generate information for the analysis needed to understand and improve borrower outcomes.

[35] The GAO reported on this: "One component of the study that will not be undertaken is an analysis to determine how outcomes for firms assisted through financial assistance programs, such as 7(a), would differ in the absence of SBA assistance. The impact study, as designed by the Urban Institute, required the use of credit scores for firms that did not receive SBA assistance. Though costs associated with this component of the study initially prohibited SBA from undertaking it, SBA officials explained that they were advised that they are legally prohibited from obtaining credit score data from firms with which they have no relationship. Ibid. *Small Business Administration: Additional Measures Needed to Assess 7(a) Loan Program's Performance*, p. 16.

III. Recommendations: Improving Borrower Outcomes

A. Determine benefits and costs to borrowers of the riskiest loan

Because defaults cause the greatest harm to borrowers, credit programs should use their riskiest loans as the first place to measure borrower benefits and costs of their programs. If these are out of balance, a program can ratchet its standards up or down so that the benefits to creditworthy borrowers outweigh the costs to those who default. Some programs, most notably student loans, may not have authority to do this, except indirectly. [36]

If borrower defaults represent perhaps the greatest costs to unsuccessful borrowers, a useful approach begins by considering the riskiest loans, that is, those with greatest chances of defaulting, that a program will accept. Private lenders often refer to their "credit box" which is the range of underwriting criteria (such as amount of down payment required, amount of risk-sharing with a lender, or a borrower's FICO score[37]) that they will accept when extending credit. Dimensions of the credit box depend on the nature of the loan (to an individual or business, collateralized or not, etc.), the appropriate criteria of creditworthiness for such loans, and the risk appetite of the organization. The most important part of the credit box is the bottom: to ensure net benefits of their programs go to borrowers, federal program agencies need to determine credit criteria of the riskiest loans that they consider acceptable for the program.

The FHA provides a good example: In 2016, the average credit score for an FHA borrower was 680. The 2016 FHA Annual Report shows major characteristics of FHA borrowers that have made FHA a mainstay of the residential mortgage market, especially for less creditworthy borrowers:

- 82.1 percent of FHA purchase loans were for first-time homebuyers, accounting for 722,075 purchase loans.
- 10.9 percent of FHA borrowers were African-American and 17.5 percent were Hispanic.

[36] Student loans have no underwriting criteria. Because they are a categorical entitlement, the Department of Education must fund all applicants so long as they meet eligibility requirements.

[37] A FICO Score, named for the Fair, Isaac Company, is a widely-accepted measure of a borrower's creditworthiness. In this report the term "credit score" means a FICO score.

- In the 2015 calendar year, FHA insurance was used for 25 percent of all purchase loans in America, but was used for 47 percent of home purchases by African-American households and 49 percent of purchases by Hispanic households.[38]

For most borrowers, FHA mortgage insurance provides a significant benefit. The policy question then becomes the balance between benefits and costs of borrowers at the lowest part of the FHA credit box. Once a program such as FHA measures benefits and costs to these riskiest borrowers, it can adjust the minimum upwards or downwards, depending on the analysis.

FHA provides a useful example (especially because FHA tends to have access to better-quality credit data than some other programs), of seeking to weigh benefits and costs of the riskiest home mortgages. While FHA can lend to borrowers with even lower credit scores, consider borrowers with a low FICO credit score of 620 who can take out a low down payment FHA-insured mortgage. Unfortunately, the combination of a low FICO score and low down payment means the chances of default can be significant. For a borrower with a FICO score of 620 and a small down payment of 3.5 percent, the chances of defaulting are about 20 percent.[39]

Because defaults cause harm, both before and after foreclosure, they should not be taken lightly. Defaulting families come under considerable emotional and financial stress as they struggle to save their home. Tension can resonate throughout the household and particularly in children. Leaving the home will disrupt the household, especially as family members then may then move to relatively unattractive quarters and, if the new residence is outside the old neighborhood, children may need to change schools. Researchers have documented how health effects, economic hardship, and food insecurity increase.[40] If the home is left vacant, and especially if it is foreclosed on, there can be significant adverse effects on other home values and crime in the neighborhood as well as increased defaults on other houses in the area.

Thus, even as the FHA single-family program is performing an important credit function for its average borrower, the program may be causing significant harm to the one-out-of-five less creditworthy FHA borrowers who default on their mortgage loans, and to their communities. In addition, there is another group of borrowers, whose loans become troubled but somehow contribute sufficient resources to avoid default. One example would be someone who borrowed for a home, could not sustain the mortgage, and then used a short sale to extricate themselves. While this may not be recorded as a default, it is a case of excessive borrowing bringing finan-

[38] *Department of Housing and Urban Development, Annual Report to Congress Regarding the Financial Status of the Mutual Mortgage Insurance Fund Fiscal Year 2016*, p. 5.

[39] Based on Wei Li and Laurie Goodman, "Measuring Mortgage Credit Availability Using Ex-Ante Probability of Default," Urban Institute, November 2014.

[40] See, e.g., Laryssa Mykyta, "Housing Crisis and Family Well-being: Examining the Effects of Foreclosure on Families," SEHSD Working Paper #2015-07, US Census Bureau, 2015; Julia B. Isaacs, "The Ongoing Impact of Foreclosure on Children," Brookings Institution, 2012; G. Thomas Kingsley, Robin E. Smith, and David Price, "The Impacts of Foreclosures on Families and Communities: A Primer," Urban Institute, 2009.

cial harm and stress to a household. Thus, while defaults are a good primary measure of costs to borrowers, more sophisticated evaluation of outcomes also is needed, as is discussed in sections III.C and IV.C, below.

Consider now benefits to the four-out-of-five low-FICO borrowers who remain in their homes. If there are employment opportunities in the area, then the home itself can be a major benefit to a family by providing a safe and healthful place to live.[41] Homeownership as an investment, rather than as a place to live, is more doubtful. Everything depends on the house appreciating in value, which is far from certain. Furthermore, the home's illiquidity can work against a borrower. If a householder works at a large firm that suddenly closes and departs for another part of the country, then owning a home could become a burden rather than benefit. The family may find that the value of its house drops just as its major employer leaves. While renters might try to follow the company to its new location, an "underwater" homeowner (one whose mortgage amount exceeds the price of the home) would find that more difficult.

That scenario is but one reflection of the problem of helping low-FICO borrowers to buy a home. In contrast to middle-class homeowners, who may maintain some investments in a diversified portfolio, low-FICO borrowers are likely to have their investments tied up in one large undiversified asset: their house. Especially if borrowers in low-income areas find that their homes do not appreciate significantly in value, the home can become a poor investment. Average real home prices (adjusted for inflation) in the U.S. have not appreciated significantly over the past several decades. In addition, there are costs of maintaining a home, paying property taxes and insurance, and other obligations of home ownership. While homeownership can be beneficial for some disadvantaged borrowers,[42] FHA needs to monitor the bottom of its credit box to ensure the balance of benefits and costs for the least creditworthy FHA borrowers that the program serves.

If outcomes for the riskiest loans are in doubt, FHA can determine how much to ratchet its credit box upwards to shift the cost-benefit balance for borrowers in a more positive direction. Moreover, by tracking characteristics of the minimally acceptable loan over time, a lending program can construct an early warning signal. If borrower or loan credit characteristics of the FHA portfolio change, then the program may need to adjust underwriting criteria for its riskiest loans, and possibly its pricing, to compensate.

As FHA considers how to adjust its credit box to ensure protection of borrowers taking out the most risky loan, it can adjust a variety of factors including FICO score thresholds and

[41] William M. Rohe and Mark R. Lindblad, "Reexamining the Social Benefits of Homeownership after the Foreclosure Crisis," Chapter 3 in Eric S. Belsky, Christopher E. Herbert, and Jennifer H. Molinsky, *Homeownership Built to Last: Balancing Access, Affordability, and Risk after the Housing Crisis*, Brookings Institution Press, 2014.

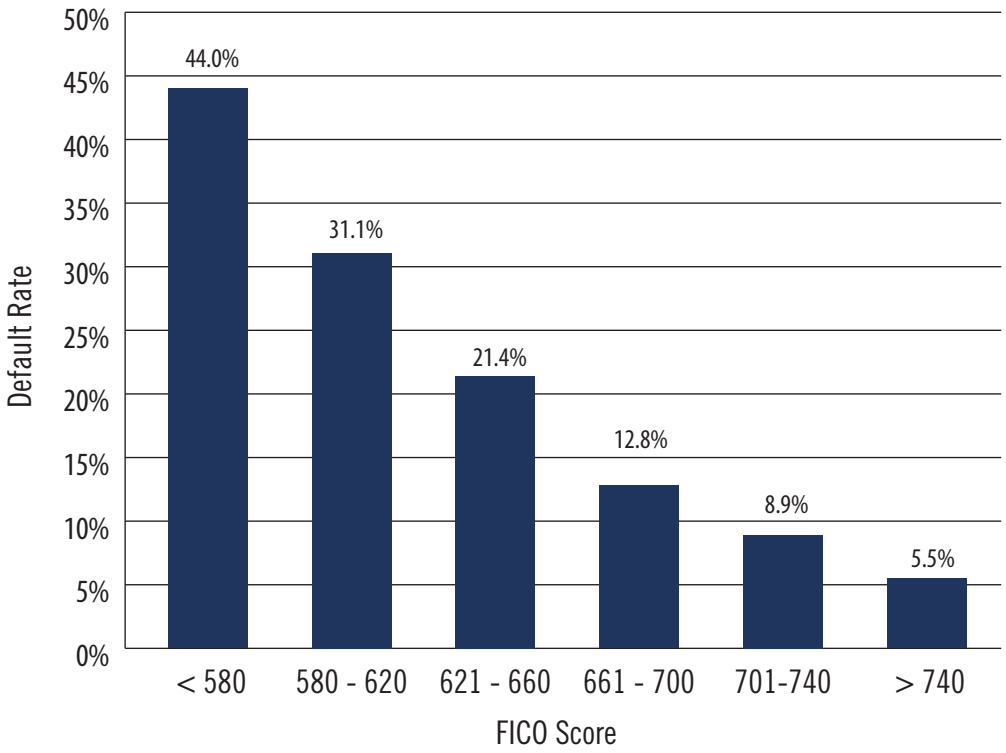
[42] Christopher E. Herbert, Daniel T. McCue, and Rocio Sanchez-Moyano, "Is Homeownership Still an Effective Means of Building Wealth for Low-income and Minority Households? (Was it Ever?)," Chapter 2 in Eric S. Belsky, Christopher E. Herbert, and Jennifer H. Molinsky, ibid.

required down payments. One of the key adjustments FHA can make is the FICO score. Figure 6, below, shows how mortgage defaults vary according to borrower FICO scores.

Other credit factors are also important in determining the riskiest loan. Figure 7, below, shows how high loan-to-value ratios (LTV; that is, low equity in the home) at the time of origination can greatly magnify the chances a borrower will default. Loan-to-value means the ratio of a borrower's mortgage debt to the value of the home. A higher down payment leads to a lower LTV. To reduce the incidence of defaults, program managers (or private lenders in a guaranteed loan program) can adjust any or all of the principal credit factors.

Another outcome-based approach is to measure the "sustainability" of program loans. For FHA, sustainability is the median life of a mortgage loan that FHA guarantees before it defaults. The sustainability of loans booked in a given year can be an important measure of the value

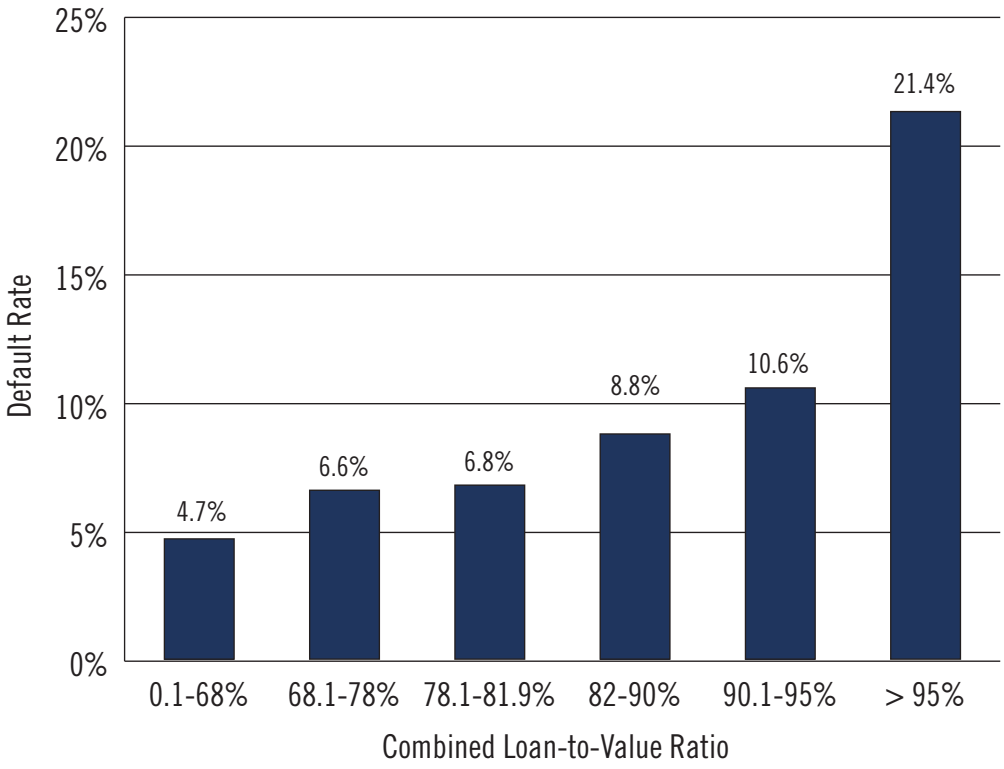
Figure 6. How Mortgage Default Rates Vary with FICO Score



Source: Based on Wei Li and Laurie Goodman, "Measuring Mortgage Credit Availability Using Ex-Ante Probability of Default," Urban Institute, November 2014.[43]

[43] The underlying data are taken from Tables A.1 and A.2, using the "average" variables for loan-to-value ratio and back-end debt-to-income ratio. As Li and Goodman do, this graph represents a weighting of expected default rates to reflect a basket of 90 percent loans originated in 2001-2 and 10 percent loans originated in 2005-6.

Figure 7. How Mortgage Defaults Vary with Loan-to-Value Ratio



Source: Based on Wei Li and Laurie Goodman, "Measuring Mortgage Credit Availability Using Ex-Ante Probability of Default," Urban Institute, November 2014.[44]

of a program to its borrowers.[45] Sustainability also can reveal important information about student loan borrower outcomes. The riskiest student borrowers—who tend to attend proprietary schools or community colleges rather than four-year colleges and universities—may be those who suffer most from unsustainable loans that lead to failed educational outcomes.[46]

[44] These are default rates for borrowers with 621-660 FICO scores. The underlying data are taken from Tables A.1 and A.2, using the "average" variables for back-end debt-to-income ratio.

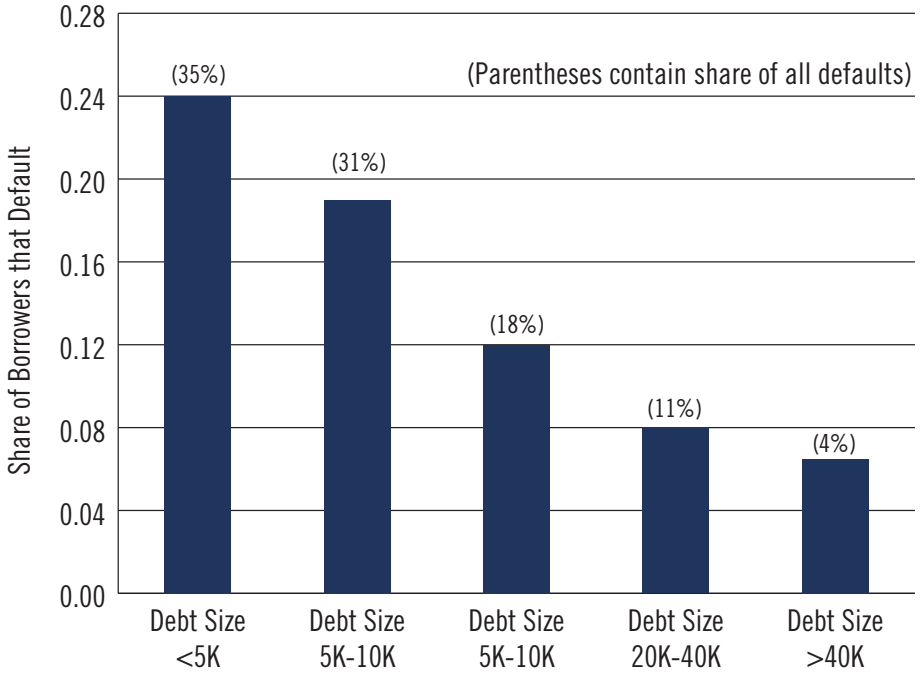
[45] Andrew Caplin, Anna Cororaton, and Joseph Tracy, "Is the FHA Creating Sustainable Homeownership?" *Real Estate Economics*, Vol. 43 No. 4, 2015, pp. 957–992: "We produce first estimates of the sustainability of homeownership for recent Federal Housing Administration (FHA) borrowers. Unfortunately, the FHA does not produce its own statistics on sustainability. Neither does it permit researchers access to its data on internal refinances. This imposes significant barriers to entry for researchers who wish to track FHA borrower performance over time. We carefully construct the required tracking data to overcome this barrier. We forecast that no more than 75% of the 2007–2009 vintages of FHA borrowers will be able to successfully exit the FHA system. Our work raises questions about FHA's role, its accounting and its accountability."

[46] "Repayment outcomes tend to be worse among borrowers who attend for-profit or community colleges; those who are low-income or independent; those who attend part time; and, especially, those who do not complete their degrees. …. ….Defaults are concentrated among borrowers with small-volume loans, in large part because these borrowers are less likely to have completed their degrees. Loans of less than $10,000 accounted for nearly two-thirds of all defaults for the 2011 cohort three years after entering repayment. Loans of less than $5,000 accounted for 35 percent of all defaults." Council of Economic Advisers, "Investing in Higher Education: Benefits, Challenges, and the State of Student Debt," July 2016, pp. 4-5.

This is reflected in Figure 8, below, showing the proportion of borrowers with different sized loans who defaulted within three years of entering repayment. Poor-quality education coupled with low prospects for graduation would seem to be major contributors to students emerging from an educational experience with debt burdens and defaults but little else to show for their efforts. Again the most disadvantaged borrowers may be those most harmed by their experience.

The lifetime default rate by dollar volume for unsubsidized federal student loans for undergraduates in the 2017 cohort is projected to be 27 percent. Given that defaults are concentrated in lower-balance loans, the proportion of student borrowers unable to handle the debt that the Department of Education provides them is likely greater than one in four.[47] To measure sustainability, the measure for student loans must be adjusted to compensate for both (1) the artificially long time the law per-

Figure 8. Share of Student Borrowers Who Default by Year 3 by Loan Size, 2011 Repayment Cohort



Note: Years are fiscal years. Loan size is based on balance of loan when entering repayment

Source: Council of Economic Advisers, "Investing in Higher Education: Benefits, Challenges, and the State of Student Debt," July 2016, p. 42.

[47] Department of Education, *Student Loans Overview, Fiscal Year 2017 Budget Proposal*, p. Q-31.

mits to elapse before a student loan default formally occurs and (2) the multitude of deferral options that can mask data about the number of people taking on unsustainable debt burdens in an effort to improve their prospects.[48] For all loans, including student loans, it would be good to adopt a standard measure of the percent of loans for the riskiest borrowers that go into ninety-day nonperformance within five years. It is time to gather information about sustainability of loans using a common methodology across programs.

To take outcome analysis to a higher level, programs must move beyond using defaults as the primary measure of borrower outcomes. As will be discussed in Section IV.C. below, improved access to data, and especially data that can be correlated combined with Census or Internal Revenue Service (IRS) information, for example, can help to measure borrower outcomes in more sophisticated ways, such as by correlating borrower expenditures funded by student loans, FHA home mortgages, or SBA small business loans with outcomes such as income or wealth or children's education later in life.

B. Strengthen oversight of lenders and other program partners to reduce defaults

Ensuring that lenders and other program partners (schools in the case of student loans) market, originate, and service sustainable loans can help prevent defaults. Some agencies provide good models of lender oversight. Program managers should consider a variety of techniques—including third-party ratings and disciplinary actions—to assure top performance by program partners. Also laws should set clear standards and permit application of a series of graduated remedies for poor performers.

The relationship between a federal credit agency and its partners depends on several elements: (1) contractual provisions the agency applies to the relationship, (2) how the agency selects its partners, (3) how the agency monitors partners' performance, and (4) how the agency promotes partners that perform well while weeding out poor performers.

Two types of program partner are especially important for federal credit agencies: (1) contractors to help the agency manage its

[48] Federal student loans are considered delinquent in 270 days of nonpayment. This contrasts with commercial lending practices and virtually every other federal credit program, which consider a 90-day delinquency to be a default. The stakeholder and budget issues, rather than policy issues involved in this convention became clear in the 1998 reauthorization of the Higher Education Act: "Officials at for-profit colleges and, to a lesser extent, community colleges, argued that while the default rate provisions had appropriately helped kill off poor quality colleges, it had also endangered legitimate institutions that served large numbers of low-income students who needed loans to pay their college bills. In part to respond to those complaints, but also to offset the costs of new programs and increased funds provided in the 1998 Higher Ed Act bill, Congress altered the cohort default rate calculation by extending, to 270 days from 180 days, the amount of time before the federal government deems a delinquent borrower to be in default." Doug Lederman, "A More Meaningful Default Rate," *Inside Higher Ed*, November 30, 2007. (The extension of default date allowed the credit budget estimates to diminish artificially since FCRA measures the present value of future defaults and an extension of time for a default to be recognized reduces the present value calculation).

programs, and (2) lenders that originate and service loans for loan guarantee programs. With respect to selecting program partners that are contractors, the federal procurement process has become increasingly difficult. Some agencies may seek to avoid new procurements whenever possible. Some agencies, notably the SBA, utilize the Section 8(a) program for disadvantaged small businesses, which allows agencies to select the contract staff with appropriate skills needed to carry out complex projects up to a value of $ 4 million. The project that developed SBA One, an automated lending platform, for example, relied on a hand-picked Section 8(a) contractor.[49]

With respect to the contractual relationship of an agency with its partners, the Office of Federal Student Aid (FSA) has neglected to require reporting of loan performance information in a standardized way from its many contract servicers. It would seem imperative, if FSA is to increase the quality of its data analytics and reduce unnecessary staff burdens, that FSA should require standardized reporting by its servicers. Agencies that do require standardized reporting, such as FHA, SBA and Ginnie Mae, can conduct analyses to determine performance of their lending portfolios in multiple dimensions.

Another significant partner for federal credit agencies is the lender that implements much of a guaranteed loan program. As with other program partners, lender performance can vary widely, for example, in the quality of loans they originate. Lender monitoring systems can help to detect poor performers before the volume of poorly originated or serviced loans reaches unmanageable proportions. Again, results matter: improper origination of loans to people or businesses that cannot carry the debt load means increased defaults and harm to those borrowers. Poor servicing also can contribute to borrower harm, such as when a servicer fails to apply available default aversion approaches allowed by law for the program.

The SBA manages a sophisticated lender monitoring system that relies on a combination of commercially generated reports about the financial condition of a lender as well as the lender's portfolio of SBA guaranteed loans, and SBA monitoring done directly or through contractors. SBA generates and monitors a score for each participating lender on a range of criteria. Called the PARRiS score, this rating captures 22 important aspects of each lender's condition and SBA guaranteed loan performance.[50]

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[49] A particular advantage of the Section 8(a) program is that it allows the agency to conduct extensive discussions with the contractor to help shape the project to meet the agency's precise needs and make appropriate cost adjustments without the impediments to good communication that the federal procurement process otherwise might create. Agencies that require services through larger procurements need to make careful use of the pre-solicitation period to visit a range of contractors and conduct market research before actually designing the scope of work.

[50] See, e.g., Small Business Administration, "SBA, Revised Risk-Based Review Protocol for SBA Operations of Federally Regulated SBA Lenders," SBA Policy Notice, December 29, 2014. See also Small Business Administration, "SBA Lender Risk Rating System," Notice and Request for Comments, *Federal Register*, vol. 79, no. 82, April 29, 2014; and Maria Contreras-Sweet, Administrator, Small Business Administration, testimony before the Senate Committee on Small Business and Entrepreneurship, May 26, 2016.

The question then becomes how to deal with a lender performing significantly below its peer group. It can be difficult to eject such lenders from some programs. Needed is a system of graduated remedies so that agencies may take well-defined steps to encourage improving a lender's performance before terminating its participation in the program. Graduated remedies can include a reduction in the volume of loans that the lender can make, an increase in the fees that the lender pays, removal of delegated underwriting authority so that a lender needs to find a stronger performing correspondent bank to submit its loans to a guaranteed loan program, or some form of temporary suspension pending an independent management review that the lender pays for.

The SBA has devised a useful system of graduated responses. SBA issues increased supervisory actions to participating lenders that fail to meet SBA program requirements. These range from (1) credit audits, to look at individual lender loan files; to (2) field audits, to look at a lender's full program operations, loan documentation, etc., to (3) suspension or debarment of individual agents or representatives; and (4) removal of a lender's delegated underwriting authority; or finally (5) outright debarment of a lender. Lenders in the early stages of these supervisory actions feel pressure both because of the slowdown audits can cause and because they must pay for the costs of an audit. SBA faces less pressure to apply draconian sanctions when lower-level remedies push lenders to bring their program operations into proper order. Also, having a well-defined and clearly disclosed system of graduated responses helps provide documentation for an agency's general counsel to be able to make a cogent case for termination in those cases when graduated remedies do not work.[51]

FHA has had a systematic program of lender sanctions in place since the 1990s, following a law that provides FHA with authority to act against lenders "if the Secretary determines that the mortgage loans originated or underwritten by the mortgagee [that is, lender] present an unacceptable risk to the insurance funds."[52] The determination is based on a comparison of early defaults on loans the lender originates with the average in the area. The Department of Housing and Urban Development, FHA's parent agency, issued regulations specifying that FHA may take actions, including removing a lender's authority to engage in delegated underwriting or termination, if the lender's loans exceed twice the normal default and claims rate for that area. In addition, FHA places a lender with one-and-a-half times the area default rate onto its Credit Watch list.[53] FHA's Neighborhood Watch program publishes data on the performance of loans that a lender originates compared to the average default and claims rate of loans in that geographic area.[54]

[51] Currently at some agencies, a lack of such documentation makes it difficult to eject a poorly performing lender.
[52] 12 USC Section 1735f-11, "Review of mortgagee performance and authority to terminate."
[53] 24 CFR 202.3, "Approval status for lenders and mortgagees."
[54] The Neighborhood Watch website is found at https://entp.hud.gov/sfnw/public/.

This approach has major advantages. It sets a specific standard for performance, thereby sparing FHA the need to try to defend a more ambiguous standard. And the system provides a nice gradation of remedies: from posting of the lender's performance on Neighborhood Watch and implicating the lender's reputation; to possible removal of delegated underwriting authority, thereby allowing the lender to participate in the program, but under greater scrutiny; and finally—only if those more moderate remedies don't work— allowing FHA to terminate the lenders' participation in the program.[55]

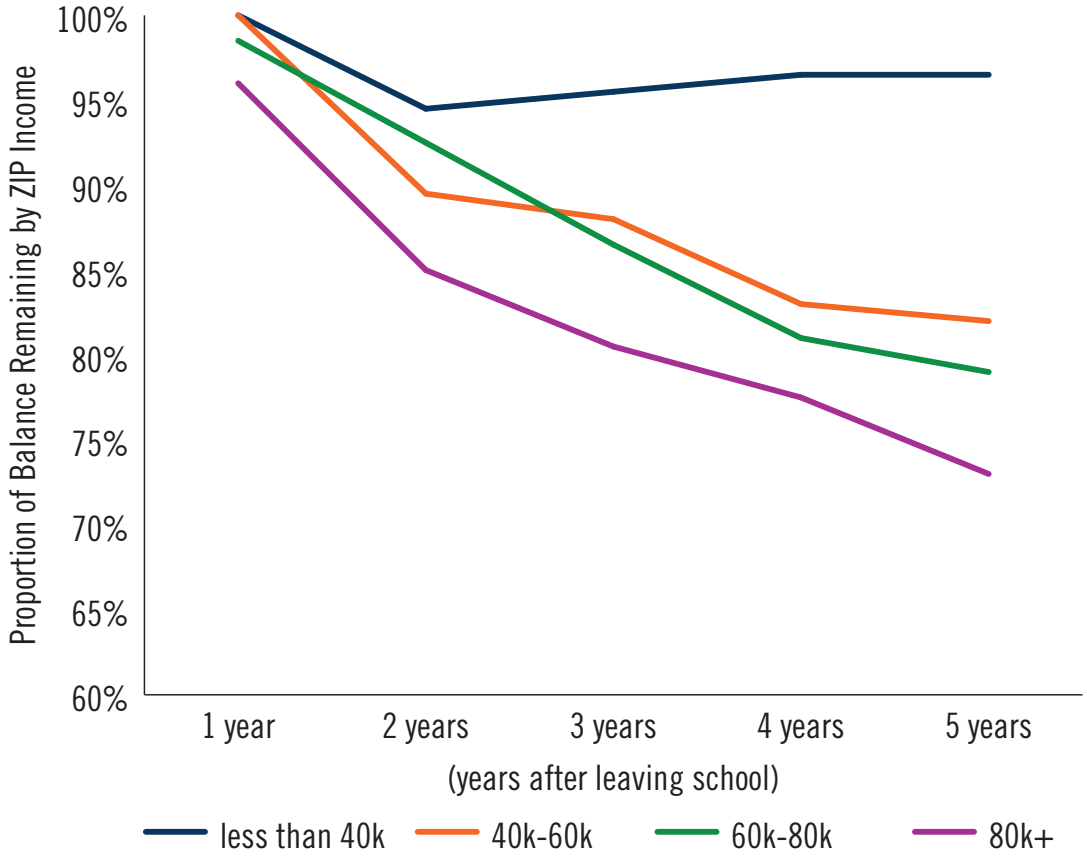
By contrast to the way that SBA and FHA deal with poor lender performance, stakeholder influence has limited the Federal Student Loan program to setting lax standards for poorly performing schools. The law currently establishes a standard for post-secondary schools such that a school will be excluded from participating in the federal student loan and Pell Grant programs if it maintains a three-year cohort default rate of 30 percent for three consecutive years.[56] As a report of the Council of Economic Advisers points out, this measure of school performance is "susceptible to artificial manipulation, which may occur if an institution pushes students into deferment or forbearance until the measurement window expires."[57] By setting such a low standard for the worst schools, the law virtually ensures that many of the neediest students will suffer harm from enrolling in those schools—including wage garnishment and other federal sanctions.

There is evidence suggesting that students at the bottom of the program's credit box are most harmed by such a lax standard of school performance. Figure 9, below, shows how students from low income households, as measured by ZIP codes of borrowers at the time they took out their loans, have failed to make significant progress in paying down their student loan debt five years after they left school, especially compared to borrowers from higher-income households.

One problem that some credit programs currently face is the growth in program participation of nonbank lenders. This deprives credit agencies from assurance that the lending partner is being supervised for safety and soundness by a bank regulator. Charles Tansey, former SBA Associate Administrator for Capital Access, and Senior Vice President of the Small Business Group at the Export-Import Bank of the US (now a Senior Fellow at the Golub Center for Finance and Policy at MIT), suggests that credit programs use independent rating or institutional analytic services to assess the financial strength of participating lenders so that the credit agency can receive early warning if the lender comes under financial pressure and gains incentive to ship bad loans into a government program, just to

[55] Trying to expand the number of borrowers at the bottom of the FHA credit box, FHA recently relaxed these standards for lenders operating in the most disadvantaged areas, but it is too soon to measure the effects on borrower outcomes.
[56] Department of Education, *Student Loans Overview, Fiscal Year 2017 Budget Proposal*, p. Q-30.
[57] Council of Economic Advisers, Using Federal Data to Measure and Improve the Performance of U.S. Institutions of Higher Education, September 2015 and updated January 2017, p. 22.

