

Testimony of Diane Katz
Senior Research Fellow in Regulatory Policy
The Heritage Foundation
Before the
Subcommittee on Energy
Subcommittee on Oversight
Committee on Science, Space, and Technology
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The government is not a canny lender.
—Henry Hazlitt

Subcommittee Chairman Weber, Subcommittee Chairman LaHood, and Members of the Subcommittees, thank you for the opportunity to address you today. My name is Diane Katz, and I am a Senior Research Fellow in Regulatory Policy at The Heritage Foundation. The views I express in this testimony are my own, and do not represent any official position of The Heritage Foundation.

Few Americans are aware that, collectively, we shoulder more than \$18 trillion in debt exposure¹ from loans, loan guarantees, and subsidized insurance provided by some 150 federal programs. Among these are 35 programs administered by the Department of Energy (DOE) and nine other agencies that provide loans and loan guarantees for “clean energy” projects.²

This redistribution of credit risk and taxpayer dollars erodes the nation’s entrepreneurial spirit, undermines innovation, and fosters cronyism and corruption.

The government credit portfolio consists of direct loans and loan guarantees for housing, agriculture, energy, education, transportation, infrastructure, exporting, and small business, among other enterprises. Federal insurance programs cover bank and credit union deposits, pensions, flood damage, declines in crop prices, and acts of terrorism. Capital for mortgage lending by banks is provided by government-sponsored enterprises (GSEs), such as Fannie Mae and Freddie Mac.

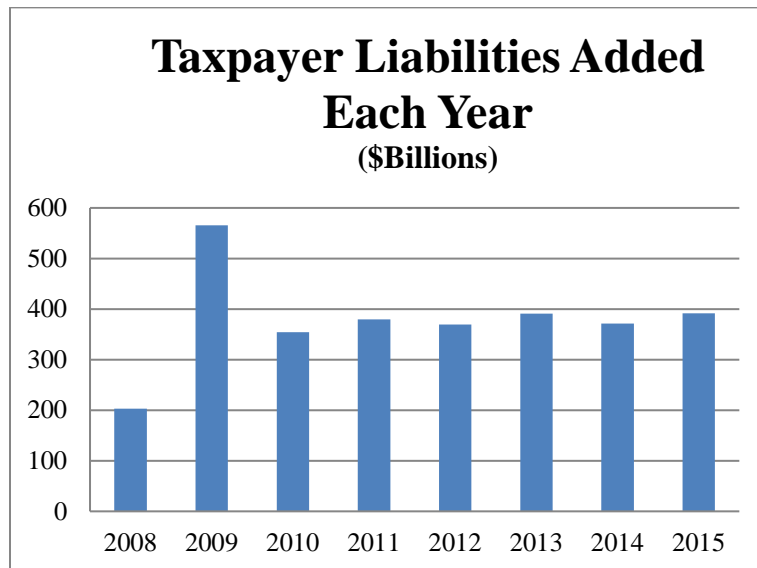
Total outstanding loans and loan guarantees backed by taxpayers exceeded \$3.4 trillion at the end of fiscal year (FY) 2015,³ including \$16 billion in direct loans from the DOE and \$3 billion in DOE loan guarantees. Add in the exposure of Fannie Mae, Freddie Mac, the Federal Home Loan Banks (FHLBs), the Federal Deposit Insurance Corporation (FDIC), and the Pension

¹“Exposure” in this context refers to the amount of potential loss from outstanding federal loans, loan guarantees, and subsidized insurance programs.

²Department of Energy, Federal Financing Programs for Clean Energy, 2016, <https://energy.gov/downloads/federal-financing-programs-clean-energy>

³The total includes \$1.1 trillion in outstanding direct loans and \$2.3 trillion in outstanding loan guarantees. Office of Management and Budget, “Analytical Perspectives: Credit and Insurance,” https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/ap_20_credit.pdf (accessed December 7, 2016).