Figure 9. 2009 Cohort Repayment Rates by Income



Source: Andrew Haughwout, Donghoon Lee, Joelle Scally, Wilbert van der Klaauw, "Student Loan Borrowing and Repayment Trends, 2015," Federal Reserve Bank of New York, April 16, 2015, slide 31.

try to stay afloat. Often, the agency will have enough historical data to craft the underwriting criteria that can be used by the rating services or institutional analysts in performing the assessment. The SBA has adopted this approach for lenders in the SBA Section 7(a) guaranteed loan program.

Finally, credit programs are subject to stakeholder influence with respect to oversight of lenders and other partners. Some astute lender trade associations may favor increased agency oversight to detect and address the small proportion of lenders with the highest borrower default rates. These stakeholders recognize that lender outliers that originate or service loans with a serious default rate can imperil the program's overall subsidy rate under Credit Reform, and thereby disadvantage the entire program. On the other hand, for a program such as student loans, where it is increasingly clear that specific subsets of schools

have the highest propensity to lead their student borrowers into default, less congenial stakeholders may be able to obtain legislation or congressional report language or otherwise prevent the program from addressing key sources of default and borrower harm.

C. Improve program information

Program managers should continuously improve program data and make such data public to the maximum degree possible. This can (1) improve program operations and internal evaluations; (2) promote external evaluations and linkages to other relevant data sources; and (3) better inform borrowers about the loans they are considering. In many cases agencies will need added authority to be able to collect appropriate outcome-related information.

Over time, the quality of program information has become stronger. Needed now is to set a basic two-part standard: first, agencies should generate high-quality program performance information (e.g., annual origination volume, cohort delinquency rate, cohort default rate, cohort recovery rate, timing of write-offs versus default) in such a form that program managers, budget officials, and the public can access. Second, agencies should work with and supplement this information to maintain a continuing assessment of borrower outcomes.

Many agencies seem to be able to generate basic loan portfolio information for a data warehouse, for example. However, some agencies report that data definitions often are unclear, leading managers to interpret information inconsistently. If such information becomes public, such as in a one-time report, this opens the door for contradictions to emerge. Part of the solution can come from creating a systematic reconciliation process between the original data and that in the data warehouse; other parts of the solution may require designation of a program official to assist data users with obtaining and understanding the meaning of particular pieces of data. In this way agencies can protect themselves from the loss of reputation that can occur if the publicly available numbers do not add up.

To strengthen information discipline, major credit programs might usefully follow the FHA model and commission annual actuarial reports. FHA benefits from these reports when managers can adjust FHA pricing, and potentially other program aspects such as the credit characteristics of the least creditworthy loans the program makes, to hold to the baseline (in FHA's case this is a two-percent loss reserve) that the program seeks to achieve. When accompanied by audits to validate program information, this can give increased confidence to managers that program outcomes are positive.

Errors can creep into any dataset. However, access by multiple users allows for feedback when a particular user finds anomalies that didn't appear for other uses. Making credit portfolio information public can allow outside users to select data segments in different ways and reach their own conclusions.

There is more to be done. To reveal actual program outcomes, researchers need to com-

bine agency portfolio data with other datasets to draw analytical conclusions—such as the effect of demographic changes on delinquencies and defaults, for example—for program managers and policymakers. Thus, in 2015 the Federal Reserve Bank of New York convened a one-day meeting on student loan data. William Dudley, President of the New York Fed, explained why high-quality student outcome data was badly needed:

> "But there are many important questions still left unanswered. What is the relationship between the amount and type of educational investment that people make and their outcomes? What attributes are associated with borrowers who are more successful at repaying their student loans? Are there particular types of degrees that are associated with better performance with respect to student debt repayment or with better living standards earlier in life? What are the best interventions to help borrowers avoid the consequences of delinquency and default, and to limit any default costs to taxpayers? Do borrowers who use programs like income-based repayment eventually succeed in paying off their debts? How do income-based repayment programs affect important decisions such as labor supply, consumption and household formation?
>
> "These are important questions for the nation, as the human capital of our citizens is far and away our most important asset, and student loans are an important mechanism for financing needed investments in that asset. But it is very hard to answer these questions with existing data. We need to link information on borrower decisions about the kind and amount of education they receive to long-run outcomes for them and for the overall economy."[58]

Former Treasury Deputy Secretary Sarah Bloom Raskin reportedly pointed to other uses of such data:

> "Raskin reiterated her previous call for better data on student loans. She argued that since student debt poses a significant risk for the U.S. Treasury—which ultimately is responsible for financing the federal government—her department needs data to model and mitigate risks. For example, better data would help policymakers predict which borrowers were at higher risk of default and design policies or systems that could help borrowers avert it. The federal government can't form good policy with incomplete data and conjecture, Raskin reportedly said…"[59]

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[58] William C. Dudley, President and Chief Executive Officer, Remarks at the Convening on Student Loan Data Conference, Federal Reserve Bank of New York, New York City, March 4, 2015. Mr. Dudley also has suggested that excessive student debt burdens can affect the overall economy: "The rising burden of student debt is weighing on interest rates in the U.S..., Federal Reserve Bank of New York President William Dudley said. The growing pile of student debt is "'obviously one headwind to economic activity"' that "'probably pushes in that direction of lower equilibrium real rates'" because it limits households' spending power, Dudley said Monday during a press briefing in New York." Matthew Boesler and Shahien Nasiripour, "Student-Debt Overhang Is Pushing Down U.S. Rates, Dudley Says," *Bloomberg*, April 3, 2017.

[59] Shahien Nasiripour, "The Federal Government Has No Idea How Much Americans Owe on Student Loans," *Huffington Post*, March 15, 2015.

There are important privacy issues when a federal credit program publishes portfolio data—especially for personal loan programs such as FHA mortgage insurance or student loans—that can be traced back to the individual borrower. That means that credit programs may need to scrub portfolio data of identifying personal characteristics before publishing it. If publication still would violate privacy protections, credit agencies can follow the approach of IRS or the Social Security Administration of allowing access by professionally qualified researchers who sign appropriate confidentiality agreements and then publish aggregated data not susceptible to identification of particular individuals. As former Deputy Secretary Raskin suggested, credit agencies such as the Office of Federal Student Aid at least could allow Treasury Department analysts access to data to use or publish with appropriate privacy protections.

Borrowers are credit programs' most important partners in achieving stable portfolios and favorable outcomes. They are the supposed beneficiaries of the policies and also bear the burden of policy failure. Credit programs should make it a priority to put useful data in the hands of these borrowers so that they can make the right decisions. With their focus on consumer outcomes, the Consumer Financial Protection Bureau or the Federal Trade Commission may be able to help credit agencies identify good resources and approaches for this work. Credit agencies will need to (1) generate relevant data, (2) devise ways to present information in a form that consumers can understand and use as the basis for their decisions, and (3) test the use of program information that may be of most benefit to different categories of borrower. A precondition to developing useful borrower information is that the credit program first generates the type of data that would be of actual use in helping a borrower to decide whether to take out a loan and for what purposes.

One area where information might be important for borrowers before they apply for an SBA loan to enter or expand a small business involves the line of business (NAICS Code) of the business. It turns out that defaults vary significantly according to NAICS Code; before exhausting their personal resources and taking on debt, prospective borrowers might benefit from information about their chances for success. It would be helpful if SBA could use available default data, for example from its lender monitoring system, to show variations in default rates for the major lines of business that attract most small businesses to SBA funding.

Sometimes providing information by itself may not be enough. Some borrowers are either not getting or not considering information important to making good choices about debt. One survey found that 28 percent of a sample of first-year college students with federal loans believed that they did not have any federal debt. Only a quarter of students could estimate their debt within 10 percent of the correct amount. [60] In such cases, improve-

[59] Shahien Nasiripour, "The Federal Government Has No Idea How Much Americans Owe on Student Loans," *Huffington Post*, March 15, 2015.

ments to program design may be needed, especially for programs that have become too complex. Federal student loans offer 56 different repayment options. Some forms of deferred repayment may have tax consequences, others not.[61] The Department of Education lists seven alternatives for repayment (not all of them income-driven): standard, graduated, extended, pay-as-you-earn, revised pay-as-you-earn, income-based, income-contingent, and income-sensitive.[62] Research has shown that, when faced with choices that are too complex or too many, people are more likely to make no choice at all.[63] Programs need to simplify borrower choices (and expand opportunity for counseling borrowers, especially disadvantaged borrowers) to help ensure that information disclosures can have meaningful results.[64] Program simplification also might allow some agencies to become more efficient in their operations.

Combining credit program portfolio data with externally generated data about demographics, income, etc., can help to improve borrower outcomes. For instance, OMB reports that "ERS [the USDA Economic Research Service] is combining administrative data collected by the Rural Business-Cooperative Service (RBS) with business establishment data from the National Establishment Times Series data and other data sources to assess impacts of selected RBS grant and loan programs on rural business survival and growth."[65] The result of information about outcomes could be programs of consumer awareness or even policymaker consideration of legislation for a streamlined program structure such as economist Susan Dynarski has suggested for the massive federal direct student loan program.[66]

To conduct such analyses, agencies will need to (1) ensure that they are legislatively permitted to gather relevant data and track outcomes, and (2) improve their evaluation capabilities. It would also help for federal loan programs to publish their portfolio data, taking account of privacy concerns, so outside analysts can conduct academic research to shed light on benefits and costs of various program features

[60] Beth Akers and Matthew M. Chingos, "Are College Students Borrowing Blindly?" Brookings Institution, December 2014.
[61] Jack Remondi, "Navient chief: There are 56 options for repaying federal student loans. It's time to simplify," *Washington Post*, August 26, 2016.
[62] https://studentaid.ed.gov/sa/repay-loans/understand/plans
[63] Sheena S. Iyengar and Mark R. Lepper, "When Choice Is Demotivating: Can One Desire Too Much of a Good Thing?" *Journal of Personality and Social Psychology* 79, no. 6 (2000): 995–1006.
[64] The Federal student aid program does provide useful information on cost and graduation rates of schools and other factors about price versus value that is likely to be useful for some student borrowers, and especially those from well-educated families. See https://collegecost.ed.gov/.
[65] Office of Management and Budget, "Using Administrative and Survey Data to Build Evidence," white paper submitted to the Commission on Evidence-Based Policymaking, July 15, 2016.
[66] See Susan Dynarski, "An Economist's Perspective on Student Loans in the United States," working paper, Brookings Institution, September 2014.

and potential alternatives.[67] Credit agencies also can invite outside analysts into the agency for up to two years, the allowed term for Intergovernmental Personnel Act (IPA) agreements. IPA analysts then are bound by confidentiality rules so that results of their research, when published, can be screened to ensure that privacy of borrowers has been completely protected. The data could also be provided to an academic or other nonprofit organization to establish a publicly available loan performance analytics platform.

D. Increase risk-sharing and price credit to improve outcomes

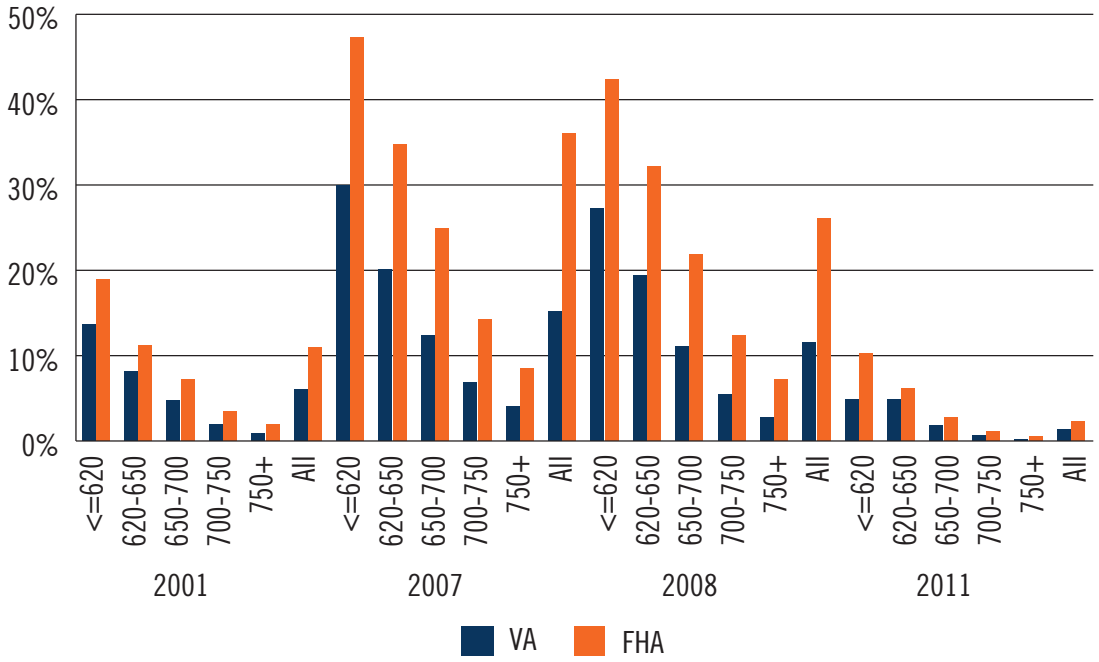
Policymakers should permit credit program agencies to vary program fees and to share significant risk of default with lenders, other program partners, and borrowers, even if only on a limited experimental basis.

Risk-sharing can be a valuable way to encourage lenders to make higher quality loans. An illustrative contrast in this regard may come from performance of VA home loans versus FHA insured mortgages. While FHA provides 100 percent insurance of the mortgage, meaning that the lender bears no risk from default, VA provides a 25 percent loan guaranty up to $36,000, with the lender bearing the remaining risk. The Urban Institute analyzed defaults of the two programs and found that, even holding borrower incomes and credit scores constant, VA loans defaulted at a significantly lower rate. As will be discussed below, there are some differences in administration of the FHA and VA programs. Even so, it seems that lender "skin in the game" can provide a critical incentive to discouraging borrower defaults. It would be good to allow federal programs to vary the amount of risk-sharing with lenders and other private parties (schools in the student loan program) and run experiments to find the optimal amount of risk-sharing that reduces defaults while not discouraging lending to creditworthy borrowers.

Figure 10, below, based on the report from the Urban Institute, compares default rates for FHA single-family mortgages with those of VA home loans, across a range of FICO scores. The Urban Institute found no appreciable difference between the two samples with respect to loan-to-value ratio and the ratio of mortgage payment to borrower income.

[67] In congressional testimony, Ben Miller of the Center for American Progress recommended: "The first step in fixing data transparency is to create a tool that would allow the public to run its own analytics off the data held in NSLDS [the National Student Loan Data System]. This does not mean giving access to anything close to personally identifiable data. It would look like PowerStats, a tool the Department of Education's National Center for Education Statistics (NCES) created to let the public run queries off the sample surveys it administers. With it, anyone can generate statistics about the rate at which students borrow, average amounts, and other important data.
"Building a similar tool for NSDLS could satisfy many research and analysis questions. With it users could answer some of the key questions raised above—what is the longer-term default rate on loans? Do borrows who use forbearance ultimately repay? What are the risk characteristics in terms of institutions and students most associated with poor loan outcomes? This system would not need to produce results at the institutional level, but would have to generate answers by institution type and major student characteristics. And it could include the same privacy protections—including jail time and fines for those who violate rules—that NCES already established for PowerStats."
Prepared Statement of Ben Miller, Senior Director, Postsecondary Education, Center for American Progress Before the United States House of Representatives Committee on Oversight and Government Reform, Subcommittee on Government Operations and United States House of Representatives Education and the Workforce Committee Subcommittee on Higher Education and Workforce Training, November 18, 2015, p. 9

Figure 10. Default Rates of FHA Mortgages and VA Loans, According to FICO Score



Source: Laurie Goodman, Ellen Seidman, and Jun Zhu, "VA Loans Outperform FHA Loans. Why? And What Can We Learn?" Urban Institute, July 2014.[68]

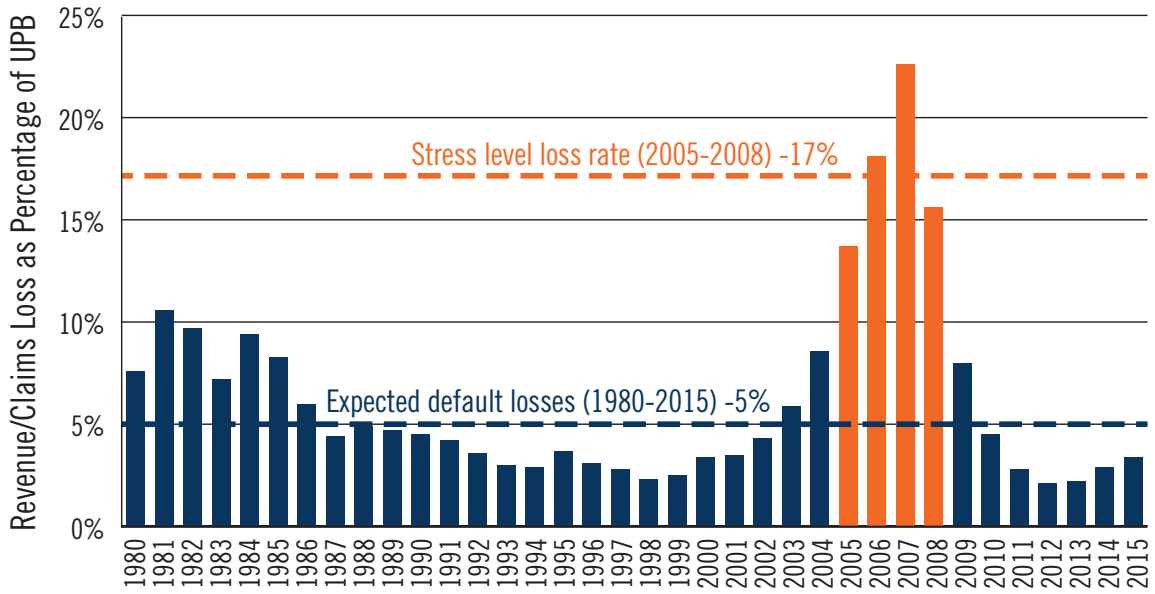
Another factor for some credit programs relates to pricing levels. Figure 11, below, comes from FHA which, thanks partly to the discipline imposed by the requirement for an annual actuarial report, possesses superior data to many other programs. The variation in level of FHA loan defaults shows how a loan program operates in a financial context that can change rapidly, especially in cases of major financial disruptions such as the financial crisis (the red bars). In today's constrained budget environment systematic underpricing can cause budget problems when the credit cycle changes and favorable economic times end for a program.

By tracking and reporting on the extent that pricing levels reflect actual credit costs over time, an agency can provide important information about how pricing might be adjusted to make a program financially sustainable in bad times as well as good. The FHA approach to tracking pricing vis-à-vis outcomes[69] is something that would benefit all major fed-

[68] The paper did not control for income, LTV, or geography, or payment-to-income (a proxy for debt-to-income). However, they found that only the inclusion of income changed the results, and "VA default rates [were] considerably lower and the largest differences occur[red] in the lower-income/lower–credit score borrowers." Laurie Goodman, Ellen Seidman, and Jun Zhu, "VA Loans Outperform FHA Loans. Why? And What Can We Learn?" Urban Institute, July 2014, pp. 3-8.

[69] FHA program losses are a useful proxy for defaults and thus borrower outcomes.

Figure 11. Tracking Program Losses Over Time



Source: Federal Housing Administration, *Annual Report to Congress: The Financial Status of the FHA Mutual Mortgage Insurance Fund, Fiscal Year 2015*, November 16, 2015, p. 39.

eral credit programs. In addition, the agency can relate pricing levels to program outcomes to help decide how to improve the benefit-cost balance.

Besides pricing levels, credit programs can consider pricing individual loans. The private sector seeks to price for the risk of loans so that high-risk borrowers pay more for a loan than would lower-risk borrowers. The Export-Import Bank of the United States similarly sets loan fees based on the risks of the country to which exports are directed, that is, the sovereign risk exposure of the loan, as well as financial characteristics of the loan and whether the borrower is sovereign or non-sovereign.[70]

By contrast, major credit programs such as federal student loans and FHA mortgage insurance generally do not price according to risk. While the lack of risk-based pricing traditionally has been seen as virtuous, because disadvantaged borrowers would gain easier access to federal credit, there can be costs in terms of borrower outcomes. Consider again FHA:

[70] Ex-Im rates countries on a 7-point sovereign risk scale. In addition, "The basic sovereign risk exposure fee, i.e., the minimum fee for a country, is determined by five variables: exposure fee level of the country, percentage of cover, the "'quality'" of product provided, and the length of the drawdown and repayment periods." Export-Import Bank of the United States, "Exposure Fees," available at http://www.exim.gov/tools-for-exporters/exposure-fees/medium-term-indicative-fees.

> "The failure of FHA pricing to reflect risk [creates] a missed opportunity: Variations in insurance costs can prompt households to make sensible decisions. Raising prices to households with a poor credit history who are considering purchasing a house with a low down payment and a high payment-to-income ratio would signal to households that they are making a costly decision…[P]olicymakers should implement risk-based pricing. As much as possible, the FHA should avoid excessive risk layering and charge suitably higher fees to borrowers with low credit scores who want high-LTV loans."[71]

Here experimentation and pilot programs may be helpful, by testing what kinds of price signals can lead to positive outcomes, such as when a household defers homeownership to accumulate more of a down payment and thereby reduces the chance of defaulting.

E. Improve outcomes with effective counseling

Policymakers should authorize agencies to make greater use of credit counseling, especially for disadvantaged borrowers.

Counseling can prepare vulnerable borrowers to take on debt. A good example comes from the SBA's disaster loan program. In June 2008 Cedar Rapids, Iowa, suffered the greatest flood in its history, with a crest of 31 feet that inundated 10 square miles of the city. The Cedar Rapids business community came together quickly to develop a coordinated plan to support businesses and assist them to return to operation.[72] Cedar Rapids Small Business Development Centers (SBDCs) counseled small businesses to create business plans to cope with the disruption caused by the disaster.[73] Because a disaster changes the entire context in which a small business operates, business owners can find it hard to develop a business plan that takes account of the locality's post-disaster circumstances. Following Hurricane Sandy and building on the Cedar Rapids experience, SBA obtained appropriations for SBDCs to provide counseling services. When a small business applies for a disaster loan and is turned down, SBA contacts the applicant suggesting that they consult their local SBDC for assistance with the application and the associated business plan. This counseling has proved valuable in generating a higher percentage of successful loan reapplications, meeting SBA's credit criteria, by the counseled businesses.

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[71] Robert Van Order and Anthony M. Yezer, "FHA: Recent History and Future Prospects," *Housing Policy Debate*, vol. 24, no. 3, 2014, pp. 644-650, at pp. 648-9. Risk layering is the combination of risks that can result from multiple forms of relaxed standards, such as low down payments (i.e., high loan-to-value ratios, or LTV), high debt-to-income ratios, and low credit scores. The result of risk-layering is a significant increase in likelihood that a borrower will default.

[72] The Cedar Rapids Area Chamber of Commerce, "First Business Case Management Program for a Natural Disaster: Cedar Rapids, Iowa – June 2008 Flood," January 2012.

[73] The SBA provides funding, oversight, and support to SBDCs to provide small businesses support for their growth and development. SBA also supports the SCORE Association, a nonprofit association of thousands of volunteer members ("Service Corps of Retired Executives") who are trained to serve as counselors, advisors and mentors to business owners and who played a role in mentoring businesses in Cedar Rapids.

The logic of counseling a disadvantaged borrower before taking out a loan is compelling. For instance, appropriate first-time homebuyers can be counseled to undertake the financial planning and budgeting needed to understand whether they are ready and to prepare them for homeownership.[74] They may also come to understand that they might want to purchase a smaller home than their hearts would desire, so that their loan is sustainable over the long term. If it has the authority, the agency can undertake counseling experiments to determine the most cost-effective way to improve borrower outcomes.

Here too, stakeholder influence plays a role. While students would benefit from learning about the benefits and costs of alternative educational choices, stakeholders have obtained enactment of a law that limits the authority of schools to counsel borrowers who may find themselves taking on more debt than they can handle.[75] Furthermore, federal credit programs will need to specify in contract or regulation which party is obligated to provide counseling and at what stage in the process. Navient, the largest student loan servicer, for example, has contended in court that it has no obligation to counsel borrowers and that its "role is to collect payments owed by borrowers … and there is no expectation that the servicer will 'act in the interest of the consumer.'"[76]

Finally, post-purchase counseling can help moderately delinquent homeowners try to avoid default and foreclosure. Researchers into this approach to improving borrower outcomes argue that, "Efforts to promote homeownership among LMI [low- and moderate-income] households will only succeed if accompanied by measures to control default rates and increase curing rates for borrowers already reaching delinquency."[77] In other words, by intervening early when a borrower becomes delinquent, programs may be able to prevent the progression from early delinquency to default. This is similar to the precept in student loans that the best way to reduce default rates is to ensure that the student makes the first payment on his or her loan.

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[74] A study by Freddie Mac economists, for instance, using data from Freddie Mac's affordable housing outreach program, shows that prepurchase homeownership counseling could reduce 90-day delinquencies (i.e., defaults) of first-time homebuyers by 29 percent, or an average of $ 1,000 per originated loan. Gabriela Avila, Hoa Nguyen, and Peter Zorn, "The Benefits of Pre-Purchase Homeownership Counseling," Freddie Mac Working Paper, April 2013. See also Wei Li, Bing Bai, Laurie Goodman, and Jun Zhu, "NeighborWorks America's Homeownership Education and Counseling: Who Receives It and Is It Effective?" Urban Institute, September 2016, indicating that the housing counseling program of NeighborWorks reduced defaults of vulnerable homebuyers by an estimated 16 percent. The value of counseling depends in part on the point in the credit cycle (e.g., before or after the financial crisis) of the data being evaluated.

[75] Thus, as a letter from the Department of Education explains, while schools may encourage students to undertake counseling, "An institution may not *require* students to participate in counseling beyond the required entrance counseling for first-time student borrowers as a condition for receiving a Direct Loan, regardless of when or where the earlier counseling occurred." Office of Federal Student Aid, "Loan Counseling Requirements and Flexibilities," April 6, 2015, emphasis in original.

[76] "Memorandum of Law In Support Of Defendants' Motion To Dismiss Plaintiff's Complaint Under Rule 12(B)(6) or, In The Alternative, For a More Definite Statement Under Rule 12(e)," filed in the case of *Consumer Financial Protection Bureau v. Navient Corporation, et al.*, Civil Action No. 3:CV-17-00101, United States District Court For The Middle District of Pennsylvania, Filed March 24, 2017, pp. 20-21.

[77] Lei Ding, Roberto G. Quercia, and Janneke Ratcliffe, "Post-purchase Counseling and Default Resolutions among Low-and Moderate-Income Borrowers," *Journal of Real Estate Research*, vol. 30, no. 3, 2008, pp. 315-344. "Curing" occurs when a borrower becomes current on a delinquent loan.

IV. Recommendations: Improving Program Outcomes

A. Anticipate increased resource constraints and their implications for program management and outcomes

Many credit agencies find themselves in a squeeze between increasing volumes of credit they provide and seriously constrained budgets to administer that credit. Risk-based budgeting is a way for credit agencies to prioritize their resources to protect their core missions and supporting activities; less important activities need then to be jettisoned.

Increased budget pressures

Discretionary spending of the federal government has decreased significantly over the past 20 years, both in real terms and as a percent of GDP and agencies are likely to face continuing reductions in their administrative budgets. Meanwhile, policymakers and program constituencies will increasingly seek to achieve a "zero" or "negative" credit subsidy level so that credit programs can serve more constituents despite budget constraints. Credit programs continue to grow in volume, with credit managers under pressure to "get the money out the door" before the fiscal year ends.

Unless properly managed, the collision of these two forces—the simultaneous downward pressure on administrative budgets and desire for ongoing program growth—could result in reduced outcomes for some federal credit programs and their borrowers. Some lenders, servicers and other private-sector credit program participants may be able to take advantage of weakened federal oversight and originate or service loans in ways that lead to worse borrower outcomes. Diminished management capacity could lead to growing delinquencies and defaults that could shift credit budgets to a positive subsidy that would require appropriations to fund credit programs in the future.[78] Resource constraints also can obstruct an agency's ability to perform its mission and serve the most pressing borrower needs. Thus, the Export-Import Bank found itself unable to expand much-needed credit to the small business sector because of its limited number of staff underwriters. This was

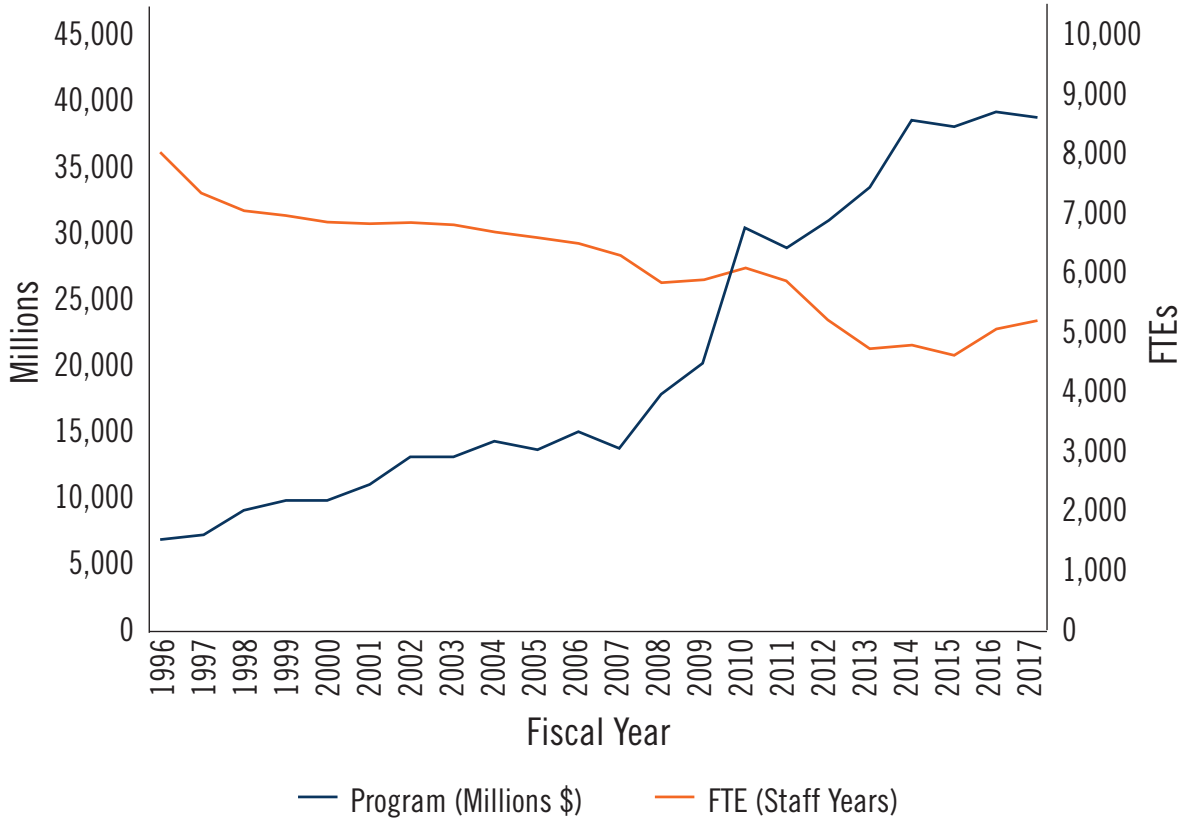
[78] A notable exception is the Federal Direct Student Loan program, which is an entitlement and is funded as a "mandatory" expenditure under the budget rules.

particularly damaging to small businesses seeking to grow after the financial crisis when private lenders had pulled back. Federal credit agencies will need to focus on outcomes to address such adverse scenarios.

Each credit program is different and faces different pressures, risks, and opportunities. Figure 12 below shows the decline in staffing ("FTEs") at one major federal credit agency, USDA's Rural Development mission, which lost about 1,000 people in the last ten years, even as program outlays almost trebled. Other programs and agencies display similar patterns. The current budget climate is likely to exacerbate these trends.

Agencies would be foolhardy if they failed to plan for contingencies that an administrative budget squeeze can cause. One danger is that continuing political conflict over budget priorities could lead to another round of arbitrary

Figure 12. Program Level vs Staffing (excluding Recovery Act)



Source: USDA Rural Development, *President's Budget Justification 2017*, p. 28-15, available at http://www.obpa.usda.gov/fy17explan_notes.html.

budget reductions, known as sequestration, that the federal government experienced in 2013.[79] Caught by surprise, agencies scrambled to mitigate the impact of sequestration cuts on their workforces. Some agencies offered voluntary buy-outs instead of imposing furloughs or even lay-offs of employees. The cost in too many cases was the departure of experienced managers and staff. Agencies discovered that they had failed to implement succession planning.