Benefit Guarantee Corporation (PBGC), and the total exposure swells to an estimated \$18 trillion.⁴



Source: <https://fiscal.treasury.gov/fsservices/gov/debtColl/pdf/reports/debt14.pdf>

Researchers with the Federal Reserve Bank of Richmond, in their “Bailout Barometer,” estimate that 61 percent of *all* liabilities throughout the U.S. financial system are explicitly or implicitly backed by government (that is, taxpayers).⁵ But the actual liability is greater because federal accounting methods understate the costs. Nor do government balance sheets capture the economic distortions induced by credit subsidies.

Federal credit ballooned amid the 2008 financial crisis. Between November 2008 and March 2012, the government “invested” \$187.5 billion in Fannie Mae and Freddie Mac.⁶ Similarly, under the Troubled Asset Relief Program, the government⁷ purchased \$540 billion in stock from Ally Financial, Chrysler, General Motors, AIG, and dozens of banks to shift corporate financial risks to taxpayers.⁸ Despite the recession ending in June 2009, higher levels of subsidies have persisted.

⁴Deborah Lucas, “Evaluating the Government as a Source of Systemic Risk,” *The Journal of Financial Perspectives*, Vol. 2, No. 3 (November 2014), pp. 45–57,

[http://www.ey.com/Publication/vwLUAssets/Journal_of_financial_perspectives_20143/\\$FILE/EY-Journal%20of%20Financial%20Perspectives-vol%202%20Issue%203.pdf](http://www.ey.com/Publication/vwLUAssets/Journal_of_financial_perspectives_20143/$FILE/EY-Journal%20of%20Financial%20Perspectives-vol%202%20Issue%203.pdf) (accessed December 7, 2016).

⁵Liz Marshall, Sabrina Pellerin, and John Walter, “Bailout Barometer How Large Is the Financial Safety Net?” Federal Reserve Bank of Richmond, February 3, 2016, <https://www.richmondfed.org/safetynet/> (accessed December 7, 2016).

⁶The two GSEs were placed under federal conservatorship by the Federal Housing Finance Agency on September 6, 2008, making taxpayers liable for the \$5 trillion in mortgages currently owned or guaranteed by Fannie Mae and Freddie Mac. See Lucas, “Evaluating the Government as a Source of Systemic Risk.”

⁷Matthew Ericson, Elaine He, and Amy Schoenfeld, “Tracking the \$700 Billion Bailout,” *The New York Times*, 2009, http://www.nytimes.com/packages/html/national/200904_CREDITCRISIS/recipients.html (accessed December 7, 2016).

⁸Lucas, “Evaluating the Government as a Source of Systemic Risk.”

Americans across the political spectrum were (and are) rightfully indignant to see their taxes used to protect the profits of banks and multinational corporations. In a great many instances, the DOE is continuing that practice by financing projects that benefit wealthy investors and titans of industry.

With a market cap exceeding \$573 billion, Google does not need government loan guarantees from the Department of Energy. Ford Motor Company, with a market cap of \$50 billion, does not need government loans from the Department of Energy. Neither does British Petroleum, Chevron or Morgan Stanley.

Appropriations for Department of Energy Loans and Loan Guarantees		
Year	Loan Authority ⁹	Program
2007	\$4 billion	Title XVII Loan Guarantees
2009	\$47 billion	Title XVII Loan Guarantees
2009	\$2.5 billion	Title XVII Credit Subsidy Support
2009	\$25 billion	Advanced Technology Vehicle Manufacturing Loans
2009	\$7.5 billion	Advanced Technology Vehicle Manufacturing Subsidy Support
2011	(\$17 billion)	Title XVII Loan Guarantees
2011	\$170 million	Title XVII Credit Subsidy Support
2015	\$1 billion	Title XVII Loan Guarantees
2017	\$4 billion*	Title XVII Loan Guarantees

*Requested

With some government loans extending 40 years, the ever-growing burden of federal credit will encumber generations to come—without their consent. Advocates insist that the subsidies are necessary to equalize opportunity, create jobs and fill gaps in private financing. Upon examination, however, the actual lending patterns and outcomes do not fulfill the programs’ purported goals.¹⁰

Distortions

Proponents say that government lending is necessary to spur economic growth, or to mitigate “market imperfections,”¹¹ such as gaps in available financing or lack of competition (leading to unduly high credit costs). But government credit is a poor substitute for private financing. The purposes of the two are entirely different, as are the repercussions.