Another sequestration, or large-scale departures of seasoned staff for any reason, could seriously affect agency performance. If programs display trends such as in Figure 12, this should be taken as a warning; agencies have only limited time to conduct succession planning and workforce training to ensure that key positions continue to be occupied by knowledgeable and capable people. Human capital losses also will occur as increasing numbers of employees reach retirement age and leave the agency. This can have a cascading effect that could lead to increased default rates (or other problems) and consequent increases in credit subsidy requirements and even policymaker loss of confidence in particular programs.

Managers need to monitor staffing levels against workload trends and other indicators such as Information Technology (IT) budgets and Salary and Expense ("S&E") budget trends. The first step is to publish and respond to annual trends in workload versus agency staff size. Agencies must constantly review their ways of doing business to ensure that they are protecting their core missions while possibly sacrificing less important activities to their budget shortfalls. As with other federal programs, credit agency managers must anticipate these questions.

Risk-based budgeting

One approach agencies should consider adopting is risk-based budgeting. Instead of the frequent practice of simply allocating cuts pro rata across activities, agencies will need to categorize their activities: (1) those prescribed by law or that otherwise are essential to carrying out the agency's core mission, (2) those to sustain agency capabilities long term, (3) those of special value to important constituencies, and (4) those that would be valuable if funds are available. Cuts then can be allocated to protect the first two categories, applying most cuts to the fourth, to the extent necessary and politically feasible. Agencies often may need to obtain clearance from OMB and the relevant appropriations subcommittees to obtain optimal benefits from this approach.[80]

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[79] See, US Government Accountability Office, "2013 Sequestration: Agencies Reduced Some Services and Investments, While Taking Certain Actions to Mitigate Effects," GAO-14-244, March 2014.

[80] See, e.g., Thomas H. Stanton, "Risk Management and the Dynamics of Budget Cuts," chapter 10 of Thomas H. Stanton and Douglas W. Webster, eds., *Managing Risk and Uncertainty: A Guide for Government Decision Makers* (John Wiley & Sons, Inc., 2014); and, for an excellent analysis of risk-based budgeting in the private sector context, "Cut Costs to Grow Stronger," chapter 5 of Paul Leinwand and Cesare Mainardi, *Strategy That Works: How Winning Companies Close the Strategy-Execution Gap* (Harvard Business Review Press, 2016).

Only a few agencies have undertaken risk-based budgeting. The Office of Federal Student Aid (FSA) is a leader in this regard. Over a decade ago FSA created an Investment Committee, now the Investment Review Board (IRB), chaired by the Chief Operating Officer (the chief executive of FSA) and attended by senior FSA managers, to make investment decisions more systematically. The IRB hears requests for approval to spend money that has already been budgeted for the fiscal year. The FSA strategic plan includes metrics for each strategic goal, and the IRB reviews the status of each ongoing project and maintains scorecards for each approved project. Following a review, the IRB might allocate support to a troubled project or otherwise help project managers to deal with problems in a proactive way.

The role of the IRB has grown over time. The board now reviews and prioritizes all of FSA's appropriated funds. Along with the investment portfolio, budget allocations for staffing get especially close attention. The IRB currently reviews about 30 budget line items and about 100 investments. To assist the IRB in decision making, the Office of Chief Financial Officer (CFO) produces roughly 70 scenarios of the investment portfolio. Many of these are updates reflecting baseline change requests that have the effect of increasing the funding level for some investments while decreasing others. Decisions are based on risk. The CFO's office prepares explanations of the risks of budget shortfalls, compared to the president's requested budget, so that congressional committees can make informed decisions about the level of funding to appropriate.[81]

Another example of a risk-based budget approach comes from the Government Accountability Office (GAO), which proactively worked to prepare for upcoming budget cuts in a short period. The leadership set forth two principles to shrink its budget: (1) Maintain at all costs the quality of work product;

[81] For instance, the FSA FY 2016 *Annual Report* provides seven examples of risks that could result from substantial budget cuts that the Congress was considering: "… even a small variation in any of FSA's volumes can significantly impact its budget. This places all other expenditures and plans associated with those expenditures at risk. This risk must be managed as long as the federal government pays for mandatory Direct Loan expenditures using discretionary administration funding. As of the end of this fiscal year, the House and Senate are proposing to fund Student Aid Administration loan-servicing activities at $855 million, $44 million short of the level proposed in the FY 2017 President's Budget. In addition, the anticipated FY 2017 costs of loan servicing have increased… In total, these changes will result in a $61 million loan servicing budget shortfall that must be cut from other operations, given the risky budgeting process. These cuts would have devastating impacts on the operations of Federal Student Aid. A few examples are listed below:

- Increases the likelihood of a data breach or system intrusion, which would place personally identifiable information of over 130 million students and borrowers at risk;
- Increases the risk of school oversight failures and limits the ability to address school oversight challenges for over 6,000 schools;
- Decreases ability to provide loan servicing oversight necessary to protect over 42 million borrowers and limits the ability to address contractor oversight and system implementation issues;
- Increases the risk of a systems infrastructure failure and limits the ability to manage system change, which would jeopardize the delivery of over $125.7 billion of aid annually;
- Decreases transparency to the public and limits the ability to support policy decisions with data;
- Decreases the outreach and awareness efforts to tens of thousands of students that are most in need of assistance."
- Eliminates plans to address thousands of Office of Inspector General (OIG) fraud referrals."

FSA Annual Report FY 2016, pp. 49-50.

and (2) have the least possible impact on the available work force. Applying these principles led to important decisions about priorities. Maintaining product quality meant reducing the number of reports done each year. GAO worked closely with its congressional clients to ensure agreement on congressional priorities for its work. With respect to the second principle, the GAO decided not to close field offices. Instead it instituted a major telework program for its employees. This reduced overhead costs substantially, and especially rent costs, achieving cost savings without sacrificing quality.

Activity-based costing

One valuable tool for identifying and achieving resource savings is activity-based costing, which identifies costs of each major activity. In the late 1990s SBA faced a set of staffing and program output trends more severe than those in Figure 7. Under pressure from shrinking staffing resources, SBA commissioned a cost allocation study, which was a slimmed-down version of activity-based costing. The analysis revealed that SBA staff spent excessive time trying to manage nonperforming loans. Further investigation showed that this work yielded few results and insufficient returns to justify the allocation of staff.

Once it made this diagnosis, SBA changed regulations governing its Section 7(a) business loan program to require lenders to liquidate defaulted loans rather than (as had been the case until then) simply putting nonperforming loans back to SBA for resolution. Then, to deal with nonperforming loans still on its books, SBA engaged in sales of billions of dollars of those loans to private companies for collection under contractual guidelines to ensure borrower protections against unfair practices. That way SBA could free up large numbers of staff, especially in field offices, to engage in more productive mission activities such as promoting SBA loans to small businesses and lenders.[82] These actions were prudent: while SBA had almost 4,000 staff (so-called FTEs) in 1988, this had dropped to just over 3,000 by 1996 and today stands at just over 1,900. The experiences of SBA and other agencies with asset sales also shows how well-designed objectives can help to ensure that borrower outcomes are respected when a loan is sold; purchasers of the loans were held to high standards of fair treatment of delinquent or defaulted borrowers.

In today's constrained resource environment, agencies similarly can benefit from cost allocation analysis to explore where they might change business processes to diminish or end less productive activities in favor of those more central to the agency's mission. Again, consultation with stakeholders and policymakers is needed to make the case for change.

Enterprise Risk Management

Another powerful management tool is Enterprise Risk Management (ERM). Reduced to its basic elements, ERM allows agencies to ask and respond to the question: "What are the

[82] See, e.g., Thomas H. Stanton, "Lessons Learned: Obtaining Value from Federal Asset Sales," *Public Budgeting & Finance*, Spring 2003.

risks that could prevent our organization from achieving its mission and objectives (including risks of missing a major opportunity or standing still while the world changes)?" Rather than distracting top management with a myriad of small risks, ERM seeks to improve the flow of information up and down the hierarchy and across business units and with stakeholders so that top managers have a good picture of major risks and rewards when they make decisions.[83]

Enterprise Risk Management allows agencies to consider risks beyond those, such as credit risk or counterparty risk, that they already anticipate. By eliciting information from across the agency and from stakeholders, the risk office can identify a range of risks that a risk committee, often the top management of the agency sitting as a risk committee, can deliberate in a process of constructive dialogue and then prioritize. Risks can be accepted, avoided, reduced, or shared. Prioritizing risks allows an agency to allocate its scarce resources (dollars, staffing, management attention) to address the greatest risks facing the organization. The risk officer facilitates identification, analysis, prioritization and deliberations about how best to address risks, while each manager owns the risks inherent in his or her operation. Focusing on major risks allows an agency to consider risk-reward tradeoffs in its activities. Credit agencies frequently extend credit to borrowers that the private sector considers too risky to serve; what is important is for the agency to understand the amount of risk it is taking and to make a considered decision whether the results are within an acceptable range.

Effective execution of Enterprise Risk Management becomes especially important during times of budget uncertainty and constraints. The core question of ERM changes from asking, "What are the major risks that could prevent our organization from achieving its mission and objectives," to asking, "As we refocus our mission to operate with a significantly reduced budget, what are the major risks that could prevent our agency from accomplishing its mission and objectives?"

Resources are increasingly available for agencies, including an excellent *ERM Playbook* and the Association for Federal Enterprise Risk Management (AFERM), a growing community of practice that offers online training and a network of people from organizations at various stages of ERM implementation who can help share experiences and approaches to practicing ERM effectively.[84]

B. Improve budgeting for credit administration

Policymakers in both executive and legislative branches should revise credit budget rules to require inclusion of administrative expense funding in credit program subsidy costs. This would create an incentive for federal agen-

[83] OMB Circular A-123, "Management's Responsibility for Enterprise Risk Management and Internal Control," released July 15, 2016; Thomas H. Stanton and Douglas W. Webster, eds., *Managing Risk and Performance: A Guide for Government Decision Makers* (John Wiley & Sons, 2014); and Thomas H. Stanton, *An Agency Guide for ERM Implementation*, Association of Government Accountants, 2017.

[84] The *Playbook* and other resources are available without charge on the AFERM website, www.AFERM.org.

cies to make cost-effective investments in staff, systems, and processes, if these could be offset by savings from lower defaults.

The Federal Credit Reform Act was incomplete in that it did not include in the cost of credit programs the resources used to administer these programs. This places credit programs in a bind: the quality of credit a program provides, both in terms of precision of targeting and minimization of default, depends in part on the quantity and quality of available staff and other resources. Delinking administrative costs from credit subsidies means that default-aversion measures, such as counseling or improved servicing or stronger lender oversight that cost program resources, cannot be offset by budget savings from reducing defaults. Separating administrative from budget costs also leads to the risks, discussed above, of too few resources allocated to managing too much credit.

The budget separation also means that the "credit subsidy" appropriation pays for only a portion of the actual cost to the federal taxpayers of extending credit to intended beneficiaries. In this respect, it seems misleading to say that a credit program conveys a zero or negative subsidy. If administrative expenses were included in the subsidy calculation, programs would need to charge higher interest rates or raise fees and premiums if policymakers choose to ensure that taxpayers are not "subsidizing" a particular credit support program of the federal government. Also, having program beneficiaries pay for administrative expenses could provide relief for credit programs from restraints on discretionary spending that undermine good program management practices.

This shortcoming in the FCRA methodology also means that direct loans are priced more advantageously to borrowers than guaranteed loans. That is because loan guarantees are administered by private lenders, who typically set interest rates and fees on borrowers sufficient to cover their costs. Meanwhile, direct loans are administered by federal agencies, so their full administrative costs are paid as part of agency overhead expenses and not charged to the borrower.

While not all issues of credit budgeting are susceptible of being addressed easily, it seems appropriate to revisit the separation of administrative costs from the credit subsidy appropriation. When the federal government extends credit support, it can be pennywise and pound foolish to skimp on the costs of oversight. If a program is to be successful, the federal government needs to retain capacity to ensure that, on balance, the credit is repaid. The trend of ever-increasing volumes of federal credit outstanding and oversight by increasingly constrained agencies will lead inexorably to greater costs than if adequate oversight had been maintained. It is time to combine administrative costs with credit subsidy budgets.[85]

[85] Another important issue for federal credit programs in the budget process concerns the discount rate used to calculate credit subsidies. FCRA requires that the Treasury interest rates for comparable periods be used to make such subsidy calculations. The Congressional Budget Office and others have suggested that the more appropriate methodology would employ market risk adjusted, or "fair value," interest rates. For a discussion of this issue, see the accompanying chapter on "Credit Programs and the Federal Budget Process."

C. Improve program evaluation

Especially at a time of resource constraints, it can be cost-effective for credit agencies to dedicate a small amount of resources to program evaluation. This can help policy makers and managers to target credit programs to achieve the most beneficial outcomes for taxpayers and borrowers.

It makes sense, even at a time of resource constraints, for agencies to spend some resources on evaluating how well they are improving the lives of people and enterprises they are trying to serve. Here the US Department of Labor provides a good model. Working with congressional leaders, the department established its office of evaluation in 2010, to:

> "(1) build evaluation capacity and expertise in the Department; (2) ensure high standards in evaluations undertaken by, or funded by the Department of Labor; (3) facilitate the use of evaluation and research findings for performance management priorities; (4) ensure the independence of the evaluation and research functions; and (5) make sure that evaluation and research findings are available and accessible in a timely and user-friendly way, so they inform policymakers, program managers, and the public. To further these goals, the Department of Labor is also building partnerships with the academic community and other outside parties to leverage private-sector research expertise."[86]

From the 2012 fiscal year to the 2015 fiscal year Congress authorized the department to set aside a small amount, up to half of a percent (0.5 percent) of operating agency budgets, for the department's program evaluations and, in 2016 increased the allocation to up to three-quarters of a percent (0.75 percent).[87] That amounted to about $ 8 million in 2016, and the percentages, for a major credit program such as FHA, SBA, or federal student loans, would seem to be a reasonable investment.

The department adopted three principles for its evaluation work:

> "1) prioritize studies that focus on measuring the effectiveness of key program outputs and outcomes consistent with the overall Departmental Strategic Plan and the agency Operating Plans; 2) encourage the most rigorous evaluation designs possible, particularly experimental designs, but in a manner that is realistic given the programmatic missions/goals, programmatic maturity, data availability, and analytic capability; and 3) expand the knowledge, capacity, value, and understanding of high quality evaluation designs and methods department-wide. All evaluations are related to the Strategic Plan, statutory requirements, or emerging departmental priorities."[88]

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[86] *U.S. Department of Labor, FY 2016 Congressional Budget Justification: Departmental Management,* p. DM-111.
[87] Andrew Feldman, "Strengthening Results-Focused Government: Strategies to Build on Bipartisan Progress in Evidence-Based Policy," Brookings Institution, January 2017, p 42.
[88] *U.S. Department of Labor, FY 2016 Congressional Budget Justification: Departmental Management,* p. DM-113.

For federal credit agencies, creating—or enhancing an existing—evaluation capability would help to ensure a focus on program outcomes and not merely the volume of credit that a program provides. Strong evaluation offices with skilled staffs can gather and analyze information about program outcomes, including analysis of the impact of a program on the least advantaged borrowers at the bottom of the credit box. Such offices should publish results and make recommendations for improving outcomes. Recommendations would go to the agency leadership, or, when new authority may be required, to Congress. By generating data, good evaluation offices can help inform both program management and policymakers about the benefits and costs of program alternatives.

Maintaining a focused program requires that an agency obtain useful and well-supported feedback about what its program is accomplishing. Independent evaluation offices can focus upon outcome measures, rather than mere outputs such as the volume of credit that an agency extends each year. The most useful evaluations relate to variables that an agency by law may adjust, either directly or indirectly. For some agencies, these may include factors relating to creditworthiness of the borrower and the loan, ancillary services such as counseling, and pricing.

It is inevitable that some borrowers will not succeed. As noted above, program managers and policymakers must decide how much risk of failure they are willing to accept. Independent evaluation offices can provide information and make recommendations to improve borrower outcomes by using all the tools of government, not just credit. For instance, their recommendations might give attention in deliberations on where to draw the line in an appropriations bill between rent vouchers and homeownership credit, especially for people with reduced capacity to bear the debt burden of homeownership.[89] Similarly, for the federal student loan program, rigorous evaluations could contribute to decisions on seeking funding for Pell Grants instead of student loans to better aid certain borrowers with an unacceptably high propensity to default. Or Community Development Block Grants may be able to provide disaster grant assistance for businesses that do not qualify for an SBA disaster loan, although this would require coordination across agencies. Other tradeoffs also may be possible, such as expanding the volume of multifamily mortgage insurance so that greater numbers of disadvantaged households might become renters, rather than hazarding the possibilities of indebted homeownership.

In sum, having evaluation offices with sufficient staff and resources to conduct ongoing

[89] Thus, scholars from the Harvard Joint Housing Center advocate a "tenure-neutral" approach to policy, where the goal of quality, affordable housing drives the question of which form of assistance is most appropriate. Christopher E. Herbert, Daniel T. McCue, and Rocio Sanchez-Moyano, "Is Homeownership Still an Effective Means of Building Wealth for Low-income and Minority Households? (Was it Ever?)," Joint Center for Housing Studies, Harvard University, Chapter 2 in Eric S. Belsky, *Homeownership Built to Last: Balancing Access, Affordability, and Risk after the Housing Crisis*, Brookings Institution Press, 2014. As discussed earlier, the problem with the other tools is that credit budgeting—as presently practiced—may make federal credit appear relatively more attractive from a budget perspective than grants, vouchers or tax expenditures to achieve similar policy ends.

rigorous analyses of federal credit programs is a critical element in helping to limit the damage that can be caused by excessive lending. In addition, it seems likely that ensuring that agencies have a strong credit program evaluation capacity could prove cost-effective not only in improving the value of credit programs for borrowers, but also by developing approaches to averting borrower defaults that save taxpayers money.

D. Increase experimentation and pilot projects to improve borrower benefits vs. costs

Experiments and pilot programs are another way for credit agencies to focus their efforts on achieving the most beneficial results. Technology is changing lending practices so rapidly that agencies need to experiment with potentially cost-effective innovations. Experimentation and pilot programs will require a change in mind-set for some programs and possibly an increase in authority.

Federal credit agencies show an impressive ability to recognize and, when permitted, to implement significant program innovations. Ideally, a credit agency would conduct regular experiments and pilot programs to determine how best to focus its credit programs as markets and public priorities evolve. There would be a continuing cycle of lending-measuring outcomes-revising-and again lending. However, the way that policymakers and private stakeholders become accustomed to a particular pattern of federal involvement means that federal credit programs may become much less nimble than their private-sector counterparts. As Sarah Wartell of the Urban Institute, and a former FHA official, has testified, FHA has difficulty engaging in demonstration projects:

> "…FHA tends to adopt new programs or program changes for its entire portfolio. There are exceptions, of course. FHA did begin to pilot note sales before expanding the program. But too often, unlike private-market participants that will try out a new business practice or insure a small portfolio and test performance before applying a strategy to the whole business, the statutory and regulatory environment for FHA leads to "all or nothing" policy changes. The length of the administrative procedures required also leads to full implementation rather than testing, because an evolutionary or phased change strategy would require iterative regulatory changes and sap so much administrative energy. These practices inherently increase risks to the Fund because new policies go into effect without enough evidence of their likely impact."[90]

Stakeholder influence also plays a role in the lack of sufficient agency pilot projects and agency inertia more generally. In 2014 FHA proposed a pilot program of expanded housing counseling and providing incentives in the form of lowered mortgage insurance premiums for less credit-

[90] Written Testimony of Sarah Rosen Wartell, President, Urban Institute, before the House Financial Services Committee Subcommittee on Housing and Insurance, April 10, 2013, p. 8

worthy borrowers who, with counseling, might lower their chances of default.[91] Congress declined to fund the proposal, effectively killing it. Among concerns that stakeholders expressed was that the pilot, and especially incentives for borrowers, would cost too much and would require an increase in already uncompetitive FHA fees.[92] Congress similarly rebuffed an initiative of the SBA proposing to shift funding away from small-business training programs to fund advanced training to encourage growth of slightly larger companies, those with the potential but not necessarily the expertise to accelerate hiring and add new revenue streams. While SBA contended that the new program would generate greater economic growth than the current program, Congress declined to approve the change.[93]

The Office of Federal Student Aid appears to be more active than other programs in developing pilot programs and experiments. One example is a joint program between FSA and the Treasury to test new forms of loan collection.[94] Another is a pilot program to assess the effectiveness of providing credit to selected partnerships between innovative postsecondary institutions and non-traditional sources of education such as online programs and intensive "boot camps" for disadvantaged students.[95]

FSA also is actively engaged in experimentation through its Office of Customer Experience in collaboration with a behavioral research group at the General Services Administration (GSA). Experiments focus on students transitioning to make their first loan repayments, struggling borrowers, and borrowers needing assistance to find good options in selecting a loan repayment plan. The experiments generally involve providing e-mail communication with one group of borrowers but not to a control group and then measuring the difference in responses. Experiments may include pools of several hundred thousand borrowers. The experiments generally seek to implement aspects of the Student Aid Bill of Rights issued by the White House in 2015.[96]

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[91] FHA, "Blueprint for Access: What FHA is Doing to Expand Access to Mortgage Credit for Underserved Borrowers," 2014. The blueprint pointed to research showing significantly reduced default rates for borrowers, and especially first-time borrowers if they first receive counseling; see also US Department of Housing and Urban Development, Federal Housing Administration (FHA), "Homeowners Armed With Knowledge (HAWK) for New Homebuyers,",' Notice, *Federal Register*, Vol. 79, No. 94, May 15, 2014.

[92] Ben Lane, "Congressional budget bill kills HUD homeowner assistance program; HAWK [Homeowners Armed with Knowledge] program designed to offer savings on FHA-insured loans," *Housingwire*, December 17, 2014.

[93] See, e.g., J.D. Harrison, "House committee rips SBA for unauthorized pilot programs, contracting woes," *Washington Post*, March 26, 2014; and J.D. Harrison, "SBA shifting funding away from small-business training programs, draws fire from Congress," *Washington Post*, May 8, 2013.

[94] David Lebryk, Treasury Fiscal Assistant Secretary, "Working to Achieve Better Outcomes for Student Loan Borrowers," *Treasury Notes*, February 11, 2016; David Lebryk, "An Update on the Fiscal-Federal Student Aid Pilot for Servicing Defaulted Student Loan Debt," *Treasury Notes*, July 1, 2016.

[95] U.S. Department of Education, "FACT SHEET: Department of Education Launches the Educational Quality through Innovative Partnerships (EQUIP) Experiment to Provide Low-Income Students with Access to New Models of Education and Training," October 14, 2015.

[96] See, White House, "FACT SHEET: A Student Aid Bill of Rights: Taking Action to Ensure Strong Consumer Protections for Student Loan Borrowers," March 10, 2015. The five elements of the Student Aid Bill of Rights are: Every student deserves access to a quality, affordable education at a college that's cutting costs and increasing learning. Every student should be able to access the resources needed to pay for college. Every borrower has the right to an affordable repayment plan. And every borrower has the right to quality customer service, reliable information, and fair treatment, even if they struggle to repay their loans.

For homeownership, FHA may find it helpful to adopt some administrative features from the VA home loan program. As noted earlier, Urban Institute researchers have found that VA loans perform better than FHA loans.[97] Besides the matter of loan-to-value ratios discussed earlier, they also point to a "residual income test" that VA, but not FHA, applies to check on the borrower's ability to pay for ordinary living expenses—such as food, clothing, transportation, and medical expenses —besides making mortgage payments and paying for the other costs of homeownership. The difference between FHA and VA borrower outcomes would seem to pose an ideal opportunity for an FHA pilot program to test whether to adopt the residual income test.

Two other differences between the FHA and VA programs also offer opportunities for useful pilot programs. One relates to risk-sharing with lenders between the two programs, discussed earlier. The other opportunity relates to servicing troubled loans, where VA practices appear superior to those of the FHA program.[98]

In one area—technical improvements—it seems possible for agencies to make substantial gains in program performance. One outstanding example from SBA is called SBA One, launched in March 2015. SBA One is an automated lending platform to streamline the process for lenders participating in the SBA guaranteed loan program. The platform assists lenders with a broad range of capabilities from determining SBA loan eligibility to closing loans. Likened by some to a "TurboTax for SBA Lenders" the platform simplifies participation in the SBA program for smaller lenders who might otherwise be deterred by the formalities of the SBA loan origination process. The platform has processed some 5,000 loans to this point and now will be deployed to reach out to some 8-10,000 smaller lenders who do not currently offer SBA loans to their small business customers. Since the initial launch, SBA has made numerous system improvements in response to input from lenders.

Especially at a time of budget constraints on program administration, new program initiatives will be necessary. Private credit markets are increasingly fluid, and credit programs need well-designed program initiatives to remain focused on the "sweet spot" of favorable outcomes for borrowers. Business management guru Peter F. Drucker long ago described the idea of staying focused in terms of two budgets, one to maintain the current business, amounting to perhaps 80-90 percent of spending, and the second "budget for the future" to be maintained in bad times as well as good. The budget for the future funds new products and services and technologies and also activities such as outreach that can help build on the organization's successes.[99] Much more than private companies, federal credit agencies will need to consult stakeholders and policymakers to make the case for the types of

[97] Laurie Goodman, Ellen Seidman, and Jun Zhu, "VA Loans Outperform FHA Loans. Why? And What Can We Learn?" Urban Institute, July 2014.
[98] Ibid.
[99] Peter F. Drucker, *Management Challenges for the Twenty-First Century*, HarperCollins 1999, pp. 88-89.

pilot program or new activity the agency may initiate. But the opposite posture —standing still—can leave agencies and their programs less capable of managing their programs as constituents, particularly borrowers, evolve in their needs.

V. Providing Support to Agencies for Improved Credit Outcomes

A. Promote sharing of promising practices among credit agencies

OMB and Treasury have important contributions to make in strengthening federal credit programs. Agencies show leadership in different management practices and OMB and Treasury can encourage sharing of these practices. Treasury can also become an advocate for shared services across programs to help conserve scarce resources. The Federal Credit Policy Council can be strengthened as a forum for exchange of information about promising practices.

Different credit agencies have adopted different best practices to manage their programs. Central government organizations such as the Treasury and OMB and recently the GSA behavioral research team can make important contributions in facilitating the sharing of these practices among credit programs. Many years ago, OMB dedicated a senior executive to assist in improving federal credit programs. The official worked with John Koskinen, then OMB Deputy Director for Management, to create and manage a Federal Credit Policy Working Group (FCPWG). The FCPWG provided a roundtable forum for federal credit agencies to meet in a non-threatening environment to exchange views and also share experiences and learn from one another. In 1996 OMB worked with the Financial Management Service of the Treasury Department to hold a three-day conference on promising practices of federal credit agencies. The conference and related work helped to shape a multi-year OMB agenda for strengthening financial soundness and sustainability of federal loan and loan guarantee programs, showing the benefit of a central organization such as OMB using its authority and ability to convene officials from multiple agencies to achieve substantial program improvements.

Towards the end of the George W. Bush Administration, OMB again undertook to use its influence to improve management of federal loan and loan guarantee programs. OMB developed a credit program scorecard that measured an agency's progress on a red-yellow-green scale. OMB then arranged for interviews with federal credit agencies to determine how their programs scored on issues such as program focus, and how programs originated and serviced loans, managed their

portfolios, and collected debt. Of interest is the way that OMB shifted emphasis, from providing support at the time of the FCPWG to exercising more of an oversight role a decade later.

This experience suggests a question that is likely to be in the minds of each credit agency. That is whether Treasury and OMB are offering to assist with management improvements or seeking to prescribe policy direction and reduce budget impacts of credit programs. The two roles can conflict and role definition will be essential to make each role work, especially the supporting role.

The Treasury can make an important contribution in encouraging shared services across credit programs. There is a Treasury unit from the Office of Financial Stability that performed well in developing credit subsidy models to score the Troubled Asset Relief Program (TARP) program for budget purposes.[100] With TARP winding down, that office has become a shared service provider, assisting other credit programs to create the credit subsidy models that they need to score their operations. When agencies contract with the office for its consulting services, the office commits that it will operate in a supporting role. For instance, the agency rather than the TARP team remains in charge of the agency's data. This allows agencies to use the office without concern that, because it is in Treasury, it will usurp a policy role in addition to the support that it provides.

Treasury still must decide whether it seeks to exercise an oversight function for federal credit programs or play a more supportive role. In interviews the authors of this report learned that even the excellent Treasury TARP team, which has helped a number of agencies with their credit budgeting, has run into this difficulty. Some credit agencies apparently shy away from seeking support from the TARP team, for fear that they would also be inviting Treasury to weigh in on credit policy, and that Treasury would tell them how to conduct their business instead of just providing technical help.

OMB and Treasury can find a number of possible solutions. One traditional solution is to separate roles into separate organizations. For instance, Treasury might play a supportive role through the former Financial Management Service (now folded into the Treasury's Fiscal Service), while exercising a supervisory function through Domestic Finance. Alternatively, particular officials at Treasury might articulate that they will play a supportive rather than supervisory role. Treasury's Chief Risk Officer appears to have addressed this issue and has helped Treasury to make a significant contribution to promoting Enterprise Risk Management in the federal government, and among federal credit agencies in particular.

Treasury has now encouraged creation of a Federal Credit Policy Council (FCPC), hosted by several individual credit agencies in rotation, to help credit agencies to work on common prob-

[100] Under the Emergency Economic Stabilization Act of 2008 (P.L. 110-343), TARP (the "Troubled Asset Relief Program") allowed the Treasury to purchase or insure up to $700 billion of financial assets to help banks and other institutions weather the financial crisis.

lems, share promising practices, and provide a collaborative and confidential forum where credit managers can ask one another about management problems and possible solutions.

The Federal Credit Policy Council then would seem similar to the federal Chief Financial Officers (CFO) Council, the federal Performance Improvement Council, or the Council of Inspectors General on Integrity and Efficiency (CIGIE). Those councils work because of the common roles of the participants who are CFOs, Performance Improvement Officers, or Inspectors General, respectively. By contrast—absent hands-on leadership from a senior OMB or Treasury official—it has proved more difficult to assemble credit program officials, who may be program managers or budget officials, into a coherent group. Nevertheless, a reinvigorated FCPC that meets regularly could make important contributions to improving program outcomes and management and address many of the issues that this report has raised.

B. Help credit agencies legislatively to improve data, analysis of outcomes, and program performance

The most important value that Treasury and OMB can add to federal credit programs is to support cross-cutting legislation to create a framework that provides agencies authority to collect and evaluate outcome-related information, engage in experimentation and pilot programs, and improve oversight of lenders and other program partners.

Treasury and OMB also can help agencies to develop effective—and cost-effective—evaluation strategies. These could include developing appropriate outcome and program performance measures, fashioning the most important research questions to be answered with available data, helping coordinate credit program access to data at the Census Bureau and at other government agencies to shed light on outcomes, and sharing approaches to ensuring appropriate rigor in evaluations so that policy makers can confidently rely on the evaluation results.

This report has made recommendations for improving the performance and evaluation of federal credit programs. Congress and program stakeholders may not be immediately receptive to many of them, especially those that would overturn already established rules and policies. The individual credit program agency officials should not have to shoulder this mission by themselves. Administration leadership should come from the White House, Treasury, and OMB as well.

In particular, Treasury and OMB need to support federal credit agencies through the legislative process. This report has flagged many ways that stakeholders have affected legislation or exerted other influence that impedes achieving better outcomes and in some cases even precludes development of information to measure outcomes. In contrast to individual credit agencies, Treasury and OMB are ideally positioned to work with key congressional committees—the congressional budget committees, governmental affairs committees, and House Ways and Means Commit-

tee—to overcome influence of stakeholders that sometimes may influence the specialized congressional authorizing committees and appropriations subcommittees to take steps that impair credit program outcomes. In contrast to specialized committees and subcommittees (those serving specialized areas such as agriculture, education, and housing, for example), the budget and governmental affairs committees and House Ways and Means take a broader view across government. Thus, for example, the budget committees led enactment of the Federal Credit Reform Act, and the governmental affairs committees led enactment of the Government Performance and Results Act, while Ways and Means drove improvements in oversight of Government-Sponsored Enterprises (GSEs).