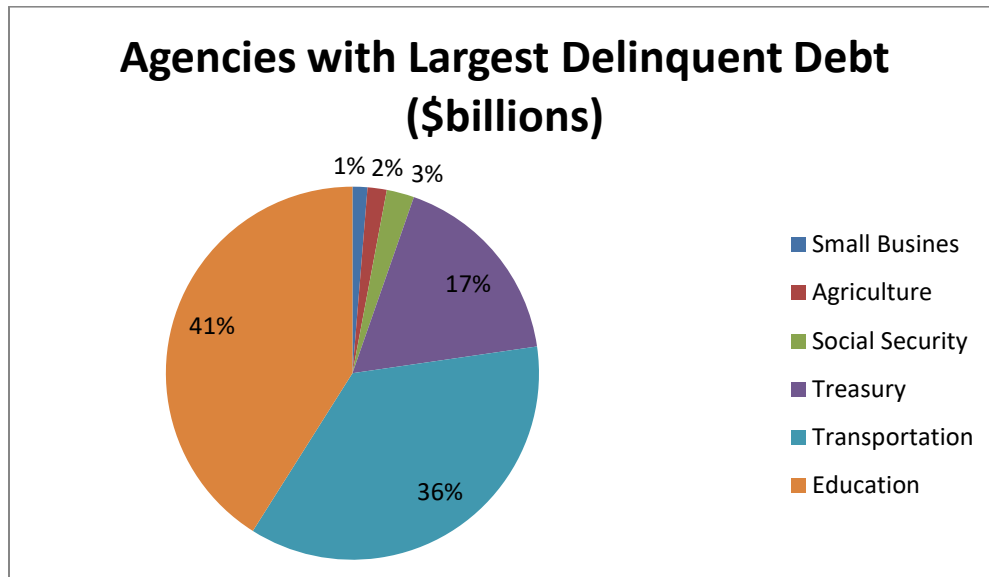
Private lenders offer credit to generate profit. The challenge they face is to minimize risk and maximize return—within ever-changing market conditions. Under threat of loss (and independent of government meddling), great care is taken in lending decisions.

⁹Budget of the U.S. Government, Fiscal Year 2017, Analytical Perspectives, <https://www.gpo.gov/fdsys/pkg/BUDGET-2017-PER/content-detail.html>

¹⁰Veronique de Rugy, Assessing the Department of Energy Loan Guarantee Program, Mercatus Center, George Mason University, June 9, 2012, <https://www.mercatus.org/publication/assessing-department-energy-loan-guarantee-program>

¹¹Office of Management and Budget, “Analytical Perspectives: Credit and Insurance.”

In contrast, government financing is entirely detached from the profit motive (and its inherent discipline) because taxes provide an endless source of revenue, and bureaucrats are largely shielded from accountability. Losses are dispersed among millions of taxpayers, and are often justified as the cost of reducing inequities in access to capital. Consequently, double-digit default rates are common among federal credit programs.¹²



Source: <https://www.fiscal.treasury.gov/fsservices/gov/debtColl/pdf/reports/debt15.pdf>

Government credit redistributes risk and access to capital. In many instances, policymakers devise this redistribution to soften costly regulatory demands. And oftentimes, the biggest beneficiaries are those with the most political influence, not those with the greatest need.¹³

The DOE, for example, guaranteed \$1.6 billion in loans for the Ivanpah project, a solar thermal power¹⁴ facility in southern California. The facility entered into long-term contracts with Pacific Gas & Electric and Southern California Edison for the purchase of the power generated there, and the utilities will apply these overpriced power purchases toward meeting California’s onerous renewable energy quotas.