Treasury and OMB could work with the budget committees to require improved credit program information by focusing on outcomes, perhaps starting with a required actuarial study for major credit programs. They could work with the governmental affairs committees to require programs to analyze and track outcomes,[101] including by combining datasets in a privacy-protected way with other government agencies, such as IRS and the Social Security Administration. Only the non-specialized committees, prompted by Treasury and OMB, may be able to overcome the way that some stakeholders have impeded even the development of suitable information to measure outcomes in a systematic way.

[101] The Government Performance and Results Act already requires agencies to include "outcome-oriented goals" in their strategic plans. 5 U.S.C. 306(b).

VI. Improving Borrower Outcomes: An Action Plan

The transition from volume to a focus on outcomes will require action from many players.

Federal Credit Agencies:

1. Assess the extent that your agency has access to information about borrower outcomes, starting with defaults and moving to other outcome measures.
2. Strengthen or build the agency's evaluation capabilities; develop appropriate outcome measures for each program.
3. Examine the riskiest loan that each program makes: what are the benefits to successful borrowers vs. costs to those that default?
4. Use available authority to adjust credit standards to ensure that on balance program benefits are positive, while protecting borrowers from taking on too much debt.
5. Examine the quality of oversight of lenders and other program partners; learn from other agencies whether cost-effective improvements can be made.
6. Explore whether the agency has authority to apply risk-based pricing and increased risk-sharing with lenders and other program partners; apply these in pilot programs or across the board.
7. Explore possibilities for including borrower counseling where it can be made cost-effective.
8. Use available authority to increase experimentation and pilot programs, both to stay abreast of developments in the credit markets and to improve borrower outcomes.
9. Plan for increasing resource constraints; apply risk-based budgeting to help set agency priorities.
10. Seek additional authority to engage in activities to improve agency cost-effectiveness without diminishing borrower outcomes.

Treasury:

1. Work with credit agencies to develop a template and seek authority for agencies to collect and evaluate outcome-related information, engage in experimentation and pilot programs, and improve oversight of lenders and other program partners.
2. Support credit agency shared services.

OMB:

1. Work with agencies to implement risk-based budgeting to protect core missions and activities at a time of diminished budget resources.
2. Work with agencies to seek legislative changes that reduce administrative burdens in a cost-effective way. Seek authority selectively to remove restrictions on budget accounts so that agencies can undertake cost-effective redeployment of scarce budget resources.

Treasury and OMB:

1. Continue strengthening the Federal Credit Policy Council as an effective forum for exchanging information about promising practices.
2. Support changing credit budget rules to allow combining administrative costs and credit subsidies.

Other Stakeholders:

1. Take a longer view: Strengthening programs now is far preferable to risking political over-reaction if a program, especially in the event of inadequate administrative resources, fails to serve borrowers in a cost-effective way.
2. Represent your better association members: privately indicate support for activities, such as improved lender oversight, that can help keep credit subsidies and political risk within acceptable bounds.

VII. Conclusion: Making Outcomes Better

The huge volume of federal credit outstanding means that too many borrowers end up defaulting on their loans. A focus on outcomes can help these borrowers, by preventing them from taking on debt they cannot handle, by ensuring that program lenders originate and service loans properly, and by taking other measures to avert unnecessary defaults. Treasury and OMB have important roles to play in seeking the authority that agencies need to manage their programs effectively.

Credit programs continue to grow in volume, with credit managers under pressure to "get the money out the door" before the fiscal year ends. It is time to change the focus from the volume of credit an agency extends to borrower outcomes. Agencies need to look at the riskiest loans that they originate or guarantee and determine the actual impact on borrowers. Then each program needs to adjust its credit box to ensure that, on balance, borrowers are being helped more than being harmed. Agencies also should place increased emphasis and organizational focus on program evaluation. Policymakers need to ensure that agencies have the authority, resources, and mandate to generate information, evaluate outcomes, and conduct pilot programs, for instance, to vary the amount of risk-sharing with lenders and other program partners to determine effects on portfolio quality and borrower outcomes. With a focus on outcomes, federal loan and loan guarantee programs can approach the goal of smaller but more effective government needed for agencies to succeed in today's budget environment.

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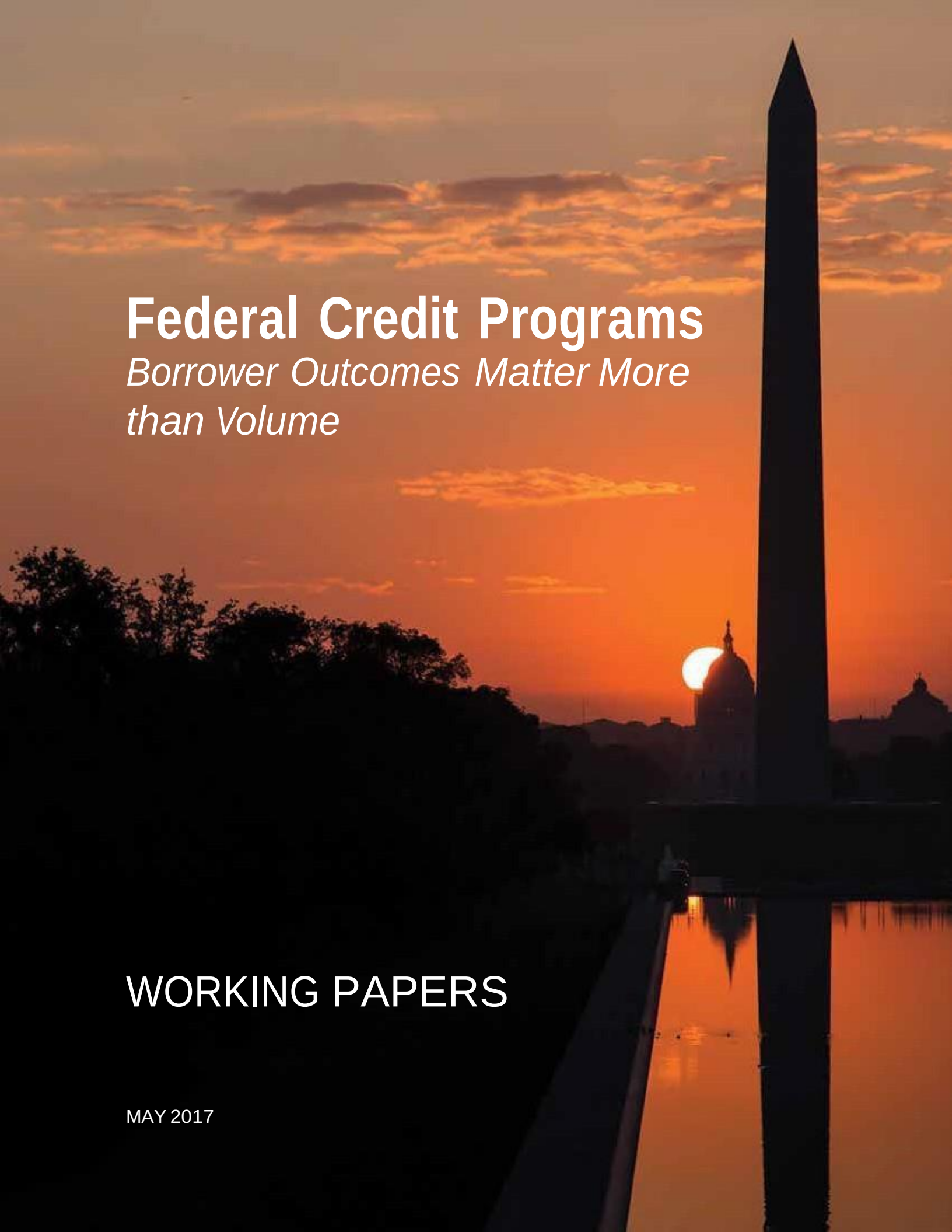

Federal Credit Programs

Borrower Outcomes Matter More than Volume

WORKING PAPERS

MAY 2017

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THE ECONOMICS OF FEDERAL CREDIT PROGRAMS

Michael E. Easterly

I. INTRODUCTION

The federal government has established a variety of credit programs over the past century to aid economic development, reward specific constituencies, and promote the provision of public goods. Over the intervening years, these programs have expanded both in volume and number to the point where they have become a substantial presence in financial markets and on the government's balance sheet.

The existence of these programs prompts an important question – why not leave such activities to the private sector? Economic theory points to several scenarios in which the market fails to produce a socially optimal outcome. The government can help in these situations because it possesses several characteristics that differentiate it from private-sector lenders. It does not have to make money, so it can fund activities that are socially beneficial even when not producing positive rates of return to private actors. It is also better able to bear risk than any private entity. Finally, when operating well, the government takes into account the welfare of society as a whole and thus can direct resource allocation toward activities that generate social benefits beyond their direct remuneration.

Government intervention into credit markets also brings costs. It can encourage excessive borrowing, harming borrowers and increasing the amount of risk in the economy. It distorts the provision of credit, either by discouraging lenders from entering markets or by reallocating credit to less valuable uses. In some cases, intermediaries may capture subsidies for themselves and fail to pass on benefits to their intended recipients. The subsidization of credit may also cause subsidized borrowers or sectors to expand to economically inefficient sizes, or, if the supply of that product is inflexible, prompt sellers in those sectors to raise prices. Furthermore, just as successful operation of credit programs can have benefits that extend beyond borrowers, poorly designed or executed programs can have negative consequences for parties that were not involved in the transactions.

Finally, federal credit programs can create political pressures that cause additional economic inefficiencies. By providing benefits to borrowers and owners of the assets that the borrowers purchase, they encourage these interests to organize to keep or expand their benefits. The cost of these benefits is often not transparent to others because framing transactions as credit can obscure the transfers that are taking place. Consequently lobbying may encourage policies and outcomes whose overall social costs exceed the benefits that the special interests capture.

This chapter discusses the economic theory behind federal credit programs, with a focus on their benefits and costs. After this this introduction, Section II explores the economic justifications for government intervention. Section III details potential problems with government credit programs. Section IV concludes with a discussion of when and how the federal government can be most effective in providing credit.

Establishing and operating successful government credit programs are delicate undertakings, in which policymakers must weigh policy goals against economic costs and minimize market distortions. Programs must be carefully managed to target benefits to their intended beneficiaries while aligning incentives with the goals of the program. This balance is made more difficult by the political process, which can hinder reforms that might curtail access to credit by powerful constituents.

II. Economic Reasons for Credit Programs

Policymakers typically advocate for government issuance of credit when they determine that markets by themselves cannot provide socially optimal outcomes. Such failures may occur for a variety of reasons: because information needed to assess risk is costly or unavailable; because discrimination prevents creditworthy borrowers from getting loans; because a product provides benefits to the public in excess of the value to the parties involved in their sale or use; or because a financial crisis has caused private credit markets to collapse, such as during the Great Depression or the recent global financial crisis. In these cases, absent outside intervention, the public may forgo important benefits.

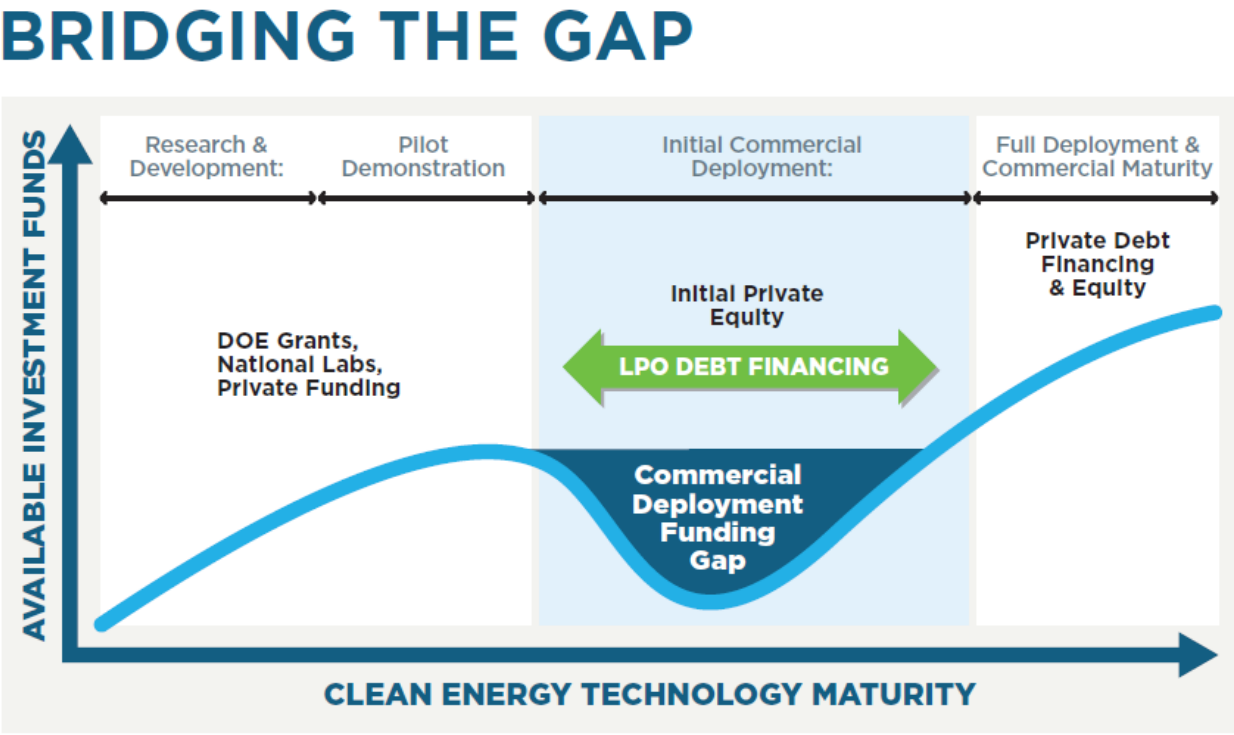
A. Asymmetric Information

Sometimes lenders lack the information they need to evaluate prospective borrowers' creditworthiness properly. Students, for instance, lack credit histories, and their future earning power is subject to many unknowns. Having just gotten started in life, they lack assets, and their future incomes are not assets that can be bought, sold, or traded. Thus they have no collateral to pledge. Yet advances of funds can increase their lifetime earnings, supplying them with the means of paying back the loans. If lenders lack a method of screening for risk, many high-quality borrowers may not get loans.

The Department of Energy explains its Title XVII program for clean energy technology in these terms. However confident they may be in their innovations, entrepreneurs may find it difficult to convince lenders to support technologies that have yet to prove themselves in the market. This is especially true of the long-term, patient capital that innovators need to sustain the enterprise while working to expand a specific technology's acceptance in the market. As illustrated in Figure 1, the Department of Energy views its loan program as a means of "bridging the gap" between a technology's initial period of discovery and development, which is commonly financed by grants,

and the attainment of commercial viability, at which time the technology can attract private funding.[1]

Figure 1
Market Gap



Source: Department of Energy Loan Programs Office, "LPO Financial Performance," November 2014, 2.

Making matters worse is the fact that borrowers typically have more information about their future ability and willingness to pay, a situation known as "asymmetric information." (Even students have a better idea of their level of financial responsibility than lenders.) In such cases, lenders cannot adjust for risk by raising interest rates. Higher rates deter the least risky borrowers to a greater extent than they do borrowers who believe they have a lower probability of repaying the loan. The higher-quality borrowers will exit the applicant pool. The pool of applicants becomes riskier, prompting further rate increases and further deterioration of the applicant pool. Lenders may react by excluding all borrowers, even the apparently creditworthy ones.[2]

[1] Department of Energy Loan Programs Office, "LPO Financial Performance," November 2014, p. 2, available at https://energy.gov/sites/prod/files/2014/11/f19/DOE-LPO-MiniReport_Final%2011%2013%2014_0.pdf.
[2] Joseph E. Stiglitz and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information," *American Economic Review*, vol. 71, no. 3, 1981, pp. 393–410.

In such cases, a modest subsidy may be enough to return the market to a favorable outcome. The subsidy lowers the rate lenders can charge, making loans more attractive to safer borrowers. As safer borrowers return to the market, the average risk of applicants improves, and lenders can do a profitable business. So long as the subsidy is not large enough to encourage excessive indebtedness, the market reaches a stable equilibrium. Government intervention thus improves on the outcome attainable solely by the market.[3]

Credit programs that address information asymmetries may also provide important demonstration effects to the private market. By supporting untried enterprises or financial products, programs develop information about the viability of those lines of business that the private sector can observe and eventually use. Thus government plays a catalytic role. By taking on the initial risks, it lays the foundation for private entry.

The most prominent example of such an effect is the 30-year, amortizing mortgage. As the history chapter describes, private-sector intermediaries attempted to establish a market for mortgage insurance during the early decades of the twentieth century, but they failed during the Great Depression amid allegations of fraud and mismanagement. The Federal Housing Administration (FHA) stepped in and created a more enduring solution. It established a national market for mortgage insurance, first for 20-year mortgages and later for 30-year mortgages, by stipulating relatively uniform requirements for getting a mortgage and adopting minimum standards for home construction and enforcing them through on-site inspection. When it ran surpluses year after year, it demonstrated that 30-year, fixed-rate mortgages could be made safely and with minimal risk to lenders. As a result, private companies began entering the market in 1957.[4]

B. Discrimination

Credit markets have a checkered history with regard to racial and gender equality. Before the Civil Rights Movement, for instance, real estate professionals restricted lending in neighborhoods with predominantly African American populations or that they perceived as transitioning in that direction. Similarly, before the advent of automated credit modeling, bank loan officers made it difficult for women to access credit independently.[5] These disparities in access resulted in inequitable opportunities for the independence and wealth-building that individuals could achieve with the help of credit.

Such discrimination has been described as economically irrational. By failing to extend credit to a borrower with the ability and willingness to repay because of her race or gender, a lender gives up a profitable business opportunity. In an efficient market, there ought to be lenders willing to

[3] Deborah Lucas, "Credit Policy as Fiscal Policy," *Brookings Papers on Economic Activity*, Spring 2016, available at https://www.brookings.edu/wp-content/uploads/2016/03/lucastextspring16bpea.pdf; *Budget of the US Government, FY 2017, Analytical Perspectives*, p. 307.

[4] See background paper on "History of Federal Credit Programs" for further details.

[5] See background paper on "History of Federal Credit Programs" and Louis Hyman, "Ending Discrimination, Legitimating Debt: The Political Economy of Race, Gender, and Credit Access in the 1960s and 1970s," *Enterprise and Society*, vol. 12, no. 1, March 2011, pp. 200–232.

capture that opportunity for their own benefit. However, discrimination can take place even in the absence of prejudice. When information costs are high, lenders may not find it worthwhile to engage in extensive underwriting. To the extent that easily observable personal characteristics associated with race, such as zip code, might correspond to harder-to-uncover information about economic opportunity, it may pay to deny loans based on those characteristics. Thus discrimination may be consistent with profit maximization, even though it excludes creditworthy borrowers from participating in the market.[6]

In such cases, a program of targeted credit may be a superior solution to regulation.[7] Preventing discrimination carries high costs. Not only must government officials monitor more transactions, but they also must take into account more subtle forms of discrimination, such as offering minorities a more limited menu of loan options. Such practices are difficult to discover and even more difficult to prove in court. Preventing them also imposes compliance burdens on lenders, which raises costs for borrowers across the board. A loan program that fills the gap directly requires a lesser amount of resources to serve the same purpose.[8]

C. Public Goods and Externalities

Some commodities that are valuable to society as a whole cannot be produced and sold profitably by the private sector. Most commonly, this situation arises because the good has benefits for people who do not buy it. The classic example is national defense. Regardless of whether he pays taxes, an individual is protected because providing security for most of the population entails providing security for all. Because of their ability to "free ride" on the contributions of others, individuals will refuse to contribute themselves, in spite of the benefits of the good for them. Extended across the entire population, this incentive not to contribute results in the good not being produced, as no one is compensated for producing it. Economists describe such a product as a "public good."

The concept behind public goods is not absolute. There can be aspects of a good that can be consumed (and paid for) privately, while other aspects extend to the general public or portions thereof. These effects are typically referred to as "externalities." Policy makers have advanced education and housing as examples of such externalities. The immediate purchasers may gain benefits in terms of increased future earnings or a stable residence and an opportunity to build

[6] Anthony Pennington-Cross and Anthony M. Yezer, "The Federal Housing Administration in the New Millennium," *Journal of Housing Research*, vol. 11, no. 2, 2000, p. 363.

[7] Barry P. Bosworth, Andrew S. Carron, and Elisabeth H. Rhyne, *The Economics of Federal Credit Programs*, Brookings Institution Press, 1987, p. 62.

[8] On the other hand, if disadvantaged borrowers have access only to federal credit while private credit serves more privileged borrowers, this could be a warning sign. In the late 1960s and early 1970s, for instance, the FHA helped accelerate the decline of urban neighborhoods by providing an expanded pool of credit available to purchase the residences of white borrowers fleeing the center cities. See, e.g., Calvin Bradford, "Financing Home Ownership: The Federal Role in Neighborhood Decline," *Urban Affairs Review*, vol. 14, no. 3, 1979, pp. 313–335.

equity, but society gains better-educated citizens or more responsible neighbors.[9] As with a public good, the social benefits of expenditures with positive externalities exceed their private returns.

Government can help in these situations. By providing a subsidy, it raises the private return from the investment to a level more consonant with its social return. A more socially beneficial amount of the good is produced because more people are willing to pay for it. In many cases, such goods are best funded through a direct transfer, such as a grant. However, credit may be called for in situations where acquisitions require large initial outlays but confer benefits only over time. The constraint in such situations is less the eventual profitability of the purchase than the limited resources of the purchaser.

Demonstration projects contain an element of a public good. Once contracts are standardized, information is more readily available, and instruments become more easily tradeable, anyone can take advantage of the resulting opportunity. Consequently, the entity that undertook such a project must share the benefits of its investment with all market participants.[10] This diminishes the return it procures for itself by taking the initial risk in establishing the new market. Market participants may fail to invest in such activities on their own, which suggests a role for government.[11]

D. Countercyclical Backstop

In extreme cases, private financial markets collapse. Typically such crashes occur when a sudden shock causes financial market participants to question the value of assets, a process that can be self-reinforcing. As their balance sheets shrink, financial institutions must either raise equity, sell assets, or call in loans, at a time when there are few buyers in the market and others are trying to do the same. This further depresses asset prices and limits the amount of funds available for borrowing, starting a downward spiral.

The United States experienced such a collapse during the financial crisis of 2007-08. Mortgage originators withdrew credit from areas experiencing deteriorating economic conditions, as they have during previous recessions.[12] Providers of private student loans and home equity lines of credit withdrew from the market or increased their underwriting standards.[13] Banks cut off lines

[9] See, for example, see President William J. Clinton, "Remarks on the National Homeownership Strategy," June 5, 1995: "You want to reinforce family values in America, encourage two-parent households, get people to stay home? Make it easy for people to own their own homes and enjoy the rewards of family life and see their work rewarded. This is a big deal. This is about more than money and sticks and boards and windows. This is about the way we live as a people and what kind of society we're going to have."

[10] Deniz Anginer, Augusto de la Torre, and Alain Ize, "Risk-Bearing by the State: When Is It Good Public Policy?" *Journal of Financial Stability*, vol. 10, 2014, p. 84.

[11] Bosworth, Carron, and Rhyne, *Economics of Federal Credit*, 78.

[12] Brent W. Ambrose, Anthony Pennington-Cross, and Anthony M. Yezer, "Credit Rationing in the U.S. Mortgage Market: Evidence from Variation in FHA Market Shares," *Journal of Urban Economics*, vol. 51, no. 2, 2002, pp. 272–94.

[13] David Cho, "As College Costs Rise, Loans Become Harder to Get," *Washington Post*, December 28, 2009, available at http://www.washingtonpost.com/wp-dyn/content/article/2009/12/27/AR2009122702116.html.

of credit for many small businesses.[14] An economic contraction threatened to become much worse.

Federal credit programs stepped into the gap created by the private market's retreat. FHA's share of the national mortgage market increased from under 5 percent of the dollar volume in 2007 to more than 20 percent in 2009, and its share of home purchase loans surged from 6.6 percent to 56.4 percent.[15] FHA also facilitated the migration of debtors from exotic loan products to mortgages with more predictable payments and instituted loss-mitigation programs intended to preempt a cascade of foreclosures that could have pushed the residential real estate market deeper into crisis.[16]

Government lending also likely stimulated the economy by easing liquidity constraints. Borrowed funds enable consumers to spend during the recession the income they expect to earn in more prosperous times, which has the effect of pulling demand forward and thus smoothing the business cycle. Deborah Lucas has estimated that under reasonable assumptions federal credit programs added around $ 342 billion in stimulus in 2010, a figure commensurate with the effect of the American Recovery and Reinvestment Act during that year and nearly five times as much as the lending's direct effect on the federal budget.[17]

III. ECONOMIC HAZARDS OF CREDIT PROGRAMS

Even if a market imperfection exists and the government is well positioned to remedy it, government intervention may not yield net positive results. Federal credit programs provide an immediate benefit to borrowers, but they also alter the incentives of program participants and nonparticipants alike. Furthermore, because programs change the prices of certain forms of credit relative to others, they cause adjustments by other market participants. These distortions can lead to unintended consequences, including excessive risk-taking, displacement of private lending, asset price inflation, and the overprovision of subsidized goods. Federal credit programs are also less transparent than direct spending, which can cause additional inefficiency when policymakers and interest groups attempt to disguise subsidies as loans. Thus in addition to the explicit subsidy paid by taxpayers, government credit assistance imposes economic costs, which do not appear in the federal budget.

[14] See, for example, Catherine Clifford, "Small Business Loan Total Drops by $10 Billion," *CNN Money*, November 17, 2009, available at http://money.cnn.com/2009/11/16/smallbusiness/small_business_loans_evaporate/. The $10 billion pertains only to the 22 banks that received the largest amounts of funding from TARP.

[15] Robert A. Van Order and Anthony M. Yezer, "FHA Assessment Report" (George Washington University School of Business, February 2011), p. 4, available at https://mediarelations.gwu.edu/files/downloads/FHA-Assessment-Report-February-2011.pdf.

[16] Edward Szymanoski et al., "FHA Single-Family Insurance Program: Performing a Needed Role in the Housing Finance Market," Department of Housing and Urban Development, Office of Policy Development and Research, Housing Finance Working Paper, December 2012, pp. 35–36, available at http://www.huduser.gov/portal/publications/pdf/FHA_SingleFamilyIns.pdf.

[17] Lucas, "Credit Policy as Fiscal Policy."

A. Transactional Distortions

1. Moral Hazard

When the government guarantees a loan, it partially protects the lender from the cost of default. This protection changes the lender's incentives. The lender receives only a fraction of the benefit of decreasing defaults, but it bears the entire costs of the enhanced screening, monitoring, and collections necessary to bring about that outcome. As a result, it may discount the cost of default and either take more risk than it otherwise would or fewer precautions against the risks it can avoid.

A study of Small Business Administration loans in the 1980s illustrates that this phenomenon, known as "moral hazard," has real-life consequences. The researcher discovered that banks did not make greater profits on their government-guaranteed loans than they did on their regular business. Instead, defaults on SBA loans were more than ten times larger, which meant that the bank's credit losses on SBA loans and loans in their own portfolios were the same net of the guarantee. In other words, lenders compensated for the government's increased protection against default by making riskier loans.[18]

Moral hazard influences borrowers as well. Once a borrower receives a loan, he faces an asymmetric payoff structure. Payments on the debt come out of his pocket dollar for dollar, while the costs of default are less certain. To the extent that a debtor questions his creditor's ability or willingness to collect or feels less of a loss from the sanctions that the creditor has available, he may take actions that reduce his ability to repay or simply refuse to pay altogether. (In the mortgage industry this is known as "strategic default.")

Federal credit is especially vulnerable in this regard. Policymakers make decisions about program structure for a variety of reasons, not all of which involve maximizing financial returns to the government. Furthermore, the government is susceptible to political pressure to go easy on collections and instead offer more opportunities for deferments, forbearance, and other concessions. Thus federal loans may "more closely resemble lending arrangements among family members," where the government has "no real choice but to accommodate his ever-changing life circumstances."[19]

The student loan program is a case in point. Default can result in severe consequences, including reduced credit scores, confiscation of tax refunds, and wage garnishments, but the consequences of late payments are less severe. Numerous options are available to reduce or delay payment, such as deferment, forbearance, and income-based repayment plans. Furthermore, the Department of Education directs servicers not to assess late fees unless the borrower has defaulted, and the penalties that are charged are less severe than other types of debt.[20] In a focus group organized by

[18] Bosworth, Carron, and Rhyne, *Economics of Federal Credit*, p. 97.
[19] Doug Criscitello, "Borrowing for Your College from Your Uncle Sam," *The Hill*, May 5, 2016, available at http://thehill.com/blogs/congress-blog/education/278570-borrowing-for-your-college-from-your-uncle-sam.
[20] Jason Delisle and Alexander Holt, "Why Student Loans Are Different: Findings from Six Focus Groups of Student Loan Borrowers," New America Foundation, 2015, p. 10, available at http://eric.ed.gov/?id=ED558774. Some borrowers report that they find such fees less onerous than making payments (ibid., p. 13).

the New America Foundation, one struggling debtor described the calculations he or she made when prioritizing which bills to pay:

> Outside of the credit report or, you know, they might call our references, but, like you said, if we don't pay our car, they'll come repossess it. … If we don't pay our credit card bill, they would increase the percentage and then it goes to the credit reporter. If we don't [pay] our house note or a mortgage, then we go into foreclosure, you know. The student loan is, their leverage is … they're not going to come get the degree because they don't want it.[21]

While a single quotation cannot be generalized to the entire population of student borrowers, it is suggestive given that as of January 1, 2016, more than 40 percent of debtors on federal student loans were not making payments or were behind on their obligations.[22]

Moral hazard may show up downstream as well, in the strategies of vendors who produce or distribute the items being purchased. Such producers have an incentive to sign up marginal borrowers and sell lower-quality products because they bear few or in some cases none of the costs of default. Their incentives shift from providing the most competitive product to bringing in the most loans.

Consider the student loan program a few years ago. An undercover operation by the Government Accountability Office found that out of the fifteen for-profit schools it visited, nine provided "deceptive or otherwise questionable" information about the duration and costs of their programs; six practiced "hard-sell sales and marketing techniques"; and four encouraged applicants to falsify their student loan applications.[23] Meanwhile, there is suggestive evidence that, consistent with economic theory, for-profit schools dependent upon federal student loans invest less in instruction than institutions that receive less income from student loans, which diminishes the probability of for-profit schools' students procuring gainful employment upon graduation.[24] While the

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[21] Delisle and Holt, "Why Student Loans Are Different," p. 8. The quotations were anonymized, so the speaker's gender is unavailable.

[22] Josh Mitchell, "More Than 40% of Student Borrowers Aren't Making Payments," *Wall Street Journal*, April 7, 2016, available at http://www.wsj.com/articles/more-than-40-of-student-borrowers-arent-making-payments-1459971348.

[23] Government Accountability Office, *For-Profit Schools: Experiences of Undercover Students Enrolled in Online Classes at Selected Colleges*, GAO 12-150, October 31, 2011, available at http://eric.ed.gov/?id=ED527057.

[24] See, for instance, Senate Committee on Health, Education, Labor, and Pensions, *For-Profit Higher Education: The Failure to Safeguard the Federal Investment and Ensure Student Success*, Majority Committee Staff Report and Accompanying Minority Committee Staff Views, July 30, 2012), p. 99, available at https://www.gpo.gov/fdsys/pkg/CPRT-112SPRT74931/pdf/CPRT-112SPRT74931.pdf:

> The amount that publicly traded for-profit companies spend on instruction ranges from $892 to $3,969 per student per year. Among all companies that received a document request, companies spent an average of $2,050 on instruction per student in 2009. … In contrast, public and non-profit schools, which by definition do not retain any revenue as profit and do not pay taxes, generally spend a higher amount per student on instruction, and spend a far lower amount on marketing and recruiting. For example, Northern Virginia Community College spends about $4,068 per student per

Department of Education is presently addressing the problem through regulation and enforcement, the pursuit of such business models illustrates the vulnerability of credit programs to moral hazard.[25]

2. Adverse Selection

Programs may also overestimate the extent of market imperfections and move into segments of the market where borrowers have access to private loans. This strategy becomes detrimental to the program's balance sheet when the private sector is capable of more precisely pricing risk. Riskier borrowers will self-select into government loans, where they pay the same rate as the average borrower of their type. The program will be left with a correspondingly worse (that is, riskier) portfolio.[26]

Such appears to have been the case in the FHA's recent foray into higher-balance mortgages. In 2008, Congress raised the limit on the agency's mortgages from $ 200,160 to $ 271,050 in low-cost areas and from $ 362,790 to $ 729,750 in high-cost ceiling areas, and it renewed the increases in 2011. Economist Chen Miller found that following the change, average loan amounts and average loan-to-value ratios increased more in the high-cost areas than they did in the low-cost areas. She further determined that these increases occurred not because of higher house prices, but because borrowers chose to borrow more and extract more cash from refinancing. The rate of 90-day delinquencies within the first two years was 16 percent higher for loans above the pre-2008 limit than for loans below that threshold, and losses from default were 1.1 percent greater.[27]

B. Market Distortions

1. Misdirected Benefits

It can be very difficult to determine whether credit programs are meeting their intended purposes. Unlike business enterprises, government agencies lack a clear and simple bottom line. It may be difficult to measure policymakers' goals in establishing and maintaining a particular credit program. Furthermore, even when they find metrics that line up with their missions, programs must determine whether the same outcomes would have occurred in the absence of government intervention. Data for such a study may be nearly impossible to find. In the absence of clear

year on instruction. It devotes two-fifths of 1 percent of its budget to marketing, or about $22 per student per year. Portland Community College in Oregon spends $5,953 per student on instruction, and about 1.2 percent of its budget, or $185 per student, on marketing.

[25] See, for instance, Department of Education, Program Integrity: Gainful Employment-Debt Measures, *Federal Register*, vol. 76, no. 113, June 13, 2011, pp. 34386–559; Department of Education, "U.S. Department of Education Takes Enforcement Action Against Medtech Colleges in Virginia, Maryland, and Washington, D.C.," press release, July 26, 2016, available at https://www.ed.gov/news/press-releases/us-department-education-takes-enforcement-action-against-medtech-colleges-virginia-maryland-and-washington-dc.

[26] Bosworth, Carron, and Rhyne, *Economics of Federal Credit*, p. 41; Szymanoski et al., "FHA Single-Family Insurance," p. 24.

[27] Chen L. Miller, "Two Essays on Real Estate Finance: 1) Effects of FHA Loan Limit Increases by ESA 2008: Housing Demand and Adverse Selection; and 2) Comparison of Two Affordable Housing Finance Channels" (George Washington University, 2017), pp. 1–57, available at http://gradworks.umi.com/10/19/10196295.html.

metrics of success, it can be tempting to use the number of constituents served or funds disbursed as proxies for the achievement of agency goals.

Such indeterminacy is all the more concerning because there are many ways that credit programs can fail to serve their intended purposes. Most obviously, money is fungible, so recipients can take out loans for goods and services that they would have purchased anyway. Likewise, lenders in guaranteed programs can simply replace funding for existing lines of credit with government credit and reallocate the newly-freed capital to other purposes. Both cases lead to no net increase in funding to the program's stated purpose, despite their costs to the taxpayer.

Who benefits from government lending programs and what form those benefits take depend not only upon the explicit terms of the policy, but on the structure of the underlying market. If a loan in the targeted market is similar to other assets in investors' portfolios, then borrowers will benefit from increased volume because even small increases in return will be enough to motivate investors to shift their holdings. If investors cannot substitute so easily, then those who do lend in the targeted market will capture most of the subsidy in the form of higher rates. On the other side of the transaction, if borrowers have many alternative sources of funds, then lenders will benefit from a sharp influx of new borrowers into the market. If borrowers have few options, then the subsidy mostly facilitates lower interest rates.[28]

2. Crowding Out

If not designed carefully, government credit programs may end up displacing otherwise viable sources of private capital. The federal government has many advantages over the private sector as a financial intermediary: its reliance on the American taxpayer enables it to borrow more cheaply, regardless of the profitability of the purposes to which it dedicates the funds, and because of its access to taxpayer revenue, it can run at a loss almost indefinitely. These advantages can aid in the achievement of social ends, but they can also prevent the private sector from taking over the same activities.

The present mortgage market illustrates this principle. In the wake of the financial crisis, private intermediaries pulled out of the market, resulting in a large increase in government-guaranteed loans in mortgage securitizations. Since then, however, the economy has experienced 30 consecutive quarters of economic growth. Nevertheless, the government's role in the market has not receded. As of the third quarter of 2016, the FHA, VA, and GSE have a combined share of 98.19 percent of mortgage securitization volume, with the remainder taken up not by new lending, but by private-sector repackaging of past loans that have become delinquent. In contrast, outside the years that comprised the housing bubble, the government's share hovered around 80 percent.[29]

[28] Barry P. Bosworth, Andrew S. Carron, and Elisabeth H. Rhyne, *The Economics of Federal Credit Programs* Brookings Institution Press, 1987, p. 33. Technically, this is known as the elasticity of supply and demand for funds.
[29] Laurie Goodman et al., "Housing Finance at a Glance: A Monthly Chartbook, January 2017," Urban Institute, January 23, 2017, p. 10, available at http://www.urban.org/research/publication/housing-finance-glance-monthly-chartbook-january-2017.

Capital markets add another layer to this conundrum. The infusion of government credit decreases interest rates in the target market. Lower interest rates diminish the return that private intermediaries gain from participating in the market. These decreased earnings in turn cause some market participants to exit the market, decreasing the amount of funds available from private sources. Thus government money "crowds out" private capital, offsetting the effects of the intervention to some extent.

Alternatively, arbitrage may diminish the effects of government lending. When the government funds a loan program, it borrows in the credit markets by selling a Treasury security. Government support causes the cost of funds in the target market to decrease, but at the same time, its increased demand for funds causes the return on Treasuries to increase. All a private intermediary needs to do is sell securities in the target market and buy Treasuries, thus taking advantage of the change in prices caused by government intervention while neutralizing its effects on the allocation of credit.[30] The arbitrageur benefits while society is no better off.

The magnitude of this effect depends upon the extent to which markets are integrated across different forms of credit. Some researchers who have studied the subject hypothesize that certain investors have a "preferred habitat" in which they will remain despite modest changes in the relative price of assets. Insurance companies, for example, generally have steady obligations that they must pay out over long periods of time, so they may favor long-term bonds with fixed interest rates. If such investors comprise a significant segment of the market, then the program will increase either the volume of credit or the interest rate. Conversely, if investors easily rebalance their portfolios into new asset classes, then the arbitrage effect will dominate.

Research by Barry P. Bosworth, Andrew S. Carron, and Elizabeth H. Rhyne found mixed results in the context of federal credit programs. According to their calculations, capital market participants do rebalance their portfolios in response to federal credit interventions – that is, they do enter and exit markets affected by federal credit to a significant extent. However, it takes nearly a year for the effect of their adjustments to materialize fully. The authors concluded that federal credit programs "have a largely transitory influence on the cost of credit to borrowers in that market."[31]

3. Private-Sector Inefficiency

If not properly targeted to a market imperfection, programs may make the economy less efficient. By intervening in credit markets on the behalf of a preferred purpose or constituency, the government is reallocating funds from projects that the private market values more highly. By design, federal credit programs take into account factors beyond efficiency, so they encourage or maintain enterprises that would not otherwise meet a market test. At the limit, government involvement in credit markets can resemble a *de facto* industrial policy. By favoring certain

[30] Bosworth, Carron, and Rhyne, *Economics of Federal Credit*, pp. 25–27.
[31] Ibid., Appendix I.

sectors, such as housing and education, with cheap credit, credit programs are favoring certain uses of capital over others.

Subsidies may also push market participants to more inefficient practices. When student loans operated as a guarantee program, the government directed payments to lenders to encourage participation. Because the amount of the subsidy was much greater than needed to attract them into the program, lenders dissipated a portion of their payments from the government in competition for borrowers through side payments and marketing costs that included revenue sharing with schools and paid travel costs and honoraria for financial aid administrators.[32]

Furthermore, because credit programs generally do not service all participants in a market, they favor loan recipients over nonparticipants and thus distort competition within industries. Consider the Air Carrier Guarantee Loan Program (ACGLP). Established after the terrorist attacks of September 11, it provided loan guarantees to airlines to overcome an anticipated dearth of private capital during a period of uncertainty for the industry. Over the ensuing two years, it made six guarantees in support of $ 1.74 billion in loans.

Whether the effect of the program was positive on net is subject to debate. While it did replace a private loan to America West that had failed to close after the attacks, the ACGLP likely interfered with the competitive dynamics of the industry. Prior to the attacks, consumers were beginning to use the Internet to compare prices and get lower fares. This development favored nimble, low-cost carriers over the legacy hub-and-spoke operators, who had less efficient cost structures. Critics argued that the less competitive carriers were using the program as a lifeline to prevent more onerous adjustments. Support for this assertion comes from the fact that most of the applications came not at its outset, but within two weeks of the program deadline. In fact, some have speculated that they arrived in response to a submission by US Airways.[33]

4. Externalities

Federal credit programs also affect individuals who do not participate. By increasing funds available to purchasers, credit programs enhance demand for a product. Depending upon how flexible the supply of that product is, this increased demand can either cause prices to increase or production to expand. Thus either purchasers in the market pay more, whether or not they utilize

[32] Deborah Lucas and Damien Moore, "Guaranteed versus Direct Lending: The Case of Student Loans," Chapter 7 in *Measuring and Managing Federal Financial Risk*, ed. Deborah Lucas, University Of Chicago Press, 2010, p. 168; Andrew M. Cuomo, testimony before the House Committee on Education and Labor, April 25, 2007, available at https://www.gpo.gov/fdsys/pkg/CHRG-110hhrg34603/html/CHRG-110hhrg34603.htm.

[33] Margaret M. Blair, "The Economics of Post-September 11 Financial Aid to Airlines," *Indiana Law Review*, vol. 36, no. 2, 2003, pp. 367–95; Jonathan Lewinsohn, "Bailing out Congress: An Assessment and Defense of the Air Transportation Safety and System Stabilization Act of 2001," *Yale Law Journal*, vol. 115, no. 2, November 2005, pp. 438–90.

government funds, or the market produces an inefficiently high quantity of goods, usually of lower quality.[34]

While scholarship on the subject remains unsettled, a few scholars have found evidence that student loans increase the cost of schooling at some schools. Three economists at the Federal Reserve Bank of New York estimated that each dollar increase in student loan limits increased colleges' sticker prices on average by 70 cents for subsidized loans and 30 cents for unsubsidized loans, and the effect was greater for schools with higher tuitions.[35] Similarly, Stephanie Riegg Cellini and Claudia Goldin found that for-profit schools eligible for student aid charged about 78 percent more for tuition than comparable institutions that were ineligible.[36]

Furthermore, poorly designed or poorly executed programs can cause damage beyond the targeted population. In housing, for instance, the consequences of default are not limited to the debtor. Foreclosures lower the prices of neighboring homes and increase the probability of default on their mortgages; increase crime; and decrease tax revenue.[37] This is the flip side of the externalities discussed in the section on economic benefits; loans can have a negative effect on people who are not parties to the loans.

In some cases, the consequences can be quite severe. In the late 1960s and early 1970s, for instance, policymakers sent the FHA on an ill-advised foray into lending to financially stretched borrowers in neighborhoods that the agency and the private sector had previously neglected. The subsequent overlending caused an estimated 400,000 foreclosures in US center cities. FHA-owned homes became "dope pads and hangouts for hoodlums," and house fires increased so dramatically in some cities that many homeowners lost their insurance. Consequently, residents of affected neighborhoods found it impossible to sell their homes.[38] Thus by taking on too much risk, the program produced the opposite of the outcomes policymakers had intended it to achieve.

C. Political Distortions

1. Opacity

The inefficiencies caused by federal loan programs may extend into the political process because credit can serve as a means by which policymakers provide benefits while obscuring the costs.

[34] According to economic theory, new entrants into the market should be less efficient than incumbents, so they must either charge higher prices or produce lower-quality goods.

[35] The authors also found that net tuition rose accordingly in the medium run. David O. Lucca, Taylor Nadauld, and Karen Shen, "Credit Supply and the Rise in College Tuition: Evidence from the Expansion in Federal Student Aid Programs," Federal Reserve Bank of New York Staff Report, no. 733, July 2015, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2646076.

[36] Stephanie Riegg Cellini and Claudia Goldin, "Does Federal Student Aid Raise Tuition? New Evidence on For-Profit Colleges," *American Economic Journal: Economic Policy*, vol. 6, no. 4, 2014, pp. 174–206.

[37] See Consumer Financial Protection Bureau, Mortgage Servicing Rules Under the Real Estate Settlement Procedures Act (Regulation X), *Federal Register*, vol. 78, no. 31, February 14, 2013, p. 10854, and cited sources.

[38] Don Ball, "Foreclosures Costing FHA Millions: Safeguards Started," *Washington Post*, December 12, 1971, available at http://search.proquest.com.proxy1.library.jhu.edu/docview/148000533/abstract/C8C16D476BA64829PQ/1.

Framing a program as a loan rather than a grant gives the appearance of an exchange of value; the beneficiary pays the government back for its extension of funds, suggesting a mutually beneficial relationship. Thus credit avoids the appearance of an explicit transfer of resources from one constituency to another and thereby creating winners and losers. Furthermore, as they are for borrowers, the benefits of federal credit programs for politicians are immediate and concrete, while the costs are remote and uncertain.

Indeed, in higher education policy loans have often emerged as a substitute for proposals involving appropriations of taxpayer funds or tax expenditures (targeted tax breaks). President Eisenhower had wanted the National Defense Education Act to operate via a tax benefit, which would have limited the government's involvement in higher education, but Democrats argued that such a program would be too costly and established a student loan system instead. The Johnson Administration hoped that loans "would help diffuse the clamor for tuition tax breaks and solidify support" for the Higher Education Act of 1965. Increased lending during the 1980s and 1990s compensated for diminishing resources appropriated for Pell Grants.[39] To some extent, favoring loans over grants makes policy sense, as subsidizing individuals who gain above-average earning power would have regressive distributional effects. However, high default rates presently occurring among disadvantaged borrowers suggest that this argument has important limits.

Credit makes for an even more attractive policy tool because it can spread a given amount of benefits over a larger number of beneficiaries. The same $ 4 billion can fund grants that put 40,000 students through college, or it can support a 4 percent subsidy on a $ 100 billion loan program that serves one million borrowers. Thus policymakers get a bigger "bang for the buck" from credit programs in terms of the number of constituents benefited.

Further, policymakers can spread benefits even more widely by drawing in more creditworthy borrowers to cross-subsidize less creditworthy borrowers.[40] Thus programs can expand without requiring additional appropriations from Congress. As discussed in the separate chapter on credit and the federal budget process, some analysts argue that credit programs will not lose their better (less risky) borrowers to the private sector because credit is underpriced in the federal budget.

Federal credit has further benefits embedded in its repayment terms. When a borrower falls into delinquency, even if she does not apply for official forbearance, she gets financial relief. This usually occurs at a time of financial stringency, such as a recession, when money is especially valuable to everyone. The opportunity to delay or end repayment is economically equivalent to a put option, and in the private sector it would be priced into the cost of a loan.[41] For the most part,

[39] Suzanne Mettler, *Degrees of Inequality: How the Politics of Higher Education Sabotaged the American Dream* Basic Books, 2014, pp. 51–85.
[40] Robert A. Van Order and Anthony M. Yezer, "FHA Assessment Report," George Washington University School of Business, June 2011, p. 8, available at http://business.gwu.edu/wp-content/uploads/2014/02/FHA2011Q2.pdf.
[41] A put option is the right but not the obligation to sell an asset at a specified price. Analogously, the availability of delinquency gives borrowers the ability to avoid a payment in exchange for whatever penalties the lender may charge.

however, the government does not factor this risk shift into its calculations, which creates an implicit subsidy.[42] Borrowers understand this, even if they cannot express it in formal terms. At the aforementioned New America Foundation panel, for instance, participants held the view that "letting the loan go into delinquency status was a strategy for managing the debt."[43]

2. Rent-Seeking

As the history chapter has shown, federal credit programs have a tendency to persist beyond their usefulness. Once started, they develop constituencies that become accustomed to a program's benefits. That leads to beneficiaries mobilizing to perpetuate and sometimes to extend those benefits. Because small interest groups with much to gain personally are more easily organized than diffuse groups who do not lose much individually, lobbying is more likely than not to yield private benefits at the expense of the broader public.

A case in point is the FHA's seller-funded down payment program. In 1996, legislation permitted mortgagors (homebuyers) in FHA programs to supplement their down payments with gifts or loans from family members. Subsequent agency guidance extended permissible sources to include borrowers' employers, government agencies, and charitable organizations. Home sellers were not among these sources, but some exploited the program by routing donations to charitable organizations; this allowed the home sellers to raise prices and effectively capture the value of the gifts or donations. Meanwhile, borrowers purchased the homes with no equity, and default rates were correspondingly high, more than three times as much as other FHA loans.[44]

Despite these results, efforts to curb the practice were consistently stymied. In September 1999, the FHA proposed a rule prohibiting charitable organizations from making gifts that derived directly or indirectly from home sellers. It withdrew the proposal sixteen months later after receiving 1,850 public comments opposing the rule, against 21 in favor. It tried again in 2007, when such loans had come to comprise 30 percent of its originations, but stakeholders persuaded a federal court to block implementation of the FHA's proposed restrictions.[45] By the time Congress passed a law banning the practice in 2008, seller-funded down payments had cost the mortgage insurance fund $ 15 billion.[46]

Such results are not only inefficient in and of themselves. The potential for government benefits also creates incentives to engage in activities that, rather than adding to the total stock of goods and services, serve only to move resources from one interest group to another. Thus instead of

[42] David Kamin, "Risky Returns: Accounting for Risk in the Federal Budget," *Indiana Law Journal*, vol. 88, no. 2 2013, p. 749.
[43] Delisle and Holt, "Why Student Loans Are Different," p. 10.
[44] Szymanoski et al., "FHA Single-Family Insurance," pp. 4, 27; Van Order and Yezer, "FHA Assessment Report," June 2011, pp. 8–9.
[45] Van Order and Yezer, "FHA Assessment Report," June 2011, p. 9.
[46] Sarah Rosen Wartell and Mark A. Willis, "FHA: Reforms to Protect Taxpayers and Borrowers," *Housing Policy Debate*, vol. 24, no. 3, 2014, pp. 656–57.

investing to make themselves more efficient in a competitive market, beneficiaries of federal credit programs may expend resources in competition for government-supported excess profits or windfalls, an activity that economists refer to as "rent seeking." Rent-seeking is considered wasteful because it employs talented people in activities that provide no net social benefit.[47]

Such perils are common to all government initiatives, whether they involve spending, regulation, or credit. However, because of the characteristics described in the previous section, credit programs are especially vulnerable. Policymakers may favor them even when a different type of intervention, such as a grant or regulation, may be more efficient and effective. Such obfuscation adds another layer of inefficiency because, in addition to creating a socially wasteful subsidy, the program conveys that subsidy through an economically inefficient mechanism.[48]

IV. CONCLUSION

Federal credit programs provide a variety of benefits to society and to help overcome market gaps caused by asymmetric information and financial crises, provide demonstration effects to the private sector, remedy discrimination, and improve resource allocation. However, the failure of a market to provide a socially optimal outcome does not assure that government intervention will provide a better one. The government, after all, has no special advantages over the private sector in selecting creditworthy borrowers or operating more efficiently. Indeed, as a general rule it is arguably worse at these functions. Furthermore, government involvement in private markets can create distortions. Thus an ill-advised government program can make a bad situation worse. The identification of a market gap is not a sufficient condition for the establishment of a federal credit program.

The point is not that government credit programs are good or bad, or that they should be expanded or curtailed. Rather, programs must be carefully calibrated to meet defined policy goals and economic needs unmet by the private market, without extending too much credit.[49] When addressing market failure, policy makers should define and quantify the market imperfection in need of remedy. Potential sources of private credit should be identified and the reasons for their insufficiency carefully explained. The intervention must then be designed to target that imperfection precisely, without causing unnecessary distortions. Plans should be made so that a

[47] Gordon Tullock, "The Welfare Costs of Tariffs, Monopolies, and Theft," *Economic Inquiry*, vol. 5, no. 3, 1967, pp. 224–32; Gordon Tullock, "Rent Seeking," in *The New Palgrave Dictionary of Economics*, eds. Steven N. Durlauf and Lawrence E. Blume, 2nd ed., Nature Publishing Group, 2008, pp. 95–98.
[48] Tullock, "Rent Seeking."
[49] Material for the following paragraphs inspired by Robert C. Vogel and Dale W. Adams, "The Benefits and Costs of Loan Guarantee Programs," *The Financier*, vol. 4, no. 1, 1997, pp. 22–29; Office of Management and Budget, "Policies for Federal Credit Programs and Non-Tax Receivables," Circular No. A-129, January 2013; MIT Golub Center for Finance and Policy, "Program Objectives: Understanding Mission and How Best to Achieve It," presentation to Mission & Metrics: Finance Training for Federal Credit Program Professionals, Washington, DC, July 11, 2016, available at https://ocw.mit.edu/resources/res-15-002-mission-metrics-finance-training-for-federal-credit-program-professionals-summer-2016/sessions/session-1-program-objectives-understanding-mission-and-how-best-to-achieve-it/MITRES15-002SUM16_Session_1.pdf.

successful program can be handed off to the private sector and, if not, there should be clear reasons why the program should continue in spite of its lack of economic justification.

If certain borrowers are to be subsidized, they should be clearly identified and the program targeted accordingly. Just as important, there should be a clear rationale as to why credit is the chosen intervention. As this chapter has explained, credit can harm as much as it can help, and often the attractiveness of its political features overshadows its economic benefits. From a policy perspective, tax expenditures or outright grants may be superior means of providing subsidies to favored groups.

Program design should carefully manage adverse selection. To some extent, adverse selection is inherent to the functioning of a credit program, as the government is trying to solve a market imperfection by bringing new borrowers into the market. However, the objective should be to serve a "sweet spot" between borrowers who would otherwise be able to get credit in the private market and lending to uncreditworthy individuals for whom credit would amount to an added burden. Eligibility requirements should carefully define the population between these extremes to make sure that funds go where they are most needed.

Moral hazard should be minimized. Program design must align incentives of borrowers, lenders, and the sellers of the assets to be purchased with borrowed funds with those of the taxpayers who are subsidizing or backing the loans. All parties should have "skin in the game" in the sense that they benefit most when the asset is purchased and the loan is repaid.

Designing and – especially – managing efficient and effective credit programs is difficult. For many programs, political pressures tend to encourage overlending despite the potentially great costs to borrowers, taxpayers, and good policy. Initiating and executing a beneficial credit program requires active and continuing oversight and evaluation by all stakeholders and public officials.

THE HISTORY OF FEDERAL CREDIT PROGRAMS

Michael E. Easterly

I. INTRODUCTION

Federal provision of credit has a long history in the United States, but the government did not establish a permanent presence in financial markets until about a century ago. Beginning with a term-limited agency to help finance America's efforts in World War I, policymakers expanded the government's role into many sectors of the economy, including housing, education, agriculture, small business, and exports, and established them on a permanent basis. Over the course of that expansion, federal involvement has surged and ebbed, and policymakers' justifications for that involvement has shifted as well.

Early twentieth-century programs were advanced as temporary or emergency measures, responses to disruptions in financial markets caused by war or bank runs. Subsequently they became the means by which to pursue broader public policy goals, such as rewarding servicemen, increasing educational attainment, expanding homeownership, or promoting exports. Over time, credit programs became permanent parts of the nation's financial infrastructure, their operations taken for granted and their persistence supported by constituencies that had to come rely upon them.

This chapter recounts the history of federal credit programs from the perspective of public policy. Section I is this introduction. Section II describes one of the first programs, the War Finance Corporation, and how its development presaged those of the programs that followed. Section III shows how the government used credit to respond to the Great Depression and how many of the programs we know today emerged from those responses. In Section IV we see how many of the programs originally introduced as emergency measures became permanent parts of the federal infrastructure.

The second half of the chapter tracks the expansion, overextension, and eventual retrenchment of federal credit programs. In Section V, we see how policymakers found new uses for federal credit and expanded them accordingly. Section VI explains how ill-advised expansions led to policy failures at many agencies. Section VII describes the retrenchment that followed. Section VIII concludes.

The history of federal credit initiatives in the United States teaches several lessons. Such programs can and have successfully created new markets, thus broadening access to financial services and expanding the types of financing available, and they have served as countercyclical stabilizers against downturns in the private market. Once created, however, such programs have at times

expanded beyond their original mandate and the resolution of the problems they were intended to address, as lawmakers used them as substitutes for grant programs and other forms of direct spending, or to augment such programs. In some cases, policymakers have pushed programs beyond the point that they were equipped to handle, with deleterious consequences. Thus past experience has shown the importance of finding the balance between too little and too much credit.

II. PRECURSORS: WORLD WAR I

The ancestor of the federal government's current portfolio of federal credit programs came at a time of emergency. With its entrance into the World War I, America needed to reallocate resources to the war effort. The first federal credit agency, the War Finance Corporation, was intended to last only until the hostilities ended, but its effects were much more far-reaching. In addition to providing a precedent for subsequent uses of the federal government's balance sheet, it presaged many of the dynamics of the programs that followed by persisting beyond its originally scheduled termination date and expanding beyond its initial mandate.

America's entry into the First World War created new complications in the financial system. War bonds were absorbing funds in the capital markets, and the Federal Reserve lending was limited to loans secured by commercial paper. Policymakers feared that banks would be constrained from providing short-term financing to railroads, power plants, chemical firms, and other war-related enterprises.[1]

In 1918 Congress created the War Finance Corporation (WFC), a wholly-owned government corporation, to finance these activities. As the secretary of war explained, credit allocation was its *raison d'etre*. "The ordinary flow of capital, which in normal times is left free to seek its own investment, should during the war be so directed and conserved that these requirements shall be taken care of before funds shall be invested either in new enterprises or for the expansion of such old enterprises as are not necessary or contributory to the prosecution of war," he explained.[2]

The US Treasury provided its full capital stock of $ 500 million.[3] Instead of lending directly, the WFC was to funnel its funds through banks because, as the secretary of war explained, "The banks of the country would, no doubt, scrutinize with the utmost care both the loans themselves and the security therefor and would exercise their individual judgment upon the borrower's credit before assuming a liability for the amount of the loan," especially because the WFC would require them to advance 25 percent of the principal out of their own funds.[4] The WFC's powers were to cease

[1] Testimony of Treasury Secretary William McAdoo before the House of Representatives Ways and Means Committee, February 18, 1918, pp. 3-4.
[2] Ibid., p. 5.
[3] Ibid., p. 12.
[4] Ibid., p. 4.

six months after the end of the war, and the WFC was to wind down its affairs and terminate completely within 10 years.[5]

Once in operation, the focus of the WFC shifted. Except for the railroads, which the federal government had nationalized, few war industries needed its facilities, as banks found that loans from the Federal Reserve were in fact sufficient for their needs. Meanwhile, policymakers found other uses for its funds. Upon the encouragement of the secretary of the Treasury, the WFC made direct loans to cattle ranchers to help tide them over a drought that afflicted the South and West, which inaugurated increased support for the agricultural sector. After the war ended, this shift accelerated. Concerned about a possible collapse in foreign trade, Congress authorized the WFC to make loans on exports to foreign buyers, either directly or through banks, with agricultural producers the chief beneficiary. By its fourth year, the agency was devoting itself almost exclusively to financing the cultivation, harvest, and marketing needs of the agricultural sector.[6]

The WFC made its last loan in 1924, but a precedent had been established. The federal government had managed financial distress through the direct and indirect extension of credit for preferred purposes and to preferred constituencies. The WFC had also shown to politicians that credit programs provided a flexible and useful tool for responding to economic and political imperatives outside the regular appropriations process.

III. Establishment: The Great Depression

The War Finance Corporation might have faded into obscurity but for another crisis that occurred less than a decade after its termination. The Great Depression crushed private financial markets, which in turn generated a self-perpetuating downward spiral. The federal government stepped in with a series of massive credit programs. These programs illustrated the beneficial effects of government intervention: they provided countercyclical support for financial markets and a demonstration effect for private lenders. Thanks to government intervention, financial markets avoided further collapse in the short term, and over the long term banks and other intermediaries learned that they could extend maturities and lend to a wider range of borrowers, which made for broader financial markets when prosperity returned.

Between August 1931 and January 1932, repeated depositor runs caused the failure of 1,860 banks across the United States and reduced deposits substantially at the ones that remained, causing credit to contract and prices to drop.[7] The nation's financial system was failing and pulling the rest of the economy further into depression.

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[5] Ibid., p. 11.
[6] W. G. McAdoo et al., *First Annual Report of the War Finance Corporation*, 7582 H. Doc. 1387, 1918, pp. 6–7; Henry C. Houston, George R. Cooksey, and Angus W. McLean, *Third Annual Report of the War Finance Corporation*, 7794 S. Doc. 341, 1920, pp. 1–8.
[7] Milton Friedman and Anna Jacobson Schwartz, *A Monetary History of the United States, 1867-1960*, Princeton University Press, 1971, p. 317.

For President Herbert Hoover, recovery depended upon getting banks to lend again. After a three-month dalliance with a privately-funded "bad bank," he proposed that the Congress establish a Reconstruction Finance Corporation (RFC).[8] In January 1932 Congress capitalized the RFC with $ 500 million from the US Treasury and authorized it to issue obligations "fully and unconditionally guaranteed both as to interest and principal by the United States" for $ 1.5 billion more, though the additional obligations had to mature no later than five years after issue. The RFC was authorized to make "fully and adequately secured" loans to a variety of financial intermediaries, including commercial banks, mortgage lenders, insurance companies, and livestock credit corporations, and it could lend directly. Its power to make loans sunset at the end of one year, but the president at his discretion could extend its term for up to an additional two years. The organization itself was to be liquidated within ten years.[9] As events unfolded, however, the RFC was to last more than twice as long.