The long-term contracts with Ivanpah also mean ratepayers will pay two to three times as much per megawatt-hour as other solar power producers, and four to five times per megawatt-hour as natural gas-powered plants.¹⁵

¹²Office of Management and Budget, *Federal Credit Supplement: Budget of the United States Government, Fiscal Year 2017*, “Supplemental Materials, Direct Loans Assumptions Underlying the 2016 Subsidy Estimates,” https://www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/cr_supp.pdf (accessed December 7, 2016).

¹³See, for example, Diane Katz, “The Export–Import Bank Corporate Welfare on the Backs of Taxpayers,” Heritage Foundation *Issue Brief* No. 4198, April 11, 2014, http://thf_media.s3.amazonaws.com/2014/pdf/IB4198.pdf.

¹⁴Mirrors reflect sunlight to boilers that create steam to drive conventional turbines that produce electricity.

¹⁵David Kreutzer, Taxpayers Are Footing Bill for Solar Project That Doesn’t Work, CNSnews.com, March 30, 2016, <http://www.cnsnews.com/commentary/david-kreutzer/taxpayers-are-footing-bill-solar-project-doesnt-work>

Ivanpah is owned by NRG Energy Inc. (market cap \$5.1 billion), Google (market cap \$573.8 billion), and BrightSource Energy Inc., a privately held company that reportedly counts Google, BP, Chevron and Morgan Stanley among its investors.

Other beneficiaries of DOE largesse include Banco Santander, a Spanish banking consortium with a market cap of \$76 billion, which ranked it as 37th in the Forbes Global 2000 list of the World's biggest public companies; ACS Cobra, a world leader in industrial infrastructure (market cap \$9 billion); and Ford Motor Co. (market cap \$49.7 billion).

These companies hardly lack access to private capital. This project is no anomaly among DOE's finance programs.

Well-intended or otherwise, there is abundant evidence that government financing produces more harm than benefit for the nation as a whole. For one thing, government credit represents a subsidy (either explicitly or implicitly). Because there is virtually no chance that the government will not cover a loss, federal credit is provided on more favorable terms than financing from a private lender, including:¹⁶

- Interest rates below commercial levels,
- Longer maturities than private loans,
- Deferral of interest,
- Allowance of grace periods,
- Waiver or reduction of loan fees,
- Higher loan amount relative to the enterprise value, and
- Availability of funds for purposes for which the private sector would not lend.

Whether government credit is provided as a loan or loan guarantee, it constitutes a risk borne by taxpayers for the benefit of a private party. That risk—multiplied by tens of thousands of transactions—carries direct and indirect consequences for the nation.

Indeed, when the government shifts credit risk to taxpayers, borrowers are largely relieved of the consequences of failure, and act accordingly. As noted by economist Henry Hazlitt,¹⁷

Responsibility follows risk. When an owner's risk in an enterprise has been minimized or eliminated because the government has supplied the funds which he otherwise would have to supply, then, speaking comparatively, the owner tends to feel no great pain from the failure of the enterprise. He would stand to gain by its success, of course, and so he

¹⁶This list appears in James M. Bickley, "Budgetary Treatment of Federal Credit (Direct Loans and Loan Guarantees): Concepts, History, and Issues for the 112th Congress," Congressional Research Service, July 27, 2012, <https://www.fas.org/sgp/crs/misc/R42632.pdf> (accessed December 7, 2016), and was paraphrased from U.S. Executive Office of the President, Office of Management and Budget, *Special Analysis F, Federal Credit Programs, Budget of the United States, Government, Fiscal Year 1988*.

¹⁷Henry Hazlitt, "Government Lending," *Newsweek*, July 1, 1956, <https://fee.org/articles/government-lending/> (accessed December 7, 2016).

would tend to work for its success; but his position is an unbalanced one because he will not try desperately to prevent its failure.

When borrowers need not compete for private loans based on merit, productivity improvements and innovation become less important than political capital. Moreover, credit-worthiness also becomes less relevant to banks and mortgage lenders that act as pass-through agents for government financing.

The result is a larger proportion of economic assets (in the form of both property and enterprise) that are inherently weaker than they otherwise would be if financed by private lenders instead of government (taxpayers).