As historian James S. Olson has documented, the RFC was "a direct descendant of the War Finance Corporation." Its chairman, Federal Reserve Board Chairman Eugene Meyer, had been a board member of the WFC, and he recruited five of its senior officers to the new organization. The RFC's organizational structure also mirrored that of the WFC, both in terms of the division of responsibilities and the number of local offices. One of Meyer's recruits drew up a list of bankers who had helped him with the WFC more than a decade earlier and offered to hire them.[10]

Econometric evidence suggests that RFC lending substantially reduced bank suspensions in its first half year of existence and slowed the contraction of the money supply.[11] However, commercial lending did not pick up, so in July, Congress turned to more direct aid for the economy. It passed the Emergency Relief and Construction Act, which set aside $ 300 million of the RFC's funds to provide loans to states to provide for relief programs. It also authorized the Corporation to make up to $ 1.5 billion in loans to states, municipalities, or their instrumentalities for "self-liquidating" public works projects.[12]

Unfortunately, that same legislation required the RFC to publish the names of all of its borrowers. When yet another panic ravaged the banking system in late 1932, banks avoided drawing upon the RFC's facilities for fear of appearing weak. In the month preceding Franklin D. Roosevelt's inauguration, state governors ordered the suspension of withdrawals, a bank holiday that the new president quickly made nationwide. Days later, Congress gave the RFC the authority to purchase

[8] James Stuart Olson, *Saving Capitalism: The Reconstruction Finance Corporation and the New Deal, 1933-1940* Princeton University Press, 1988, pp. 10, 14.
[9] Reconstruction Finance Corporation Act, P.L. 72-2, 1932.
[10] Olson, *Saving Capitalism*, pp. 14–15.
[11] James L. Butkiewicz, "The Impact of a Lender of Last Resort during the Great Depression: The Case of the Reconstruction Finance Corporation," *Explorations in Economic History*, vol. 32, no. 2, 1995, pp. 197–216.
[12] Olson, *Saving Capitalism*, p. 19.

the preferred stock of any national bank or trust company and removed limits on the amounts it could loan to institutions in the process of liquidation.[13]

When bank lending still did not pick up, the RFC's powers expanded. A 1934 amendment to the RFC authorization permitted the agency to lend to "any business enterprise … either directly or in cooperation with banks or other lending institutions through agreements to participate," so long as adequate security was provided, credit was not available from private sources, loans did not exceed $ 500,000 to a single borrower or $ 300 million in the aggregate, and maturities did not extend beyond five years.[14] Subsequent amendments relaxed or eliminated all of these restrictions except the requirement that credit not be available elsewhere. In addition, the RFC was empowered to make disaster loans, purchase and sell gold (to stimulate inflation), and provide startup funding for the Works Progress Administration. The RFC also provided seed capital for the Federal Housing Administration, Fannie Mae, the Commodity Credit Corporation, the Rural Electrification Administration, and the Export-Import Bank, and it recapitalized the Farm Credit System and Federal Home Loan Bank system.[15]

From its inception until December 30, 1940, the RFC disbursed $ 7.67 billion in loans, but its influence extended even further. While loans of longer maturities were not unknown prior to the Great Depression, banks were reluctant to make them. The RFC educated the private sector how to make "term loans," and banks began making more and more of them on their own.[16]

Meanwhile, credit in international markets had disappeared. The Depression had pushed the balance of payments for many countries out of alignment. To deal with the problem, some governments had restricted their foreign exchange payments. Bankers became wary of lending when repayment might be delayed. Short-term lending for exports went from $ 100 million per year in the 1920s to $ 4 million in 1934.[17]

To reestablish trade Roosevelt signed an executive order to create the Export-Import Bank (Ex-Im).[18] He appointed as its director George N. Peek, the former head of John Deere and a vigorous advocate of the agricultural sector. Peek in turn reached out to the National Foreign Trade Council,

[13] Emergency Banking Relief Act, P.L. 73-1 (1933).
[14] US Statutes at Large (1934), 1105-1113, quoted in Hyo Won Cho, "The Evolution of the Functions of the Reconstruction Finance Corporation: A Study of the Growth and Death of a Federal Lending Agency" PhD dissertation, The Ohio State University, 1953.
[15] Olson, *Saving Capitalism*, p. 45; Cho, "Reconstruction Finance Corporation," pp. 42–44, 52–53, 61–62, 65–66.
[16] Neil H. Jacoby and Raymond J. Saulnier, *Term Lending to Business*, National Bureau of Economic Research, 1942, cited in Cho, "Reconstruction Finance Corporation," pp. 80–81.
[17] William H. Becker and William M. McClenahan, Jr., *The Market, the State, and the Export-Import Bank of the United States, 1934–2000*, Cambridge University Press, 2003, pp. 17–18.
[18] This account simplifies the events surrounding the establishment of the Bank considerably. It came about via the creation of two banks, one to finance trade with the Soviet Union and the other to assist exports first to Cuba, then to the entire world except the USSR. Part of the rationale for the founding of the first bank was leverage in getting the Soviets to repay pre-revolutionary debt taken on by Russia. The two banks merged the next year and never did any business with the USSR. For a more fulsome account, see ibid., chapter 1.

which had been advocating for a government agency to finance exports for the past three years, and the American Bankers Association for advice.[19]

Meanwhile, an ambitious loan program for the rural poor emerged indirectly from the federal government's relief efforts. In Roosevelt's first 100 days, Congress had passed the Federal Emergency Relief Appropriation Act, which established the Federal Emergency Relief Administration to oversee grants to the states for public assistance. In densely populated areas, this took the form of job programs and direct relief, but administrators in the Rural Rehabilitation Division (RRD) had a different idea. Believing that farms were inherently self-sustaining, they opted for a program of "Supervised Credit." Loans for feed, fertilizer, livestock, and equipment were combined with periodic visits to help the farmers plan food production, budgets, and other aspects of farm management. Officials at the RRD argued that the program would be cheaper and more cost-effective than other forms of relief.[20]

In 1937 a formal program began for addressing farm tenancy. Representatives of that population had been lobbying the Roosevelt Administration for years, and following the election, the president and elective representatives moved to address their concerns. In 1937, the Bankhead-Jones Farm Tenant Act established a low-interest loan program for the purchase and improvement of land by sharecroppers, tenants, and other agricultural workers. Appropriations for the bill had been whittled down in committee to such an extent that it became more practical to provide assistance come in the form of loans instead of grants.[21]

In the housing sector, a huge debt overhang, exacerbated by inflexible debt contracts, threatened recovery. At the time, mortgages lasted only five to ten years. Typically, they were rolled over at maturity, but if they were not, the mortgagor owed a large balloon payment. When the banking crisis hit, lenders refused to refinance, and borrowers were either unable or unwilling to pay. As defaults mounted, a vicious cycle set in: foreclosures would cause housing prices to decrease, which would leave more homeowners owing more than their houses were worth, which would lead to more defaults, and so forth. Foreclosures on nonfarm properties reached nearly 250,000 by 1932, more than triple the rate in 1926.[22]

To stabilize the market, Congress created the Federal Housing Administration (FHA). The National Housing Act of 1934 created this government agency to administer a revolving fund that would insure mortgages against default. In exchange for a fee set by the FHA commissioner, lenders were insured against loss of principal on mortgages that defaulted, with recovery for unpaid interest contingent upon the amount received from sale of the foreclosed property. Section 203 of

[19] Ibid., p. 26.
[20] Charles Kenneth Roberts, "The New Deal, Rural Poverty, and the South," PhD dissertation, University of Alabama, 2012, pp. 61–68.
[21] Ibid., pp. 201–2.
[22] Susan B. Carter et al., eds., *The Historical Statistics of the United States*, Millennium edition, Cambridge University Press, 2006, Table DC1255-1270.

the Act defined an eligible mortgage as having a principal of no more than $ 16,000 and a loan-to-value ratio not to exceed 80 percent, and maturities were not to exceed 20 years. The loans were to be fully amortizing with payments not to exceed the mortgagor's (homeowner's) "reasonable ability to repay," as determined by the Commissioner.[23] The insurance fund was to insure only mortgages that were "economically sound."[24]

Title III of the Act provided for the creation of national mortgage associations. Intended to be private entities, they were authorized to purchase and sell first mortgages, thereby creating a liquid secondary market for FHA-insured mortgages. The FHA commissioner was given the power to periodically examine the associations and had the power to liquidate, reorganize, or place under receivership any whose capital fell below 10 percent of assets or was otherwise operating in an unsafe or unsound manner.[25] After such organizations failed to materialize, the FHA requested the RFC in 1938 to create the Federal National Mortgage Association, later known as "Fannie Mae," as a demonstration project.[26]

In its first annual report, the FHA announced its intention to accomplish "a thorough reform in the home financing structure" aimed at "develop[ing] practices that protect the borrowers against excessive charges" and "discourag[ing] the assumption of obligations above the borrower's reasonable capacity to pay."[27] But the FHA's innovations went well beyond the four corners of the mortgage contract. It established minimum standards for home construction, including for design, materials, water supply, and sewage disposal, and enforced these standards through on-site inspections. Appraisals were made by the FHA, either by in-house staff or appraisers it hired, which insulated estimates from pressure by developers, home sellers, or real estate agents. Subsequent legislation required that builders warrant that they had built the home in "substantial conformity" with the plans approved by the FHA and authorized the FHA to pay the home owner for any "substantial defects" that he might discover. Home buyers took eligibility for FHA loans as a proxy for home quality, which encouraged the private sector to adopt the same standards.[28]

The FHA succeeded where the private market had failed. Building and loan companies had been experimenting with amortization for nearly fifty years through "direct reduction" contracts, with limited success. Implementing such arrangements required innovations in accounting and the

[23] National Housing Act of 1934, P.L. 479-73, 1934.
[24] Dwight M. Jaffee and John M. Quigley, "Housing Policy, Mortgage Policy, and the Federal Housing Administration," Chapter 5 in *Measuring and Managing Federal Financial Risk*, ed. Deborah Lucas, 2010, p. 105.
[25] National Housing Act of 1934, P.L. 479-73, 1934.
[26] Kenneth A. Snowden, "The Anatomy of a Residential Mortgage Crisis: A Look Back to the 1930s," National Bureau of Economic Research Working Paper 16244, July 2010, 27, available at http://www.nber.org/papers/w16244.
[27] "First Annual Report of the Federal Housing Administration," House Document No. 88, 74th Congress, 1st Session January 29, 1935, p. 4.
[28] Milton P. Semer et al., "Evolution of Federal Legislative Policy in Housing: Housing Credits," Chapter 1 in *Housing in the Seventies: Working Papers*, by Department of Housing and Urban Development, National Housing Policy Review, GPO, 1976, pp. 12–13.

management of credit risk that few of these associations could handle.[29] Furthermore, when the Great Depression hit, many building and loan associations went down with it. Private mortgage insurance firms had emerged after the turn of the century and by 1930 were insuring $ 3 billion in mortgages. Some had begun marketing pass-through certificates on (i.e., selling shares in) pools of mortgages to investors. These firms, however, only insured shorter-term mortgages, and in the 1930s they had failed amid allegations of fraud and mismanagement. Their malfeasance was so flagrant that a legislative committee in New York, where nearly all were domiciled, recommended that the business be banned.[30]

The FHA also shaped the market in less salutary ways. Seemingly innocuous standards, such as for lot size and for distance from streets and neighboring buildings, rendered many properties in more densely populated cities ineligible.[31] More egregiously, the FHA adopted the private sector's biases against "undesirable racial elements" and their "ingress" into areas with homogeneous populations.[32] Its 1939 underwriting manual required that appraisers record the "predominating racial characteristics" of neighborhoods with letters for "white," "mixed," "foreign," and "Negro." It also advised them to "investigate[]" nearby areas "to determine whether incompatible racial and social groups are present, for the purpose of making a prediction regarding the probability of the location being invaded by such groups," as "a change in social or racial occupancy generally contributes to instability and a decline in values."[33] Thus standards that had been applied on a local and *ad hoc* basis by the private sector became formal and uniform nationwide, enforced by on-site inspections by FHA representatives. The FHA ended up subsidizing the flight of more affluent and mostly white residents to the suburbs, to the detriment of center cities.[34]

IV. CONSOLIDATION: THE POSTWAR PERIOD

World War II eventually raised the economy fully out of depression. However, despite the return to prosperity, government credit programs became only more entrenched. Policy makers found new uses for government credit, and the old programs did not go away. As with other forms of government support, organized interest groups had come to rely upon federal credit, and they made their voices heard in the halls of Congress. Once started, government credit programs remained,

[29] Jonathan D. Rose and Kenneth A. Snowden, "The New Deal and the Origins of the Modern American Real Estate Loan Contract," *Explorations in Economic History*, vol. 50, no. 4, 2013, pp. 549–53.
[30] Kenneth A. Snowden, "Anatomy of a Residential Mortgage Crisis," pp. 14, 20–21. The types of malfeasance would be very familiar to modern readers, as the insurers "violated underwriting standards, substituted bad loans for performing mortgages in their mortgage pools, and maintained inadequate guarantee funds to support their insurance policies" (ibid., p. 20).
[31] Kenneth T. Jackson, "Race, Ethnicity, and Real Estate Appraisal: The Home Owners Loan Corporation and the Federal Housing Administration," *Journal of Urban History*, vol. 6, no. 4, 1980, p. 436.
[32] Stanley L. McMichael, *McMichael's Appraising Manual: A Real Estate Appraising Handbook for Field Work and Advanced Study Courses*, Prentice-Hall, 1931, p. 278, cited in Calvin Bradford, "Financing Home Ownership: The Federal Role in Neighborhood Decline," *Urban Affairs Review*, vol. 14, no. 3, 1979, p. 323.
[33] Federal Housing Administration, *Underwriting Manual: Underwriting Analysis under Title II, Section 203 of the National Housing Act*, GPO, 1934, §§ 937, 1850.
[34] Bradford, "Financing Home Ownership"; Jackson, "Race, Ethnicity, and Real Estate Appraisal."

and as we will see in this and the following section, expanded significantly despite original assurances that they would be limited in scope.

The initial stimulus was the cessation of hostilities. At war's end, the federal government was confronting the formidable task of demobilizing from the twin emergencies of depression and war. More than fifteen million soldiers were coming back to the States, with no jobs or homes waiting for them. Making matters worse, conscription had interrupted their opportunities to gain skills either through education or on-the-job experience.[35] Meanwhile, industry had to transition to a consumer economy, and there was no guarantee that economic depression would not return.

Congress responded with the Servicemen's Readjustment Act of 1944, more colloquially known as the GI Bill. Proposals circulating within Congress and the Roosevelt Administration for this measure had been relatively modest, but the American Legion expanded them and mobilized its grassroots network to spur the enactment of a broader program.[36] The final bill provided long-term unemployment benefits, health care, and disability allowances, but the most far-reaching provisions pertained to credit and educational subsidies. Veterans were entitled to apply for a guarantee of a loan to buy a home, acquire farm equipment or livestock, or start a business. Interest rates were not to exceed 4 percent, and maturities were limited to 20 years. The federal government would pay interest for the first year. Finally, the bill offered veterans $ 500 per year for tuition, plus living expenses.[37] Consistent with its name, the act was intended to be short-term. Returning servicemen were required to apply for benefits within two years of separation from service or the termination of war, whichever was later.

However, that restriction did not last long. Real estate prices had risen so much during the war that the maximum allowed guarantee, $ 2,000, was insufficient to buy a home. Twenty-year maturities required payments beyond the incomes of prospective purchasers. Furthermore, given the number of eligible veterans, policymakers feared that restricting transactions within the two-year limit would cause further house price inflation. Accordingly, amendments the following year extended eligibility to ten years and lengthened allowable maturities to 25 years.[38]

Though not a loan program *per se*, the educational benefit established a substantial role for the government in higher education. Fifty-one percent of veterans took advantage of the opportunity, one-quarter of them for higher education.[39] This provided a significant stimulus for the educational sector. According to a Congressional investigation, it spurred the establishment of a hundreds of "fly-by-night ventures" offering "every course imaginable, attempting to break into

[35] Congressional Research Service, *GI Bill: 1944-1975* (Washington, DC, 1975), p. 3.
[36] Suzanne Mettler, *Degrees of Inequality: How the Politics of Higher Education Sabotaged the American Dream*, Basic Books, 2014, p. 57.
[37] Congressional Research Service, *GI Bill*, p. 5.
[38] Department of Veterans Affairs, *Legislative History of the VA Home Loan Guaranty Program*, August 23, 2006, p. 4, available at http://www.benefits.va.gov/homeloans/documents/docs/history.pdf.
[39] Mettler, *Degrees of Inequality*, p. 57.

the education and training field for the purpose of securing the GI dollar." The Bill had included no means of weeding out bad actors and ensuring that program outcomes were favorable. "It is not surprising," the committee report concluded, "that in a program of this magnitude there have been abuses, there have been errors, there have been extravagances, there have been isolated instances of corruption and larceny, and there has been administrative inefficiency."[40]

Nevertheless, the federal role in financing higher education increased in the late 1950s. In 1957 the Soviet Union launched Sputnik, the first artificial satellite, into space. The event raised concerns among policymakers that the nation was falling behind in educational attainment and technical skills. In response, Congress passed the National Defense Education Act (NDEA), a law whose preamble declared an ambitious target: "We must increase our efforts to identify and educate more of the talent of our Nation. This requires programs that will give assurance that no student of ability will be denied an opportunity for higher education because of financial need." [41]

President Eisenhower had wanted the NDEA to operate via a tax benefit, which would have limited the government's involvement in higher education. Democrats, however, argued that such a program would be costly and instead established a student loan system. Credit was to be extended directly from the government, repayable over ten years, to undergraduate and graduate students studying areas relevant to national defense.[42]

The Cold War also bolstered the prospects of the Export-Import Bank. Europe was in dire need of funds to help with reconstruction, and the Bank had experience with large-scale loans. Accordingly, Congress gave it an extension of its charter and a 400 percent increase in its lending authority, and it rescinded restrictions on lending to countries that had defaulted on obligations to the US.[43] Subsequent to its work on reconstruction, Ex-Im financed projects in Afghanistan, Iran, Israel, Saudi Arabia, and Yugoslavia (which was distancing itself from the Soviet Union at the time), along with loans to the French government for military equipment to fight the communists in Vietnam.[44]

Attempts to restrain the Bank's private lending did not succeed. Eisenhower's Treasury secretary argued that "there should be as little government lending as possible," and he was especially interested in reducing Ex-Im's draw on the Treasury. In January 1954 he pushed a resolution through the Bank's advisory committee stating that the Bank was to focus on short- and medium-term loans and that as much as possible they be made via participations with private-sector intermediaries.[45]

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[40] "Report of the House Select Committee to Investigate Educational and Training Programs under the GI Bill," 1951, quoted in Congressional Research Service, *GI Bill*, 6–7.
[41] Matthew B. Fuller, "A History of Financial Aid to Students," *Journal of Student Financial Aid*, vol. 44, no. 1, 2014, p. 15; National Defense Education Act, P.L. 85-864 (1958).
[42] Fuller, "History of Financial Aid," p. 15; Mettler, *Degrees of Inequality*, pp. 60–61.
[43] Becker and McClenahan, Jr., *Export-Import Bank*, pp. 62–65.
[44] Ibid., pp. 81–82.
[45] Ibid., pp. 89, 96, 107.

Exporters pushed back. Led by Westinghouse, they lobbied key members of Congress to roll back restrictions. The chair of the Senate Committee on Banking and Currency held a series of hearings in which supporters of the Bank (no opponents were scheduled) testified in its favor. A committee staff report relayed exporters' complaints that the bank was doing "relatively little" for US manufacturers and that the requirement that those who did get loans provide at least 25 percent of the financing "appears inappropriate and unduly burdensome." In August 1954, Congress passed a bill "reaffirm[ing] the status of the Export-Import Bank as an independent agency of the United States," reflecting congressional assertion of greater control over the Bank relative to the Treasury Department and the Executive Branch. In reporting out the bill, the Banking and Currency Committee stated that it was imposing "no legislative limitation upon the loan authority of the Export-Import Bank that would exclude it properly from making long-term, medium-term, or development loans."[46]

Meanwhile, questions arose over the continuing relevance of the Reconstruction Finance Corporation. As economic growth resumed, bankers especially argued that credit markets no longer needed its support.[47] In renewing the agency's charter in 1948, Congress prohibited it from purchasing the stock in any bank, make loans to foreign governments, capitalize government agencies, continue to operate its home mortgage subsidiary, or have more than $ 2 billion outstanding at any time. Presumably this was expected to reduce its lending, which had reached $ 393 million for 1947. However, the RFC continued to grow, with new loans exceeding half a billion dollars in the fiscal year ending June 1950. It extended credit to a wide variety of concerns, including "a gambling casino, a rainbow trout fishery, night clubs, snake farms, swank resort hotels in Miami Beach, movie houses, and a grower of cactus plants for sale in dime stores."[48]

The RFC was nearing its end. In addition to growing without any apparent constraint, it had become an attractive target for corruption. A Congressional subcommittee in 1951 issued a report finding significant favoritism and influence-peddling at the RFC, causing an uproar. The agency thereafter became an important symbol in Republican's 1952 to "clean up the mess in Washington."[49] Once in office, the new Republican majority abolished the agency and ordered that its operations be transferred to the US Treasury.

Nevertheless, there remained considerable enthusiasm for government support of credit for small business. Senator William J. Fulbright, who had chaired the investigation of the RFC, argued that in many areas in the South and West, such as his home state of Arkansas, small businesses found it difficult to obtain loans because of the small size of local banks. The RFC had been serving this

[46] Ibid., pp. 96–101.
[47] Barry P. Bosworth, Andrew S. Carron, and Elisabeth H. Rhyne, *The Economics of Federal Credit Programs* (Washington: Brookings Institution, 1987), p. 82.
[48] Jules Abels, *The Truman Scandals*, Henry Regnery, 1956, cited in Addison W. Parris, *The Small Business Administration*, F. A. Praeger, 1968, p. 14.
[49] Parris, *Small Business Administration*, pp. 15–18.

market through depression and war, and without it, Fulbright claimed, "hundreds of businesses in the South and West could [have] never expand[ed]."[50]

Thus in the same legislation that abolished the RFC, Congress established the Small Business Administration (SBA). The legislation authorized the agency to draw upon a revolving fund at the Treasury not to exceed $ 275 million. All loans were to "be of such sound value or so secured as reasonably to assure repayment," and no loan could be made "unless the financial assistance applied for is not otherwise available on reasonable terms,"[51] the latter provision being important in gaining the support of the American Bankers Association.[52] The statute required that the SBA sunset after two years.[53]

Almost immediately policymakers found these restrictions to be too binding. In 1955, the Small Business Administrator asked that his agency be extended for two years, and the Chairman of the Senate Small Business Committee countered with a proposal that the SBA become permanent, as "allow[ing] the agency to drift, uncertain of its future, would jeopardize the large investment on services and in appropriations already made."[54] Funding constraints also evaporated. The SBA habitually depleted its revolving fund and made yearly requests for additional funds, which Congress routinely accommodated. Between 1953 and 1966, lawmakers appropriated an additional $ 1.8 billion dollars for the agency, making the SBA "a *de jure* revolving fund agency but a *de facto* traditional agency."[55]

Meanwhile, under the umbrella of the FHA, the residential mortgage market had become financially integrated.[56] The agency itself was running substantial surpluses, demonstrating the viability of long-range, amortizing mortgages, and higher leverage. With this evidence of success, Congress moved to liberalize terms. In a series of statutes passed between 1938 and 1957, it progressively extended maximum maturities until they reached 30 years and increased maximum loan-to-value ratios to 97 percent for some mortgages. Congress also replaced the "economic soundness" requirement for mortgages with an "acceptable risk" test. The basis for the maximum

[50] Cho, "Reconstruction Finance Corporation," pp. 281–82, 291–92, quoting "Resolution on Reconstruction Finance Corporation," *Congressional Record*, vol. 99, no. 25, February 13, 1953, p. 1090.
[51] An Act to Create the Small Business Administration and to Preserve Small Business Institutions and Free, Competitive Enterprise, P.L. 83-163 (1953).
[52] Bosworth, Carron, and Rhyne, *Economics of Federal Credit*, pp. 82–83.
[53] An Act to Create the Small Business Administration.
[54] Statement of Senator Thye (R., Minn.), *Congressional Record*, vol. 101 (1955), p. 7638, quoted in Mirit Eyal-Cohen, "Why Is Small Business the Chief Business of Congress?" *Rutgers Law Journal*, vol. 43, no. 1 (Fall/Winter 2011, p. 33.
[55] Parris, *Small Business Administration*, p. 118.
[56] Kenneth Snowden, "The Evolution of Interregional Mortgage Lending Channels, 1870-1940: The Life Insurance-Mortgage Company Connection," Chapter 7 in *Coordination and Information: Historical Perspectives on the Organization of Enterprise*, eds. Naomi R. Lamoreaux and Daniel M. G. Raff, University of Chicago Press, 1995, p. 244.

insurable amount changed from long-range value to replacement cost, a less conservative measure.[57]

V. EXPANSION: THE 1950S AND 1960S

With many now on a permanent basis, federal credit programs expanded. Agencies expanded in size and scope as policy makers found new uses for the government's balance sheet. Credit programs became a way for policymakers to extend federal largesse without appearing to increase the deficit.

The FHA became an active tool of social policy and the housing industry. Congress recruited the agency to support, and often subsidize, programs for urban renewal, affordable rentals, and home purchase assistance. Between 1954 and 1968, it passed amendments to the National Housing Act to encourage urban renewal housing (Section 220, passed in 1954); below-market interest rates for families displaced by urban renewal (Section 221, 1954); multifamily housing through mortgages at below-market interest rates (Section 221(d)(3), 1961); housing in "older, declining urban areas" where "one or more of the eligibility requirements … could not be met" (Section 223(e), 1968); mortgages with low down payments and subsidized interest rates to low-income households (Section 235, 1968); subsidized loans for construction of multifamily housing (Section 236, 1968); and credit for mortgagors with bad credit (Section 237, 1968)

A "Special Risk Insurance Fund" was established for all these programs except 221(d)(3) and 221(d)(4) to compensate for higher-than-expected defaults and insulate the main FHA insurance fund from losses. The original single family mortgage insurance (203(b)) program moved downmarket as well, due to the more lenient terms approved between 1938 and 1957 and because of binding maximum loan limits. By 1969 FHA had transformed from a general-purpose insurer into a program designed largely to help lower-income households afford housing.[58]

The Farmers Home Administration (FmHA) expanded as well. Beginning in 1949, legislation increased the credit facilities administered by FmHA at a crisp pace, adding housing loans to farmers (the Federal Housing Act of 1949); loans for farm water systems (the Water Facilities Act of 1954); emergency loans following natural disasters (the Disaster Loan Act of 1949); housing loans for nonfarm rural residents (the Federal Housing Act of 1961); loans for association grazing ranges and for resource conservation (the Farmers Home Administration Act of 1962); loans to low-income residents of rural areas, improvements to small farms, and for nonfarm businesses (the Economic Opportunity Act of 1964); housing loans to low-income families and developers of low-income housing, for farm labor housing, and for "self-help" homebuilding projects (the Housing Act of 1968); guaranteed loans by private-sector intermediaries for farming, housing, business, or

[57] James R. Barth, Joseph J. Cordes, and Anthony M. J. Yezer, "FHA Mortgage Insurance and High-Risk Mortgage Lending: Some Lessons for Policy," *Housing Finance Review*, vol. 2, no. 2 (April 1983), p. 97.
[58] Kerry D. Vandell, "FHA Restructuring Proposals: Alternatives and Implications," *Housing Policy Debate*, vol. 6, no. 2, 1995, pp. 312–14.

industry (the Rural Development Act of 1972); guaranteed loans to financially distressed livestock and poultry farmers (the Emergency Livestock Credit Act of 1974). To execute its new responsibilities, the FmHA established branch offices across the country.[59]

Despite being in operation less than five years, the SBA also expanded. According to testimony at Congressional hearings and a series of analytical reports by the Federal Reserve, small businesses faced an "equity gap" – difficulty in getting long-term loans or equity capital from private financial intermediaries – and this financing deficit diminished their competitiveness with larger enterprises. Citing these findings, lawmakers passed new legislation, the Small Business Investment Act (SBIA).

The SBIA authorized the creation of small business investment companies (SBICs), privately owned and operated firms licensed by the SBA to provide patient capital to small businesses. Specifically, SBICs were to finance eligible firms through long-term loans and convertible debentures (unsecured bonds that could be converted into stock). Investors could start such firms with at least $ 150,000 of their own capital. The law then permitted them to leverage up with two dollars of federal money for every dollar the principals invested. Congress sweetened the deal with special tax breaks. To wean the companies off of government support, the law stipulated that small businesses receiving capital from an SBIC had to buy shares of its stock equal to no less than 2 percent of the value of the funds.[60]

As with the original SBA, these restrictions did not last long. Two years after passage of the SBIA, Congress rescinded its mandate that provision of equity be the SBICs' primary function. Furthermore, because small businesses perceived capital purchases as little more than excess interest payments, Congress made their investments in SBICs voluntary. Amendments to the SBIA in the 1960s increased the amount of matching funds the SBA could provide to $ 7.5 million per SBIC, far above the limit of $ 150,000 in the original legislation. Congress also removed limits on the amount that an SBIC could lend to a single business and expanded the ability of commercial banks to participate in the program.[61]

In 1964, the SBA's domain expanded even further. In that year six hurricanes caused $ 2.5 billion in damages in Florida, Louisiana, Texas, Georgia. Alaska suffered a damaging earthquake, floods occurred in Montana and in the Ohio River valley, and California experienced forest fires. Congress directed the SBA to make immediate disaster loans of $ 49.5 million, which they followed with a $ 60 million supplemental appropriation. Rather than disappearing after the

[59] United States Department of Agriculture, "Federal Credit Programs for Agriculture: Background for 1985 Farm Legislation," *Agricultural Information Bulletin*, November 1984, pp. 10–11, available at https://naldc.nal.usda.gov/naldc/download.xhtml?id=CAT87212350&content=PDF.
[60] Parris, *Small Business Administration*, pp. 156–57.
[61] Ibid., pp. 157–60.

emergencies passed, the set-asides remained. Two years later, Congress voted to continue to funding the program, and it eventually became permanent.[62]

In 1965 the government extended the student loan program to nonmilitary ends. Under the umbrella of his expansive Great Society initiative, the Higher Education Act of 1965 (HEA) was to be a catalyst of economic opportunity for lower- and middle-income students who might otherwise be unable to afford college. The legislation included a grant program, later renamed Pell Grants, and a system for guaranteeing private-sector loans, both of which were subject to income limits, the latter being $ 15,000 in family income. Policymakers hoped that the supply of cheaper credit would help quell continuing pressure for tax credits and that the income limits would help restrict the program to lower- and middle-income students.[63]

Later in the decade, interest rates began to rise. To encourage lenders' continuing participation in the student loan program, Congress established a Special Allowance Fund to subsidize such loans. The fund compensated lenders on the basis of dollar volume outstanding. A committee of government officials was to determine the exact amount of the subsidy, which was not to exceed 3 percentage points.[64]

In the fifteen years following the passage of the HEA, college costs rose sharply, leading to more pressure for government help. Expanding the student loan program and providing increased subsidies proved to be the path of least resistance. In its 1972 reauthorization of the HEA, Congress authorized the subsidization of interest payments by students during school through a program later renamed Stafford Loans. The Middle-Income Assistance Act of 1978 removed all income restrictions from the student loan program. To accommodate increased demand for loans, Congress lifted the cap on Special Allowance payments the following year.[65]

In the 1970s, the Export-Import Bank was employed to deal with increasing international balance of payments deficits. Intensified competition from abroad, along with rising energy prices due to shocks to the international oil supply, caused American imports to exceed exports. Moreover, other countries were aiding their own exports with subsidies of their own, making US products less competitive in international markets. Presidents Nixon and Carter each made Ex-Im part of their export promotion policies.[66]

Congress expanded Veterans Administration mortgage insurance through a series of bills passed following the Vietnam War. First it extended indefinitely the time in which veterans could utilize guarantees, and it extended coverage to new types of housing and to refinancing. A subsequent revision enabled beneficiaries to use the guarantee again if previous obligations had been settled.

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[62] Eyal-Cohen, "Small Business the Chief Business," pp. 20–21.
[63] Mettler, *Degrees of Inequality*, pp. 60–61; National Commission on Student Financial Assistance, "Guaranteed Student Loans: A Background Paper," Report No. 1, March 1982, p. 24, available at http://eric.ed.gov/?id=ED228950.
[64] National Commission on Student Financial Assistance, "Guaranteed Student Loans," p. 25.
[65] Ibid., p. 26.
[66] Becker and McClenahan, Jr., *Export-Import Bank*, pp. 172, 182, 190–91.

A few years later, Congress increased the benefit, further expanded its scope, and increased eligibility. In 1992, the program was extended to reservists, partly as an incentive for what was expected to become an increasingly important part of the nation's military readiness. Thus Veterans' Administration mortgages changed from a one-time benefit, intended to manage a massive demobilization immediately after a major war, to a lifetime entitlement and a recruiting tool for an all-volunteer military.[67]

Federal support for housing also expanded significantly in the late 1960's with expansion of federal backing of the secondary market for mortgage loans. At the Johnson Administration's request, Title VII of the 1968 Housing and Urban Development Act divided Fannie Mae into two parts. The Government National Mortgage Association (Ginnie Mae) was created as a government agency inside the newly-created Department of Housing and Urban Development with the mission of developing the pass-through mortgage certificate, which guaranteed principal and interest on pools of FHA, VA and Rural Housing mortgages. Fannie Mae was spun off in a sale to private investors and it was to specialize its secondary market functions primarily in non-government-backed mortgages.

VI. OVERLENDING: THE 1960S AND 1970S

By and large, federal credit agencies were unprepared for the new responsibilities placed upon them. Congress had expanded the size and scope of their missions without investing in corresponding capabilities. The combination of increased pressure to make loans and decreased experience with the types of loans Congress mandated led to ill-advised expansions of credit to borrowers unable or unwilling to pay back their debts. The results ranged from unfortunate to disastrous.

The SBA's Small Business Investment Company program was among the first to run into difficulty. In an effort to get the program started, the fledgling agency was generous in giving out licenses. It did little investigation into the character or qualifications of applicants.[68] Staff lacked the expertise to supervise the companies, and its accounting system could not provide current or accurate information on SBIC performance. As a result, SBA could not keep track of the status of its loans to SBICs or estimate potential losses. The SBA's Office of the Inspector General lacked sufficient staff to perform routine examinations. In any case, there were few penalties on the books for violating the agency's regulations.[69] As a result, the program was ridden with poor performance, conflicts of interest, self-dealing, and fraud.[70]

[67] Economic Systems Inc., ORC Macro, and The Hay Group, *Evaluation of VA's Home Loan Guaranty Program: Final Report*, July 2004, chapter 2, pp. 1-6, available at http://www.benefits.va.gov/homeloans/documents/docs/final_report.pdf.
[68] Eyal-Cohen, "Small Business the Chief Business," p. 41.
[69] Ibid., pp. 44–45.
[70] Parris, *Small Business Administration*, pp. 162–63, 191–95.

Meanwhile, FHA took on the ambitious Section 235 and 236 programs in the midst of an ill-advised reorganization. Department of Housing and Urban Development Secretary George Romney, attempting to fix what he saw as "the entire Rube Goldberg structure" of federal housing initiatives, redistributed many of FHA's functions among HUD's divisions. For all intents and purposes, this meant that there were no longer any FHA employees, as workers who belonged to the agency took on mission responsibilities beyond underwriting and lending. The reorganization also centralized all computer systems under the assistant secretary for administration, so officials had to make formal requests whenever they needed to increase FHA usage of the facilities.[71]

Operations in the neighborhoods that the FHA had been asked to serve were even more troubled. Having neglected them for decades, the FHA also lacked experience in underwriting loans in center cities. With little to guide them but a mandate to increase lending, the FHA took ill-advised risks. Its commissioner directed that FHA-approved lenders should reject applications in "only those instances where a property has so deteriorated or is subject to such hazards … that the physical improvements are endangered or the livability of the property or the health of its occupants are seriously affected."[72]

Unscrupulous real estate agents took advantage. They bought up dilapidated properties, added cosmetic fixes, and then sold them for double or triple their cost. The buyers, frequently recruited by the same agents, were often poor, sometimes on public assistance, and new to homeownership. They did not anticipate the cost of maintenance and utilities, and no effort had been made to educate them about their obligations. When cracked foundations, faulty wiring, defective plumbing, and inadequate heating revealed themselves, the extra expenses exceeded their ability to pay, and they defaulted. In Detroit alone, ten thousand FHA-financed homes entered foreclosure, and by 1979, about 18 percent of Section 235 mortgages nationwide had been foreclosed or assigned.[73] Starting in 1973, the general insurance fund, which had been solvent in 1969, began requiring yearly infusions of about $ 240 million from the Treasury in order to remain afloat. The Special Risk fund, despite being a much smaller program, required nearly the same amount of assistance.[74]

After the passage of the Middle Income Student Assistance Act of 1978, the student loan program grew exponentially. Part of the rationale for removing income restrictions had been that the administrative cost of verifying earnings was too burdensome, but that decision had much more

[71] Vandell, "FHA Restructuring Proposals," pp. 321–24.
[72] Letter from the Commissioner of FHA to all approved FHA mortgagees, August 2, 1968, quoted in Calvin Bradford, "Financing Home Ownership," p. 326.
[73] House Committee on Banking and Currency, *Interim Report on HUD Investigation of Low- and Moderate-Income Housing Programs*, December 1970; Robert A. Van Order and Anthony M. Yezer, "FHA Assessment Report," George Washington University School of Business, June 2011, p. 8, available at http://business.gwu.edu/wp-content/uploads/2014/02/FHA2011Q2.pdf.
[74] Vandell, "FHA Restructuring Proposals," pp. 326–28.

far-reaching implications. Students could now apply for a loans without any notice or involvement by their parents.

Defaults surged a few years later. The Department of Education lacked a vigorous collection program, and borrowers took advantage. Bankruptcy laws for young adults were also fairly lenient at the time, giving borrowers another escape route. The combination of increased loans and inadequate servicing and collection practices proved to be costly. Defaults increased to nearly 15 percent of loans entering repayment in 1990, and payments out of the insurance fund hit $ 2.4 billion, up from $ 200 million in 1981.[75]

In international markets, Ex-Im responded to increased political pressure with a stepped-up lending program. In the 1970s, it expanded its portfolio, increased the amount its risk participation in loans made in partnership with commercial banks, and reduced the interest rates it charged below its cost of borrowing funds, which was already below market due to its governmental status. In both cases, the Bank's financial performance suffered in subsequent years.[76]

In the agricultural sector, a significant economic reversal was the impetus for an ill-advised episode of emergency credit. In the early 1970s, demand for farm products had soared because of government price supports and increased demand for exports. Inflation added to the sense of prosperity by raising agricultural prices and increasing the value of farmland. Farmers borrowed heavily to meet the demand.[77] Later in the decade, however, conditions in the agricultural sector reversed themselves. Interest rates soared and foreign demand for domestic agricultural products fell, leaving farmers squeezed between high costs and low prices.

In response, Congress passed the Economic Emergency Loan program. That legislation prompted the Farmers Home Administration to increase emergency lending by over $ 3 billion between 1978 and 1982. At the same time, however, cost-cutting measures had limited the size of FmHA's staff, and the complexity of farming was increasing faster than the training of supervisors. As a result, many marginal loans were made without much oversight. Foreclosure moratoriums on FmHA loans between 1983 and 1988 and in 1993 made matters worse by depriving the agency of a significant means of enforcement.[78] Between 1989 and 1997, the Farmers Home Administration and its successor agency, the Farm Service Agency, wrote off $ 15.2 billion in direct farm loans to more than 80,000 borrowers.[79]

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[75] National Commission on Student Financial Assistance, "Guaranteed Student Loans," pp. 31-32; Mettler, *Degrees of Inequality*, pp. 68–69.
[76] Becker and McClenahan, Jr., *Export-Import Bank*, pp. 142–54, 189–95.
[77] Bosworth, Carron, and Rhyne, *Economics of Federal Credit*, p. 112.
[78] Eddy L. LaDue, "Farm Lending Program Challenges for the Farm Service Agency," Cornell University Department of Agricultural, Resource, and Managerial Economics Working Paper SP 95-10, September 1995, p. 5, available at http://studylib.net/doc/11951826/staff-paper-sp-95-10-september-1995-revised--12-95.
[79] General Accounting Office, "Farm Service Agency: Information on Farm Loans and Losses," GAO/RCED 99-18, November 1998, p. 2.

By 1980, federal credit had grown to $ 382.6 billion, ($ 938 billion in 2015 dollars), which was equivalent to two-thirds of government outlays for that year.[80] Large losses at several federal credit programs served to make increasingly clear that the government's credit portfolio was neither costless nor risk-free.

VII. CONTRACTION: THE 1980S, 1990S, AND EARLY 2000S

The 1980s and 1990s brought the rise, first in the presidency and then in Congress, of significant opposition to the continued growth and expansion of federal credit. The administrations of Ronald Reagan and George H. W. Bush, and the more conservative Congress brought in by the 1994 election, curtailed the scope of many credit programs, although none was abolished.

The FHA was not eliminated, but its scope was reduced. The Community Development Act of 1981 established targets for low-income borrowers, but increased focus failed to get the agency to right itself. The FHA had inadequate financial controls, implemented lax underwriting standards, and failed to sanction lenders with high loss rates. A series of regional recessions across the nation increased defaults.[81] In 1985, the FHA's accounting had deteriorated to such an extent that the General Accounting Office announced that it was unable to perform its statutorily mandated audit of the agency's finances. In 1987 it hired Price Waterhouse, which also found FHA's accounting to be inadequate, though it did find enough evidence of weakness to predict substantial losses ahead. In a subsequent audit the accounting firm found that the FHA's reserves had dwindled from 5 percent of insurance in force to less than 1 percent.[82]

The scandal brought legislation placing new controls on the FHA. The Housing and Urban Development Act of 1989 authorized the FHA's Mortgagee Review Board to discipline or remove lenders that did not obey FHA rules; established the Offices of the Chief Financial Officer and FHA Comptroller; and required annual audited financial statements from the agency.[83] The following year, the Cranston-Gonzales National Affordable Housing Act instituted a target level of capital for the agency equal to 2.0 percent of insurance in force and mandated an overall increase in premiums. It also required higher premiums on loans with higher loan-to-value ratios. As a

[80] *Budget of the United States Government, FY 1982*, House Document, pp. M3, 18; Samuel H. Williamson, "Seven Ways to Compute the Relative Value of a U.S. Dollar Amount, 1774 to present," MeasuringWorth.com, April 2016.
[81] Anthony Pennington-Cross and Anthony M. Yezer, "The Federal Housing Administration in the New Millennium," *Journal of Housing Research*, vol. 11, no. 2, 2000, p. 360; Kerry D. Vandell, "FHA Restructuring Proposals," pp. 330–31.
[82] Vandell, "FHA Restructuring Proposals," pp. 330–31.
[83] Edward Szymanoski et al., "FHA Single-Family Insurance Program: Performing a Needed Role in the Housing Finance Market," Department of Housing and Urban Development, Office of Policy Development and Research, Housing Finance Working Paper, December 2012), p. 19, available at http://www.huduser.gov/portal/publications/pdf/FHA_SingleFamilyIns.pdf.

result, FHA premiums became significantly higher than private mortgage insurers' for the first time.[84]

These measures helped return the FHA to solvency in the 1990s, but they also cost it market share.[85] Technological innovation also limited its growth. In the private sector, automated underwriting systems streamlined the process of evaluating credit risk, and new pricing models enabled lenders to charge rates customized to borrowers' level of risk. Instead of rationing credit, private originators, along with Fannie Mae and Freddie Mac, began serving borrowers that were formerly the domain of the FHA.[86] Meanwhile, the FHA was slow to adapt to automated underwriting, and it resisted the use of risk-based pricing. Mortgage brokers found the agency's rules cumbersome and costly and increasingly turned toward other sources of credit. Limits on the maximum size of FHA loans did not keep pace with house price appreciation, so an increasing number of purchases were ineligible for agency loans. By 2006, the FHA's share of originations had shrunk to less than 2 percent, down from 20 percent in 1970.[87]

The Farmers Home Administration contracted as well. Labeled a "high-risk agency" by the General Accounting Office, it and its successor organization, the Farm Service Agency, reduced its direct loan portfolio from $ 23.3 billion in 1989 to $ 9.7 billion at the end of the 1997 fiscal year. The agency also shifted toward a greater reliance on guaranteed loans.[88] Legislation establishing the Farm Service Agency restricted the extent to which borrowers who had defaulted on earlier government loans could gain new credit from the agency.

At Ex-Im, reforms weakly implemented in earlier decades began to bear fruit. Between the two oil price shocks of the 1970s, Congress had directed the Bank to pursue agreements with export credit agencies of foreign governments to jointly limit subsidies.[89] International agreements in the early 1980s led to increased minimum interest rates on aircraft loans. Furthermore, as market interest rates declined over the first half of the decade, private financing became more attractive to exporters. As a result, Ex-Im loans on aircraft decreased from more than $ 2 billion in the 1980 and 1981 fiscal years to $ 200 million in 1982. Ex-Im's negative interest rate spreads declined to

[84] Jaffee and Quigley, "Housing Policy, Mortgage Policy," p. 117; Szymanoski et al., "FHA Single-Family Insurance," pp. 3, 19.
[85] Pennington-Cross and Yezer, "New Millennium," p. 360.
[86] Sarah Rosen Wartell, "Single-Family Risk Sharing: An Evaluation of Its Potential as a Tool for FHA," Millennial Housing Commission, 2002, pp. 26, 38, available at http://govinfo.library.unt.edu/mhc/papers/wartell.doc; Snowden, "Anatomy of a Residential Mortgage Crisis," p. 30.
[87] Jaffee and Quigley, "Housing Policy, Mortgage Policy," p. 106; Snowden, "Anatomy of a Residential Mortgage Crisis," p. 30; Wartell, "Single-Family Risk Sharing," pp. 26, 38–39, 52; Szymanoski et al., "FHA Single-Family Insurance," p. 22.
[88] Testimony of John W. Harman, Director of Food and Agriculture Issues, Resources, Community, and Economic Development Division, General Accounting Office, before the House Committee on Agriculture, Subcommittee on Conservation, Credit, and Rural Development, January 25, 1990, available at http://www.gao.gov/assets/110/102964.pdf.
[89] Becker and McClenahan, Jr., *Export-Import Bank,* pp. 171–72.

an average of less than 1 percent, and by 1985, about 80 percent of export credit agencies' subsidies had been eliminated.[90]

A particularly colorful campaign was waged against the Small Business Administration. David Stockman, the Reagan Administration's director of the Office of Management and Budget, told the Senate Small Business Committee that the agency "conducts a $ 3 [billion] to $ 4 billion annual lending program which indiscriminately sprays a faint mist of subsidized credit into the weakest and most prosaic nooks and crannies of the nation's $ 4 trillion economy. In the process, it serves almost no rigorously defined public policy purpose." The Reagan Administration proposed ending the whole agency, but although the SBA's budget was cut that year, the agency was not eliminated.[91]

Student loan programs were a notable exception to the trend toward contraction or slower growth of federal credit programs in the 1980s and 1990s. With budget deficits growing, it became difficult to win agreement in Congress on increases in grants that could keep pace with rapidly rising college tuitions. Expanding student loans seemed like a low-cost way of filling this gap. While grants dwindled in real terms, Congress increased borrowing limits and established unsubsidized loan programs for students with no demonstrated financial need.[92]

Subsidies for lenders, however, did decrease. Congressional investigations in the 1990s and 2000s revealed that guarantees on student loans had paid off handsomely for lenders, administrators, and schools but had not delivered corresponding benefits for students. Beginning in 1993, the Department of Education implemented a direct loan program, which has since become the sole source of student loan funding.[93]

VIII. Conclusion

With the onset of a severe housing collapse in 2007 and the failure of Lehman Brothers in 2008, the U.S. economy experienced the worst financial crisis since the Great Depression. Private-sector lending plummeted, going from $ 24 trillion in the second quarter of 2008 to $ 21 trillion in the fourth quarter of 2010.[94] As in the Great Depression, federal credit became an important policy tool for reversing financial contraction and reviving the economy. In 2008, the combined share of FHA and VA mortgage guarantees surged from less than 3 percent of the market to more than 20

[90] Ibid., pp. 204-07.
[91] "Congress Staves Off Reagan Plan to Ax the Small Business Administration," *CQ Almanac*, 1985, p. 412.
[92] Mettler, *Degrees of Inequality*, pp. 67–68.
[93] Ibid., pp. 68–69; Fuller, "History of Financial Aid to Students," p. 21. The shift has not been linear. In 1998, for instance, Congress increased subsidies for lenders after the Consumer Bankers Association threatened its members would stop lending under the current formula. See Mettler, *Degrees of Inequality*, pp. 76–77.
[94] Board of Governors of the Federal Reserve System (US), All Sectors; Total Loans; Liability [ASTLL], retrieved from FRED, Federal Reserve Bank of St. Louis; available at https://fred.stlouisfed.org/series/ASTLL, October 14, 2016

percent of total mortgage originations.[95] Federal student loans crested above a trillion dollars. In the past eight years, overall federal credit has increased from $ 1.7 trillion to $ 3.4 trillion.

Since then, some programs have experienced a reckoning. The FHA, for instance, has had to draw funds from the Treasury to cover losses. The government continues to play a dominant role in mortgage markets. Meanwhile, borrowers have begun to struggle to with their student loans, which has prompted Congress and the Obama Administration to add to the menu of income-based repayment plans. These modifications are expected to generate significant losses in future years.

These developments fit a pattern that has played out over the past century. Credit programs serve vital roles in responding to emergencies but fail to recede after the crises pass. The temptation then arises to expand the programs to achieve new policy goals, leading to credit losses. Reconsideration and retrenchment follow.

What happens next remains to be seen. Will federal credit programs continue to expand, contract, or shift to a steady state? Already programs are instituting reforms, as described in the main report. Will these reforms gain support from Congress, the president, Treasury, and the Office of Management and Budget? An opportunity is presenting itself to write a new history of federal credit programs. Will policymakers take advantage of it?

[95] Jaffee and Quigley, "Housing Policy, Mortgage Policy," p. 106.

CREDIT PROGRAMS AND THE FEDERAL BUDGET PROCESS

Alan B. Rhinesmith

I. INTRODUCTION

A critical element in explaining the major characteristics of current federal credit programs and the course of their development in recent decades has been their treatment in the federal budget. This chapter reviews that evolution and discusses several ongoing issues in that treatment.

Credit support is only one of several tools the federal government can employ to accomplish public policy objectives. Direct government spending to provide a service or extend grants, subsidies or assistance payments is perhaps the most straightforward policy tool the government has. The government can also use its power to tax and regulate economic transactions to support particular policy objections or favor certain sectors of the economy. Credit is yet another policy instrument in the government's tool kit. Extending or guaranteeing loans is an especially enticing but complicated tool to use. In particular, it can be difficult to measure and account for the resources expended by the government in supporting credit transactions. Direct loans can be made for various terms and at a range of interest rates. Guarantees entail some possibility of loss of principal and interest but projections of the expected amounts of potential losses depend upon a number of risk factors. Such complexities make credit an inherently challenging policy instrument both to measure and control in the federal budget process.

A key consideration in the choice of policy instruments is how each approach is treated (or not) in the federal budget. The competition for government resources has only intensified in recent years as spending on entitlement programs such as Medicare and Social Security continues to increase at rates in excess of the growth of the overall economy and federal revenues.[1] In such a budget environment programs that can provide large amounts of financial assistance at seemingly low cost to the federal budget become especially attractive. Credit programs can often appear uniquely suited to fill this "niche". But this is not actually a recent development. Rather, as we will see, credit programs have been used to support government policy objectives while frequently evading budget discipline and financial controls since they first began to be used as instruments of government policy in the early Twentieth Century. Yet as the main Report suggests, failure to

[1] See Congressional Budget Office, "The 2017 Long-Term Budget Outlook," March 2017, p. iii ("In CBO's projections, deficits rise over the next three decades—from 2.9 percent of GDP in 2017 to 9.8 percent in 2047—because spending growth is projected to outpace growth in revenues. … In particular, spending as a share of GDP increases for Social Security, the major health care programs (primarily Medicare), and interest on the government's debt").

restrain the growth of federal credit may ultimately do real damage to borrowers and impose excessive costs on taxpayers in the long run -- a situation which may be arising today.

The use of credit as a tool to achieve public policy objectives is further complicated by the multiple dimensions of the federal government's relationship with the financial markets. The federal government has a very important role in regulating the banks and other financial institutions on which all economic actors – individuals, private firms and governments – must rely for credit. As demonstrated in the financial crisis of 2008-09, the federal government has periodically found it necessary to intervene in financial markets to ensure their stability and prevent collapses that would produce severe contractions in the overall economy. The federal government is also a large borrower in the financial markets, conducting regular auctions of Treasury securities to finance its own operations. At the same time, the Federal Reserve System conducts monetary policy through the purchase and sale of federal debt instruments. Given multiple reasons for federal involvement in the credit markets, there is ongoing potential for different government agencies and programs to operate at cross purposes in their interactions with the financial system. This, in turn, underscores the need for a budget process that is transparent and accountable to policymakers as they seek to use credit to support certain economic sectors while at the same time assuring the stability of the banking system and the broader economy.

All of these factors argue for some caution in the use of credit as an instrument of public policy. Nevertheless, as we have seen, the U.S. government has undertaken numerous programs that rely on government supported credit transactions to accomplish their objectives, making their budget treatment an especially important consideration.

II. HISTORY/OVERVIEW

A. INITIAL BUDGET TREATMENT OF CREDIT INITIATIVES

A formal, centralized and structured federal budget process in the Executive Branch traces its origins to the post World War I era. Prior to that time control of federal spending was mainly exercised by the Congress, which received "estimates" of Executive Branch spending needs directly from the agencies themselves.[2] The Treasury Department oversaw the process only to assure that the agencies' spending was governed by congressional appropriations, the obligations incurred by the agencies were paid and accounting records were kept. While this system worked sufficiently well throughout the Nineteenth Century, its inadequacies became apparent early in the Twentieth Century as customs revenues declined, a constitutional amendment authorizing a federal income tax was ratified and federal expenditures grew in conjunction with a rapidly growing and

[2] See Frederick C. Mosher, *A Tale of Two Agencies*, Louisiana University Press, 1984: "[T]he heads of the departments and agencies by and large were no better staffed or inclined to review and modify the estimates of their constituent bureaus than was the president. Most of the estimates in the nineteenth and early twentieth centuries were products of the bureaus, untarnished by secretarial, presidential, or Treasury review. They might as well have gone directly from the bureaus to the congressional committees; in fact, many of them did."

urbanizing America. Recommendations for a national budget for the Executive Branch were first initiated during the administration of President Taft. Although President Wilson did not share Taft's enthusiasm for budget reform, the surge in federal spending and debt during World War I made clear the need for improvements in the financial administration of the federal government.[3] Congress finally acted with passage of the Budget and Accounting Act of 1921, creating a federal executive budget process, the Bureau of the Budget in Treasury, and an independent General Accounting Office.

During the same period as the government was adopting a more systematic national budget process (that is, the early twentieth century), and as discussed in the separate chapter on the history of federal credit programs, the federal government began to use credit to assist certain borrowers and sectors of the rapidly growing U.S. economy. The budget treatment of these government credit support initiatives has also been an ongoing source of complication and even contention in the federal budget process since that time.

The War Finance Corporation (WFC) is an early example of a recurring tension in the federal government's use of credit as an instrument of public policy. In the era of the First World War and its aftermath, the federal government channeled its support for credit to particular sectors of the economy through the banking system, as well as making direct loans to America's allies. During the War, Congress established the War Finance Corporation (WFC) – initially funded with $ 500 million from the Treasury – to make loans to banks.[4] These loans were collateralized by the banks' loans to firms (utilities, mining and chemical companies, railroads) vital to the war effort. Although it preceded the adoption of a more formal budget process, this arrangement allowed Congress to provide credit to certain industries without making direct appropriations.[5] Congress also avoided putting such federal credit support efforts in direct competition with the banking sector.

Hence, the attraction of using credit to support public purposes without a full accounting in the government's financial processes got an important toehold with the precedents established by the WFC. Indeed the issue of the status of the WFC relative to the government's financial accounts arose in a Supreme Court decided in 1927 that confirmed that the WFC's transactions were not

[3] Mosher, *Tale of Two Agencies*, p. 25 ("But the war, with its tremendous expenditures and debt, magnified the enthusiasm among the public and particularly in the Congress for any measures that promised reduction of alleged governmental extravagance and taxes, and this was exactly what the supporters of a budget system offered").

[4] More technically, the WFC operated essentially as a revolving fund. See Woodbury Willoughby, *The Capital Issues Committee and the War Finance Corporation*, The Johns Hopkins Press, 193, p. 55 ("The funds with which, the corporation conducted its operations were, in the first place, derived from the subscriptions of the Treasury to the capital stock which was called in installments when and in the amounts needed up to $500,000,000. Capital obtained in this way was used as a revolving fund from which to make advances and purchase government obligations").

[5] See James L. Butkiewicz and Mihaela Solcan, "The Original Operation Twist: The War Finance Corporation's War Bond Purchases, 1918–1920," *Financial History Review*, vol. 23, no. 1, p. 23 ("In conjunction with the war financing provision, the WFC was also authorized to trade and deal in federal debt securities. The WFC was created as an off-budget agency").

included in the government's books.[6] After the war, ongoing concern about boosting exports and the depressed prices of U.S. farmland prompted the Congress to continue the operations of that organization. As the WFC was wound down beginning in 1924, Congress continued credit support for agriculture through the creation of the Farm Intermediate Credit Bank system.[7] It was not surprising that agriculture was perhaps the first instance of a federal credit program to serve a particular sector of the economy. As historian James Olsen observes, "The success of the War Finance Corporation during World War I had built the public faith in federal credit operations and during the 1920s the government had moved into the agricultural credit markets when the farm depression all but destroyed thousands of rural banks."[8]

In the 1930's, the federal government's efforts to counteract the impacts of the Great Depression led to the creation of a large array of new government credit support programs, particularly for housing and farm lending. Key to this development was the creation in 1932 of the Reconstruction Finance Corporation, an independent wholly owned government corporation modeled on the WFC and financed by its own debt issuances. During the Hoover Administration, the RFC was initially focused upon making loans to banks that the Federal Reserve had resisted making. The Roosevelt Administration greatly expanded the role of the RFC, using it to finance public works projects and to provide initial funding for a number of new federal financing agencies, including the Farm Credit Administration, the Federal Farm Mortgage Corporation, the Rural Electrification Administration, the Federal Home Loan Bank system, the Home Owners Loan Corporation and the Federal Housing Administration. In short, as financial historian James Olson explains "[t]he Reconstruction Finance Corporation was the capital bank for the New Deal."[9]

The budget treatment of the RFC was a critical reason for Roosevelt Administration's heavy reliance upon it to finance its New Deal programs. Olson quotes longtime Federal Reserve Board secretary Chester Morrill to make this point very aptly:

> [I]t became apparent almost immediately, to many Congressmen and Senators, that here was a device which would enable them to provide for activities that they favored for which government funds would be required, but without any apparent increase in appropriations, and without passing an appropriations bill of any kind to accomplish its purposes. After they had done that, there need be no more

[6] *United States ex rel. Skinner & Eddy Corporation v. McCarl, Comptroller General*, 275 U.S.1, 48 S.Ct. 12, 72 L. Ed. 131, decided Oct. 10, 1927 ("Indeed, an important, if not the chief, reason for employing these incorporated agencies was to enable them to employ commercial methods and to conduct their operations with a freedom supposed to be inconsistent with accountability to the treasury under its established procedure of audit and control over the financial transactions of the United States").

[7] Although the establishment of Federal Intermediate Credit Banks in 1923 represented a major step in the provision of operating capital loans for farmers, this was not the first congressional action to provide credit to the agricultural sector. The Federal Farm Loan Act had provided for the creation of the federally supported Land Banks in 1916. See Hoag, W. Gifford, *The Farm Credit System: A History of Financial Self-Help*, The Interstate, 1976, p. 1.

[8] Olson, James S., *Saving Capitalism* (Princeton: Princeton University Press, 1988), pg. 86.

[9] Ibid., p. 44.

> appropriations and its activities could be enlarged indefinitely, as they were almost to fantastic proportions.[10]

The transactions of the RFC in support of housing, agriculture and other credit programs were disclosed in the RFC's own separate budget schedule ("supporting statements") and not considered to be financed through congressional appropriations or funds "payable from the Treasury." In effect, this meant that the RFC's transactions were not included in the main budget presentation or counted as part of government spending totals. Once they were stood up, the major credit programs (e.g., Farm Credit, HOLC, FHA) initiated under the RFC became self-financing out of premiums and other receipts, meaning again that their credit transactions typically had no effect upon the main administrative budget for the overall federal government.

The RFC was terminated in 1957 and, as we have seen in the history of credit programs chapter, there were only a few new credit programs initiated in the decades after the New Deal era. There was, during that period, some consolidation of credit programs into the main (administrative) budget in which government total expenditures were tabulated. Yet proponents of credit programs were also able to come up with new practices to avoid adding to total federal expenditures and the federal deficit.

One particular device was to sell loans. The federal budget was at the time and remains today measured and recorded largely in terms of the cash flows of the government's component entities.[11] Hence credit transactions were factored into the budget totals only as loans were disbursed, repayments and interest was received and payments on guaranteed loans that defaulted were made. Loans were held on the government's books as assets and if they were sold, the entire amount of the proceeds of such sales were reflected on the government's books as receipts that served to offset other government outlays. Hence, loan asset sales could be used to minimize the overall impact of a credit program on total government expenditures. Because the government was typically obligated to make up any losses or defaults on such loans even after they had been sold to private parties, the practice of selling loan assets was frequently cited as an abuse of the cash flow budget as a true measure of the financial impact of credit programs upon federal taxpayers.[12]

Even more contentious was the practice of selling "participations," or shares, in pools of loans and having the receipts thus produced counted as an offset to expenditures. Here again, delinquencies or defaults on loans in the pool that backed the participation certificates did not expose the buyer

[10] Ibid., p. 43.

[11] As discussed later in this paper, with the passage of the Federal Credit Reform Act of 1990, federal credit programs were put on an accrual accounting basis and became the major exception to government's practice of budgeting on a cash basis.

[12] The 1967 Budget Concepts Commission (discussed below) noted, after discussing the growth in loan participation certifications then occurring, that "anyone looking at recent budget presentations could have been left with an erroneous impression as to the extent of increase in direct loans outstanding." See Report of the President's Commission on Budget Concepts, GPO, 1967, p. 54.

of the participation certificate to losses. Hence, critics of this practice argued strenuously that such sales were, in fact, merely an inferior form of federal borrowing (compared to Treasury debt) that should not be recorded as producing receipts to the relevant agency's credit program nor to the federal budget totals.

In the mid-1960's, the Johnson Administration compounded the loan sales problem. The Federal National Mortgage Association (FNMA) had been created in 1938 as a wholly owned government corporation by the RFC to assist the nascent FHA by buying mortgages that FHA had insured.[13] At the time, FNMA's transactions were treated in a separate trust funds accounting tabulation and not in the main budget.

Seeking to decrease the recorded deficit and reduce pressure for a tax increase to finance its Viet Nam War and Great Society ("guns and butter") efforts, the Johnson turned to FNMA to conduct an aggressive program of loan participation sales. FNMA created pools of loans not only of its own mortgages but also of loans originated by numerous other credit programs ranging from Farmers Home to Education to SBA. The 1968 Budget projected receipts of $ 4 billion and $ 5 billion in 1967 and 1968, respectively, produced from such sales. This ploy served to reduce the deficit when the administrative and trust fund budgets were combined. But the result was heightened scrutiny of the budget from members of Congress, the press and other critics of the Johnson Administration's conduct of the war in Viet Nam and its Great Society initiatives concerning whether certain practices such as loan sales were serving to disguise the real fiscal situation of the federal government

B. Credit Programs and the 1967 Budget Reforms

The 1968 Budget, released in January 1967, acknowledged ongoing confusion and controversy in the way the federal government was tabulating and presenting its budget transactions. In his budget statement President Johnson announced his intention "to seek advice on this subject from a bipartisan group of informed individuals with a background in budgetary matters" and in March he appointed a Commission on Budget Concepts. The budget treatment of housing and other loan sales transactions had effectively precipitated a larger set of questions about whether the federal budget was accurately measuring the resources being used by the government and presenting budget transactions fairly and clearly to the public.

As we have seen, in the early Twentieth Century when federal credit programs began operations they were largely kept out of the main or administrative budget. By 1967 most credit programs had been moved "on budget" and included in the $ 135 billion administrative budget, but another $ 45 billion in spending continued to be tracked in a separate trust fund budget. The latter included FNMA. When the 1967 Budget Concepts Commission issued its report in October,[14] it

[13] In 1944, Congress created a separate mortgage insurance program for Veterans in the Serviceman's Readjustment Act and FNMA's charter was expanded to include authority to purchase these mortgages as well.
[14] Budget Concepts Commission, p. 54.

recommended that that practice be terminated and the trust fund agencies be included in a single or "unified" federal budget.

The Johnson Administration accepted most of the Commission's recommendations. It agreed that loan participation sales should be treated as a means of financing, similar to Treasury borrowing, and not as an offset to spending. It also agreed to create a single or unified federal budget, effectively consolidating into one budget (and one bottom line total) many of the accounts, such as that for FNMA, that were included in the separate trust funds budget. But the Johnson Administration sought to avoid adding FNMA's $ 2.5 billion in spending to the federal budget totals.[15] While not directly opining on the treatment of FNMA at that time, the Commission did address the status of two similar federal lending organizations supported by the RFC: the federal land banks and the federal home loan banks. Because they had evolved to be 100 percent privately owned, the Commission recommended that these "government sponsored enterprises," as they were now called, be excluded from the budget. Thus, the Johnson Administration soon recommended and Congress subsequently passed legislation to transform FNMA ("Fannie Mae") into a similar privately owned stock corporation – a GSE – while retaining several key attributes of a federal agency.

The status of a credit agency as a GSE subsequently became a favored vehicle for federal policymakers to provide credit support to certain economic sectors – particularly housing, education and agriculture – while avoiding acknowledging any taxpayer exposure in the budget. Additional GSE's to support housing (FHLMC or "Freddie Mac"), education (SLMA or "Sallie Mae"), agriculture (FAMC or "Farmer Mac") and others were created in the years that followed. More recently the federal taxpayers have had to come to the rescue of these enterprises. The Farm Credit System was rescued in 1987 and the rescue of Fannie Mae and Freddie Mac in 2008 required $ 187.5 billion in Treasury outlays.