Fisker Automotive is a case in point.¹⁸ The DOE awarded the electric car company a \$529 million loan in April 2010 to develop and produce two lines of hybrid plug-in vehicles at a plant in Delaware. Fisker's inability to meet performance targets forced the DOE to cap the loan at \$192 million. Fisker filed for bankruptcy in November 2013, and taxpayers lost \$139 million.

Government financing also distorts the allocation of private lending. As noted by economist Jeffrey Lacker, president of the Federal Reserve Bank of Richmond, "These government lending programs, by targeting particular market sectors, alter the allocation of credit across markets. Consequently, while some market segments benefit from reduced funding costs, others may actually see their costs rise as credit is diverted to those markets that have been targeted for support."¹⁹

We will never know what innovations have gone undiscovered because of Washington's financial and regulatory preoccupation with electric vehicles, solar panels and other pet technologies. Evidently, the government financing isn't too effective since it never ends. The DOE, for example, has been financing development of electric and hybrid vehicles for more than 40 years. But sales remain a fraction of the auto fleet. Washington evidently bet on the wrong horse (so to speak).

There is also a pernicious regulatory chain reaction when policymakers engage in lending. As Hazlitt noted, "[When] the government provides the financing, the private property becomes public property instead and the government has the right to decide how, where, when, and by whom the property shall be used."²⁰

All of which increases the costs to consumers, who take a double-hit: not only are they forced to subsidize energy producers, but they pay more for products and services that are heavily regulated.

¹⁸Nick Loris, Examining the Department of Energy's Loan Portfolio, March 3, 2016, file:///C:/Users/Diane%20Katz/Downloads/Loris_Testimony_160303.pdf

¹⁹Jeffrey M. Lacker, "Government Lending and Monetary Policy," Federal Reserve Bank of Richmond, remarks at the Washington Economic Policy Conference of the National Association for Business Economics, March 2, 2009, https://www.richmondfed.org/press_room/speeches/president_jeff_lacker/2009/lacker_speech_20090302 (accessed December 7, 2016).

²⁰Hazlitt, "Government Lending."

Purported Benefits

Proponents of government credit contend that the social goals for which the subsidies are employed justify—or at least offset—the market distortions, regulatory onslaught, and taxpayer risk they produce.

Whether subsidized financing achieves the goals set by policymakers is dubious; there is very little measurement of program results, and abundant evidence of negative consequences. Under the Government Performance and Results Act of 1993, for example, Congress directed federal agencies to set goals and report on their progress. But the metrics largely measure only inputs (such as the number of loans awarded), not outcomes.

In testimony to this committee last year, my colleague Nick Loris²¹ reviewed each of the projects in the DOE’s loan portfolio. He found repeated incidences of the following:

- Failed companies that could not survive even with the federal government’s help.
- Projects labeled as success stories but are still in the infancy of their operation and it is too early to tell if they will succeed in the long run.
- Projects that have the backing of companies with large market capitalizations and substantial private investors. These companies should have no trouble financing a project without government-backed loans if they believe it is worth the investment.
- Private investors hedging their bets and congregating toward public money. These projects on their surface appear to be financial losers but the government involvement entices companies to take a chance.
- Companies and projects that benefit from a plethora of federal, state, and local policies that push renewable energy.
- Government incompetence in administering and overseeing the loans.

At the very least, any benefit derived from government credit is offset by handicapping enterprises that operate without subsidies.

Tracking Costs

The Federal Credit Reform Act (FCRA) of 1990 requires agencies to estimate the long-term costs (including subsidy costs) of loans and loan guarantees, and to “true up” those figures annually (after the end of the fiscal year) to reflect actual loan performance and to incorporate any changes in projections of future loan performance.