The 1967 Budget Concepts Commission paid considerable attention to the budget treatment of federal lending activities. The scope of its recommendations extended well beyond addressing the budget treatment of sales of loan participation agreements and the status of government sponsored enterprises. The Commission's recommendations were made in the context of maintaining, with a few exceptions, a unified cash expenditure budget.[16] One such exception was the proposal to transition credit programs (and others) to an accrual basis. As discussed below, that recommendation took years to implement.

[15] Removing FNMA's transactions from the federal budget also meant that its debt did not count as part of total federal debt outstanding. See Raghuram G. Rajan, *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, Princeton University Press, 2010, p. 33

[16] There was considerable confusion at the time about what particular tabulation or concept was meant by reference to "the federal budget." The Commission recommended a single unified budget concept be adopted and that the "terms *administrative budget, consolidated cash budget*, and *national income accounts budget* should all disappear" (Budget Concepts Commission, p. 14).

In the meantime, direct loan, loan guarantee and insurance programs were to remain on a cash basis. Hence, direct loans produced immediate outlays and thereby increased the federal deficit in the short run. There was no recognition of the probability of ultimate repayment and therefore future budget inflows in the years after the direct loan was disbursed (except, of course, to the extent of actual loan repayments occurring immediately in the budget year). Rather, the budget reflected such offsetting or "negative" cash flows only over the longer term as loans were repaid with interest. Loan guarantees had the opposite effect, with initial receipts produced by fees imposed on guarantee transactions serving to reduce spending at the time of loan origination and outlays (and deficit increases) occurring only over the longer term as claims on defaulted loans were paid. There was no requirement to set aside and include in the budget outflows any funding for a contingent reserve to cover loan guarantee claims. Thus, in terms of minimizing federal spending and deficits, budgeting on the basis of cash flows favored loan guarantee programs.

The Commission noted at the time of its report that with respect to government guaranteed and insured loans there was "an increasing trend toward providing such incentives to private credit, instead of making direct loans, to further public programs."[17] The Commission further acknowledged that "inclusion of direct loans in the budget, particularly with separate identification and emphasis, may operate toward further expansion of guaranteed and insured loans not warranted by program considerations."[18]

The Commission's concern about potential rapid growth in federal loan guarantee programs proved to be well founded. Once again the treatment of federal programs in the budget was a key factor in substantive government credit policy decisions. As guaranteed lending for housing (including FHA insurance), education, small business, rural development and other purposes continued to grow, concerns arose in the Congress and the Treasury Department about whether the federal government involvement in the credit markets was at working at cross purposes. Treasury was borrowing by conducting auctions of various debt instruments (for example, notes and bonds) while other agency borrowers were also in the same market – sometimes on the same day – selling securities that also had full or partial backing of the U.S. Government. This led to concerns that the resulting competition for funds was undermining optimal pricing of all these debt instruments.

A further problem arose from the fact that the Budget Concepts Commission had not shut the door completely to loan asset sales, allowing sales of individual loans, even with a federal guarantee, to be scored as a budget receipts. Congressional appropriations committees also eroded the rules precluding sales of loan pools, particularly for agriculture related loans.

The Treasury Department attempted to solve these problems with the creation in 1973 of the Federal Financing Bank as a separate office in the Department. This organization was authorized to buy the guaranteed debt of other federal agency programs, thereby converting guaranteed loans into direct lending. The FFB was also authorized to buy direct loans made by other agencies.

[17] Ibid., p. 21
[18] Ibid., p. 49

Proponents of the creation of the FFB believed it would be able to coordinate and consolidate federally sponsored transactions in the financial markets. But in creating the FFB Congress directed that it be treated as an "off budget" entity. This meant that its outlays to purchase direct and guaranteed loans were not included in the budget totals. Consequently, what some observers had viewed as an attempt to mitigate the adverse impacts of the growth in federal loan guarantees became a large federal direct loan program outside the federal budget. Once again the tension between controlling and expanding federal credit had played out in favor of supporting significant credit program growth outside the discipline of the federal budget process.

The Budget Concepts Commission had recommended that federal direct lending be broken out separately and clearly identified within the unified federal budget. In the 1980's the Office of Management and Budget took further steps to measure and control the continuing growth of federal credit by creating a separate "credit budget." The President's budgets began to propose, and the congressional authorizing committee enacted, statutory language within appropriations bills setting annual limits or ceilings on the totals amount of direct loans and guarantees any specific programs could undertake. Such limitations continue to be enacted annually for most discretionary direct loan and loan guarantee programs. Significantly, entitlement programs such as education loans were not made subject to such limitations. Moreover, the limitations were routinely set at levels that did not bind the agencies and they have had virtually no effect on federal outlays or the deficit.

C. THE FCRA ERA

As noted above, the 1967 Budget Concepts Commission called for federal direct loans to be included in the unified budget totals. It also called for the federal government to take an additional very significant step: it recommended that the (main) expenditure budget include only the "subsidy value" of the loan transactions "since such subsidies are much more like grants than loans" and that a tabulation totaling all direct lending on an unsubsidized basis be separately published. Furthermore, the Commission recommended that the subsidy values be calculated on a capitalized basis.[19] The Commission recognized that this would be a complicated undertaking but suggested that it might be possible to present the budget with separate capitalized (accrual) subsidy amounts for direct loan in the 1970 Budget.

In fact, federal budget officials and staffs struggled with this recommendation for 23 years, working on many of the technical details as to how this step might actually be implemented. Finally, in the budget summit agreement between Congress and the George H.W. Bush

[19] Ibid., p. 47. A positive subsidy in a loan transaction can be conveyed in numerous ways, such as reducing the loan principal amount that must be repaid, charging the borrower a lower interest rate than the lender's cost of financing, or forgiving some portion of the principal and/or interest due over some period of time. "Capitalization" is the process of calculating a single lump sum value for such subsidies and involves taking the discounted present value of all these subsidy provisions. Discounted present values reflect the time value of money, i.e., a dollar today is worth more than a dollar received at some point in the future; the higher the discount (interest) rate used in this process, the lower will be the present value amount that results.

Administration in the fall of 1990 a budget "credit reform" proposal was adopted and legislation coming out of that agreement included the "Federal Credit Reform Act of 1990" (FCRA). Credit programs were first presented in the budget on a credit reform basis in the 1992 Budget transmitted to Congress in January 1991.

Putting programs on a capitalized or accrual basis for budgeting purposes was a major departure from the cash flow measures used for most of the federal budget. It required that the full amount of the subsidy involved in any direct or guaranteed loan be calculated and accrued upfront and then carefully tracked in the financial accounting systems of the agency beginning at the time the credit transaction is undertaken. Projections of annual cash flows over the life of the relevant loan must be discounted by an appropriate interest rate. Such projections were especially sensitive to the choice of interest rate used in the calculation. The process therefore caused considerable controversy with the stakeholders involved in each federal credit program. It was also complicated by the need to reconcile the subsidy measurement calculation to be used in the official budget with the actual cash flows as they occur with respect to any given federally supported credit transaction.

The move to require that federal agencies develop and execute the budgets for virtually all federal direct loan and loan guarantee programs on a credit reform basis has had a profound impact.[20] One important result of the adoption of credit reform has been the way that it has enabled the Congress and the cognizant agencies to minimize the budget impact of many of these credit programs by encouraging actions to reduce defaults and raise fees, thereby lowering their credit subsidy calculation. Indeed, for the two largest programs, FHA and student loans, the subsidy calculations have been negative for a number of years, meaning that they are currently scored in the budget as net money makers for the government. This has made these programs attractive offsets for other federal spending. FHA has routinely been used to reduce the federal deficit impact of HUD spending. And when the federal student loan program was revised from a guaranteed lending to a direct loan program, the projected present value of the savings produced served as a $ 19 billion offset to the initial costs of implementing the Affordable Care Act when it passed Congress in 2010.[21]

III. ISSUES

The 1990 credit reform legislation introduced major improvements in the way in which federal credit programs are measured and recorded in the federal budget. It represents a significant milestone in the history of the federal government's use of credit as a tool for program delivery. It continues to be refined by the Office of Management and Budget, the Treasury Department and the credit program agencies in terms of the sophistication of the methodologies employed to develop subsidy estimates. In many cases it has caused agencies to significantly improve their

[20] As noted later in this chapter, at the time of passage of the FCRA the Congress considered but ultimately declined in include federal insurance programs under the requirements of that Act.

[21] See letter from CBO Director Douglas Elmendorf to House Speaker Nancy Pelosi, March 20, 2010, available at https://www.cbo.gov/sites/default/files/111th-congress-2009-2010/costestimate/amendreconprop.pdf.

accounting systems and program performance data collection and analysis. But credit reform did not eliminate certain underlying problems in the accounting and budget treatment of credit programs and it did, at the same time, introduce several new and ongoing controversies.

A. Accuracy of Estimates

Credit subsidy estimates rely upon projections of the cash flow inflows and outflows of each year's cohort of direct loans or loan guarantees.[22] This in turn requires accurate data and accounting records in order to track the performance of the individual loans and aggregate such data in a consistent and readily accessible manner. Cash flow projections must reflect not only contractual loan disbursements and collections but also incorporate such factors as prepayments, delinquencies and defaults. To make such projections agencies can choose several methodologies.

Simpler projections involve estimating loan performance based upon recent experience. More sophisticated projections involve adjusting past experience for changes in the conditions of the overall economy, the path of economic growth and employment and changes in interest rates. Loan recipients may be categorized in segments with similar performance characteristics. Still more complex projections can be made using econometric models that incorporate additional variables such as fluctuations in the collateral backing housing or business loans or the prospects for employment of student loan recipients or homeowners. Cash flow projections also need to incorporate any loan sales the agency anticipates undertaking as well as collections from disposition of collateral acquired on defaulted loans.

The cash flow projection process is also affected by the size and composition of a programs' loan portfolio. Programs with many loans, such a mortgages or student loans, produce a rich trove of data on which to model cash flows. Other programs that provide credit using only a few very large heterogeneous loans made only periodically, such as Maritime Guaranteed Loan (Title XI) ship construction loans or the Department of Energy's Title XVII Innovative Technology Loan Guarantee Program for renewable, nuclear and other large-scale energy projects, face difficult and perhaps greater challenges in developing a basis for estimating expected cash flows.

Initial subsidy estimates recorded in the budget must be reevaluated each year through a comprehensive re-estimation process for each outstanding cohort of loans. Re-estimates are separately computed for the impacts of interest rate changes and technical factors such as default rates actually experienced relative to those initially projected. Downward re-estimates – meaning that the subsidy for a particular cohort was overestimated -- do not present a problem in terms of necessitating new appropriations or financing resources. For the opposite situation, Congress recognized the need for some resource to finance instances in which the initial estimates are too low and additional appropriations or "obligational authority" is needed to keep any one year's cohort of loans fully paid for in the budget over the lifecycle of the loan. The solution was to

[22] "***Cohort*** refers to the fiscal year of obligation for direct loan obligations, or loan guarantee commitments of a program" (Office of Management and Budget, Circular A-11, 2016, Section 185 – Federal Credit, p. 6).

provide the agencies with permanent indefinite appropriations, in effect a financing resource that is automatically available to cover such situations without further action by the Congress.

The continuing use of permanent indefinite authority to cover underestimates of the lifetime subsidy requirements of individual loan cohorts raises the potential for a systematic bias in the initial credit subsidy calculation. That is, agencies may have an incentive to "low ball" their initial program cost subsidy estimate knowing that additional subsidy authority beyond what Congress appropriated for that year is available without cost in the course of the re-estimating process.

In practice both OMB and the Government Accountability Office (GAO) have found that, on average, there has not been such a bias in subsidy estimates, at least not so far. OMB reported in the FY 2015 Budget, released in March 2014, that for the 21 years that credit reform has been in place, net lifetime subsidy re-estimates for direct loans and guarantees have totaled $ 17 billion upwards, meaning credit subsidies had been underestimated by that amount.[23] This represented less than one percent of the combined total (face value) of the loans and guarantees made over that period.[24]

More recently, the GAO undertook an analysis of credit subsidy re-estimates for loan cohorts originated in fiscal years 2001 through 2014.[25] Their overall finding was that for this 14 year period total direct loan and guaranteed loan subsidies had been underestimated by $ 3.1 billion and $ 39 billion, respectively. These underestimates likewise represent less than one percent of the total amounts of loans disbursed or guaranteed over the period.[26] GAO's analysis provides some interesting patterns among individual programs, however.

For direct loan re-estimates, the Department of Education's Direct Student Loan Program was the source of $ 15.4 billion in upward subsidy re-estimates during the 2001-2014 period; the education related loan category (including education loans made by the Department of Veterans Affairs) also experienced the widest fluctuations in re-estimates during that period. These underestimates were largely the result of changes in interest rates between the time of initial loan obligation and subsequent actual disbursements and repayments. Direct student loan subsidy estimates were also underestimated because of the impact of greater borrower use of income driven repayment plans, public service loan forgiveness initiatives and rising borrower defaults.

Offsetting the impact of the underestimates for direct student loan subsidies was an extraordinary initiative of the Treasury Department to purchase $ 226 billion in mortgage-backed securities (MBS) as part of the federal government's efforts to counteract the adverse impact of the 2008-09

[23] *Budget of the US Government, FY 2015, Analytical Perspectives*, p. 338
[24] Ibid.
[25] Government Accountability Office, *Credit Reform: Current Method to Estimate Credit Subsidy Costs Is More Appropriate for Budget Estimates Than a Fair Value Approach*, GAO-16-41, January 2016.
[26] Ibid.

financial crisis.[27] Treasury's MBS direct loan program ran from September 2008 through December 2009 but, because of its scale, interest rate changes occurring over the period it operated served to produce $ 12 billion in "profits" for the federal budget.[28] This major subsidy downward re-estimate was really an anomaly, however, as highlighted by the fact that the Federal Reserve System also conducted a program of mortgage-backed securities purchases during roughly the same time. However, the Federal Reserve is administratively excluded from the federal budget and, consequently, the impact of a similar favorable interest rate adjustment upon its $ 1.25 trillion MBS purchase program is not reflected in credit subsidy estimates or re-estimates in the federal budget.[29] Had the one-time impact of Treasury's MBS purchase program been excluded from the budget totals – as the Federal Reserve's program was excluded – the overall perspective on the accuracy of federal direct loan program credit subsidy estimates during the 2001-2014 period would have changed. In particular, the over $ 15 billion underestimate of the Direct Student Loan Program credit subsidies during the period stands out as perhaps a more serious concern when its budget impact is not offset by the one-time Treasury financial recovery program.

As for loan guaranteed re-estimates, the Department of Housing and Urban Development's FHA Mutual Mortgage Insurance Fund was the largest source of underestimates during the period analyzed by the GAO. The MMI loan guarantee program incurred a string of losses for the period 2008-2012 as FHA's mortgage loan guarantee program was hit by impact of the collapse in housing prices and the resulting spike in mortgage defaults during the financial crisis. Credit subsidies for the full period studied (2001-2014) were underestimated by $ 75.3 billion. A large swing in the other direction for the Department of Education's Federal Family Education Loan (FFEL) program served to offset this figure and helped reduce total upward re-estimates for the federal government as a whole to the $ 39 billion amount mentioned above. Disaggregation of the GAO's findings suggests that the main housing and education loan programs of the federal government need to be monitored carefully in terms of the accuracy of their credit subsidy estimates.

The FFEL program was terminated as of July 1, 2010, although there are still over $ 250 billion in FFEL loans being serviced. Further, a more recent GAO report on the income-driven repayment segment of the direct student loan program found that subsidy estimates for loans originated in 2009 through 2016 had more than doubled. Hence, given the recent experience with credit subsidy re-estimates of the Department of Education's loan programs and the fact that rapid program growth is occurring in those programs with a recent track record of underestimating program costs, there may be reason to be concerned about whether the budget is accurately reflecting their cost to taxpayers.

In terms of overall government-wide totals, credit program subsidy estimates made by Executive Branch agencies appear to have been fairly accurate in aggregate terms. There is no evidence to

[27] *Budget of the US Government, FY 2013, Appendix*, p. 1080.
[28] Department of the Treasury, "The Financial Crisis Five Years Later," September 2013, p. 22.
[29] *Budget of the US Government, FY 2014, Analytical Perspectives*, p. 28.

support assertions that agencies may be able to "game the system" because underestimates do not come at a meaningful cost to program beneficiaries and agency budgets. Nevertheless, it may still be worth considering revisions to the process that would limit access to such financing. As noted above, the re-estimate process already distinguishes between interest rate changes and other, technical sources of re-estimates. To give agencies further incentive to improve the accuracy of their estimates policymakers could consider requiring that some share of the cost of technical re-estimates be paid out of new program origination appropriations. But while such a practice could encourage many credit agencies to continue to sharpen the estimating skills of discretionary program agencies, it would not be effective in the case of entitlement programs such as student loans.

B. Administrative Expenses

With the enactment of FCRA, Congress and the George H.W. Bush Administration put into effect the 1967 Budget Concepts Commission recommendation to treat credit programs in the budget on an accrual basis. In specifying what costs were to be included in the subsidy calculation, however, FCRA, excluded the cost of administering credit programs. Instead, Congress retained authority over the administrative costs of credit programs by requiring that such agency expenses continue to be separately appropriated. This separate treatment and close oversight of administrative expenses has allowed Congress to retain control over all agency spending required to operate and manage federal credit programs. Such budgetary controls apply even in the case where the credit program being administered is an entitlement, such as student loans, that does not receive annual appropriations to cover its (separate) credit subsidy spending.

Separate treatment for administrative expenses means that credit program budgets are not calculated on a consistent basis with respect to direct versus guaranteed loans. Agencies operating direct loan programs do not include any of their operating costs in the subsidy rate and do not attempt to recoup such costs in their fees imposed upon borrowers. Loan guarantee programs, on the other hand, involve transactions initiated and managed by the private sector and therefore almost certainly incorporate their private sector operating costs in the fees and interest earnings retained by the lender. Of course other administrative costs of loan guarantee programs, including lender oversight, claims processing and the disposition of acquired collateral, continue to be paid out of agency budgets. The failure to include some or all of the expenses of administering federal credit programs distorts the federal budget process by understating credit subsidy costs.[30]

In this respect, credit reform was incomplete and it may be desirable to consider alternative methods of financing and overseeing administrative expenses. For example, rather than being

[30] More precisely, what is missing in the credit subsidy calculation is the incremental cost to the government of originating a loan or loan guarantee. See Deborah Lucas and Marvin Phaup, "Reforming Credit Reform," *Public Budgeting & Finance*, vol. 28, no. 4, 2008, p. 100 ("[T]he subsidy cost of a loan or guarantee implicitly assumes some level of servicing and collection effort that is obligated when the government extends credit").

separately appropriated, administrative costs could be collected in fees or implicitly in the interest rates paid by the borrower.[31]

Regardless of how the total program costs (FCRA subsidy amounts plus administrative expenses) are funded, whether through appropriations, use of receipt sources, or some combination of the two, policymakers should consider giving credit program agencies increased discretion in how they administer credit programs. As discussed in the main Report, in an era of growing budgetary pressure, the ability of program managers to make optimal trade-offs between spending to execute or guarantee loan transactions and investments to make improvements in administrative practices will be increasingly important.

C. The Discount Rate and the Risk Premium ("Fair Value") Debate

One critical issue in the implementation of credit reform about which debate continues is the proper discount rate to use in calculating the subsidy costs under the FCRA procedures. The FCRA calls for the use of Treasury cost of borrowing in calculating subsidy rates and amounts and this approach continues to be supported by GAO, the Obama Administration and others. An alternative approach, known as "fair value," would add a market risk premium to the Treasury rate and use the resulting higher interest rate as the discount rate to calculate credit subsidies. This measure would raise the cost of most federal credit programs. It is supported by CBO and has been the focus of numerous CBO reports since 2004.[32] Its usage was mandated for the first time in the legislation creating the Troubled Asset Relief Program (TARP) in 2008.[33] It has recently received further support in Congress in the budget process reform proposals under consideration by the House Budget Committee.[34]

This discussion will not presume to resolve this debate. Nevertheless, it is an important issue to consider because of the significant impact on the budget process, and the "scoring" in the budget of all federal credit programs, that the choice of the FCRA interest rate can have.

From a practical standpoint, much of the debate about the proper interest rate revolves around the purpose and use of the federal budget. Defenders of the current practice argue that the federal budget is primarily a compilation of the costs of federal programs that measures, in the aggregate, the fiscal position of the United States and the macroeconomic impact of its spending. Proponents of the fair value methodology argue that the budget process is also about making resource

[31] Congress could continue to exercise close oversight by imposing, through appropriations language, obligation limitations upon the program agency's authority to use program funds to cover administrative expenses. But that would likely continue to undercut agency incentives to make optimal resource tradeoffs, for example, in cases where increased administrative spending on IT and other investments, for example, in the short run would produce long term efficiencies.

[32] See in particular Congressional Budget Office, "Estimating the Value of Subsidies for Federal Loans and Loan Guarantees," August 2004.

[33] Emergency Economic Stabilization Act of 2008, P.L. 110-343, § 123 (Credit Reform).

[34] See House of Representatives, Committee on the Budget, "Proposed Rewrite of the Congressional Budget Process – Summary of Selected Provisions," November 30, 2016, p. 5.

allocation decisions and therefore the price of a program is critical to determining how much support it should receive relative to other competing claims on those resources.

Interestingly, the 1967 Budget Concepts Commission took the position that the federal budget is intended *both* as a measure of the government's fiscal position and as a critical tool in making resource allocation decisions. Thus, the Commission's report states that "the budget must serve simultaneously as an aid in decisions about both the efficient allocations of resources among competing claims and economic stabilization and growth." [35] The Commission's acknowledgement of the dual purposes of the budget underscores the dilemma confronting the executive and legislative branch overseers of the ongoing impact of credit reform: the choice of one interest rate methodology is implicitly a choice to favor one budget objective over the other. It is therefore worth considering both positions – that in favor of the status quo Treasury interest rate approach and that in favor of a change to using Treasury rates adjusted for market risk -- in greater detail.

Proponents of the current practice of using Treasury interest rates to discount cash flows and calculate credit subsidy values argue that the budget should be calculated using actual costs to the federal government and should not include costs that are not actually paid by the government in the course of its transactions with the American public and the (private sector) economy. They contend that the single overriding purpose of the budget is "to gauge the federal government's fiscal position."[36] For policymakers to measure the government's aggregate fiscal impact relative to its budget constraint, that is, its revenue sources over the long term, the constituent parts of the budget must be "measured in a way that reflects their effect on the federal fiscal position."[37]

Further, adherents of the current Treasury interest rate methodology argue that incorporation of a risk premium in the interest rate used to discount credit program cash flows would weaken the usefulness of the budget by injecting "social cost" considerations in a process that is not intended to and cannot well serve such deliberations. Analysis of the broader social cost of a program should at the same time consider its benefits, they argue. Cost-benefit analysis is important, they acknowledge, but it is not the primary objective of the budget process. To add a risk premium to the discount rate in an attempt to make the budget useful in such cost-benefit analysis would be to conflate two separate objectives: 1) promoting a clear understanding of the government's fiscal position and assuring its fiscal accountability; and 2) measuring performance in producing social benefits relative to the costs of government programs.

Supporters of the Treasury interest-rate approach also argue that adjusting the Treasury rate to include a market risk premium as well is simply not feasible and would greatly complicate budget calculations and accounting. As we have seen, the current methodology already entails a laborious

[35] Budget Concepts Commission, p. 12.
[36] David Kamin, "Risky Returns: Accounting for Risk in the Federal Budget," *Indiana Law Journal*, vol. 88, no. 2, p. 739.
[37] Ibid., p. 747

and protracted re-estimation process that ultimately allows budget estimates based upon an accrual accounting approach to be reconciled with the actual cash flows generated over the life of a loan. The financing of loans to private sector borrowers and their repayments as well as other cash flow transactions that occur during the life of a particular loan or loan guarantee reflect the actual cost to the government of Treasury cash borrowings used to finance those transactions. To incorporate an additional risk premium into the critical interest rates used in making budget estimates and reconciling them to actual results realized injects unnecessary further complexity into the process. The added sums included in a credit subsidy estimate of a loan transaction must be subsequently backed out of the cash flows, making for a very complicated re-estimation process. Moreover, the Treasury adjusted interest rate used in the process cannot be tied to any actual market transactions like the cost of Treasury borrowing and there is therefore no "true" market adjusted interest available to be used in correcting the initial estimates for the actual budget execution interest rate in the re-estimation process.[38]

It is interesting to note that the Budget Concepts Commission recommended that "the full amount of the interest subsidy on loans compared to Treasury borrowing costs be recorded and specifically disclosed in the expenditure account of the budget." But the Commission went on to say that there is a "further subsidy involved in the fact that federal loans have larger element of risk than Treasury borrowing." The Commission recommended that the budget include an allowance for losses for each loan to allow for an accounting for such additional risk.[39] Presumably such allowances or reserve accounts for federal credit programs could be used only in the event of macroeconomic or economy-wide events; amounts outlaid to such accounts would nevertheless be included in the budget totals every year and would correspond to (some fraction of) the annual volume of new lending the agency undertook.[40]

A more sophisticated solution to the problem of how to adjust credit subsidy amounts for this additional or larger element of risk identified by the Budget Concepts Commission is the fair value approach. The fair value interest rate approach involves adjusting the appropriate Treasury interest rate to include an added risk premium and then using that risk-adjusted rate in making credit subsidy calculations.

Policy analysts and academics who favor the fair value methodology argue that budgets are also about resource allocation decisions. One of the explicitly stated purposes of the Federal Credit Reform Act is to "improve the allocation of resources among credit programs and between credit and other spending programs." Public policymakers must make difficult choices both about the relative amounts of government spending versus private sector investment and consumption, and

[38] For a fuller discussion of the Obama Administration's critique of the fair value position, see *Budget of the US Government, FY 2013, Analytical Perspectives*, pp. 393-399, and *Analytical Perspectives, FY 2015*, pp. 337-340.
[39] Budget Concepts Commission p. 52.
[40] This arrangement is similar to proposals to budget for natural and other disasters on an *ex ante* basis by requiring annual outlays to reserve accounts for expected or average amounts of disaster spending. See Marvin Phaup and Charlotte Kirschner, "Budgeting for Disasters: Focusing on the Good Times," *OECD Journal of Budgeting*, vol. 2010, no. 1, 2010, pp. 8-9.

about the preferred methods of accomplishing government objectives using grants, loans, tax expenditures and other tools. Furthermore, in making credit and capital investment decisions, the private sector uses market comparable interest rates that include risks over and above the (risk-free) Treasury rate for the time period involved. In the course of making its budget decisions among competing priorities, the government uses market prices to determine how much to spend on a wide array of public purposes, such national defense, housing subsidies and grants to state and local governments for particular purposes. Consistency would argue that in employing credit to accomplish public purposes the government should be using market comparable prices, that is, market interest rates, as well.

Using full market comparable interest rates could also have the advantage of largely eliminating any need to budget for administrative expenses separately from the credit subsidy amount. Direct loan interest rates would be higher and the ensuring repayments would include an implicit amount required for the private sector to undertake the loan transaction. Similarly, loan guarantees would be more costly and such higher costs could either be charged to the beneficiary or appropriated to the guarantee program, but a separate appropriation for administrative costs would be redundant. Congress could still exercise control over the cognizant agency's spending on program operations through a statutory obligation limitation.

Fair value proponents recognize, however, that the correct interest rate to use in implementing their approach would not necessarily be based upon full comparability with the interest rate charged by the private sector for loans of comparable terms and duration. Rather, they argue the proper approach to derive the interest rate to be used for federal credit reform budgeting purposes is to adjust comparable Treasury rates only for risks that cannot be diversified, i.e., what might be called catastrophic risks.

The point here is that the size of the adjustment to Treasury rates advocated by fair value proponents should not be overstated. Risks that *can* be diversified should be insurable in private markets. The fact that market interest rates in most cases do actually reflect a premium for diversifiable risks is a result of market imperfections or "market incompleteness." In undertaking credit transactions the government can spread risk such diversifiable risks broadly – in effect performing an insurance like function – and this means that they should not be a factor in government resource allocation decisions.

Theoretically, the proper interest rate to be used in fair value adjustments to the Treasury rates currently used under FCRA could be derived by carefully disaggregating actual market interest rates observed in the credit markets. This adjustment process would identify the extraordinary risk element embedded in market interest rates that reflects risk that even the government cannot eliminate. Such risk arises from macroeconomic fluctuations or "exogenous shocks" like financial crises that affect all participants in the marketplace and that cannot be offset by engaging in insurance contracts with unaffected parties. Therefore, argue fair value advocates, to be

conceptually accurate, Treasury interest rates should be adjusted for such non diversifiable risks to produce "market rates" for credit subsidy estimating purposes.[41]

In the view of the fair value school, to leave out such a risk premium charge understates the full economic cost of the government's use of credit in the competition for budget resources, particularly when other government programs must use market prices. This effectively biases resource allocations decisions in favor of government credit programs and may be contributing to their overuse.

While it is true that the use of such market-risk adjusted interest rates further complicates the budget calculations for federal credit programs, implementation of credit reform successfully overcame many such issues and this should be viewed only as yet one more technical challenge. Credit reform was already a significant departure from the cash flow budget treatment of credit programs that prevailed up until FCRA was enacted and the adoption of fair value methodology is only one more feature among the differences between a cash flow and an accrual budget. Hence, advocates of the fair value approach to credit reform are do not find the technical implementation issues raised by GAO and OMB sufficiently persuasive to warrant not adopting what they view as the proper discount rate procedure.[42]

D. Cross Subsidization

As currently treated in the federal budget using Treasury discount rates, the major federal housing and education credit programs are producing budget savings and serving to reduce the recorded federal deficit. And as noted in the main Report, under credit reform federal credit program managers have had a strong incentive to keep subsidy costs low to serve as many individuals or businesses as possible. This means they must raise interest rates and/or impose fees. If such interest rates and fees are imposed on a uniform basis, then the question arises whether some portion of loan beneficiaries is being "overcharged" in order to permit the government to serve riskier borrowers, a practice known as cross subsidization.

A system of risk-based pricing, by comparison, would adjust the fees and interest rates borrowers pay to more closely reflect the risk they pose to the federal credit program. While such a policy would arguably improve program targeting, it could also lead to riskier or "needier" borrowers leaving the program, defeating the public policy purpose of providing credit to such borrowers. Alternatively, if the program were more effectively targeted to the intended, or "needier," beneficiaries and less risky borrowers were excluded, the program might not generate sufficient income or have lower overall losses to allow it to operate at a low or zero total subsidy. In either case, in the absence of cross subsidization, Congress might decide that credit is not the preferred

[41] For further discussion see CBO, "Estimating the Value," p. 5 ("[M]arket risk cannot be eliminated by diversification because it results from an aggregate change in asset values").

[42] Yet another option for recording federal loans and loan guarantees transactions in the budget has recently been presented by economist and former CBO Deputy Director Donald Marron. See Donald B. Marron, "The $300 Billion Question – How Should We Budget for Federal Lending Programs?" Urban Institute, September 2014.

mechanism for achieving the desired public policy outcome. Indeed, policymakers might then decide that the intended beneficiaries could be better served by a direct spending grant or refundable tax credit program.

E. Should Insurance Programs Be Included Under Credit Reform?

One final issue concerning budgeting for credit programs concerns whether federal insurance programs, such as those for bank deposits, pension benefits and floods, should also be budgeted on an accrual basis and their subsidy cost or income be included in the budget on a credit reform basis. The current financial situation of the Pension Benefit Guarantee Corporation highlights the issue. The Obama Administration's 2017 Budget reported that the liabilities of the PBGC exceed its assets by $ 76 billion. As with Fannie Mae and Freddie Mac in 2008, U.S. taxpayers could well be liable for much or all of this cost yet this significant financial exposure goes unacknowledged in the federal budget. Budgeting for the PBGC on an accrual basis as is done under FCRA would cause some annual amount of annual spending on PBGC's pension guarantees to be recorded in the budget totals and add to the federal deficit.

Including federal insurance programs under credit reform was considered at the time of passage of the Federal Credit Reform Act in 1990 but Congress ultimately declined to so and a subsequent proposal by the George H.W. Bush Administration to expand the scope of credit reform for this purpose was rejected. The House Budget Committee has recently recommended such an expansion of accrual budgeting for insurance and retirement programs (except Social Security).[43] We note here only that the complexity of taking this step, given the need to make actuarial projections of the expected claims for insurance over long periods of time, and then to measure and record them in the budget on an accrual basis, could prove very challenging to the agencies operating these programs.

[43] House Budget Committee, "Proposed Rewrite of the Congressional Budget Process," p. 5.

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