However, the methods required by law to do so produce imprecise results, and, consequently, faulty projections of budgetary gains and losses. There are also inconsistencies among agencies in scoring, and scarce oversight by Congress of payment errors and default rates.²²

Under the FCRA, the subsidy cost of federal credit is calculated by first converting all future loan costs and revenue into a “net present value.”²³ Because \$100 to be received a year from now

²¹Nick Loris, Examining the Department of Energy’s Loan Portfolio, March 3, 2016, file:///C:/Users/Diane%20Katz/Downloads/Loris_Testimony_160303.pdf

²²Government Accountability Office, “Credit Programs: Key Agencies Should Better Document Procedures for Estimating Subsidy Costs,” GAO-16-269, July 2016, <http://www.gao.gov/assets/680/678373.pdf> (accessed December 7, 2016).

is not worth as much as \$100 today (which could be invested now and grow larger over the next year), a discount rate is applied to future revenues when calculating the net present value. Under the FCRA, that discount rate is tied to the interest rate on U.S. Treasury securities.²⁴

If the present value of estimated cash outflows exceeds cash inflows, there is a subsidy cost. If the present value of estimated cash inflows exceeds cash outflows, there is a negative subsidy cost, referred to as “subsidy income.”

However, as currently calculated, subsidy estimates consistently understate costs because of the nature of the discount rate applied when calculating net present value. Treasury yields are lower than private securities because there is virtually no risk that the government will default. This low rate does not account for the actual risks that government loans represent. Therefore, the government’s accounting method produces artificially high estimates of future revenue. (In other words, the lower the discount rate, the higher the present value of future income.) The use of these artificially low discount rates makes government loans appear to generate income for the Treasury.

Inaccurate budget estimates feed the propensity of government to minimize costs, and induce policymakers to expand federal credit rather than adopt other policy tools. All of which increases the risk to taxpayers.

Most agencies have been granted “permanent indefinite authority” to obtain additional funds from the Treasury to cover higher subsidy costs that result from annual re-estimates. That means the actual costs are largely hidden.

How should agencies calculate subsidy costs? The Financial Economists Roundtable recommends that subsidy costs be calculated using the same discount rates as private lenders. Those rates would be higher than Treasury rates, thereby reducing the present value of future income—and thereby providing a more accurate estimate of the costs to taxpayers.

According to Lucas, “Private-sector financial institutions are responsible for reporting fair values [of loans and guarantees], so there is an entire infrastructure for providing these values.”²⁵

Conclusion

Reform of government financing has not been a congressional priority. Few taxpayers are aware of the extent of the burden, and the subsidies have given rise to powerful constituencies of beneficiaries. And unconstrained spending, unfettered losses, and rampant cronyism are only part of the cost of the government’s vast credit racket. Trillions of dollars of credit subsidies represent the commandeering of financial services by government and its escalating power over private enterprise.

²³The net present value represents the loan disbursements and claim payments to lenders minus estimated cash flows to the government from loan repayments, interest payments, fees, and default recoveries on defaulted loans over the life of the loan, excluding administrative costs.

²⁴More precisely, “the average interest rate on marketable Treasury securities of similar maturity.” Section 502(5E).

²⁵Financial Economists Roundtable, “Accounting for the Cost of Government Credit Assistance,” October 2012, <http://www.chandan.com/content/knowledgewharton/real-cost-government-loans-and-credit-guarantees> (accessed December 7, 2016).

**Appendix:
Federal Credit Programs by Agency**

Loans

Agriculture

- Agriculture Credit Insurance Fund
- Farm Storage Facility Loans
- Apple Loans
- Boll Weevil Eradication Loan Program
- Distance Learning, Telemedicine, and Broadband Loans
- Rural Electrification and Telecommunications Loans
- Rural Telephone Bank
- Rural Housing Insurance Fund
- Rural Economic Development Loans
- Rural Development Loan Program
- Rural Community Facilities Program
- Rural Business and Industry Program
- Rural Water and Waste Disposal Program
- Rural Community Advancement Program
- Public Law 480
- Title I Food for Progress Credits
- Multifamily Housing Revitalization Program
- Rural Microenterprise Investment Program

Commerce

- Fisheries Finance

Defense–Military Programs

- Military Housing Improvement Fund

Education

- Federal Direct Student Loan Program
- Temporary Student Loan Purchase Authority
- College Housing and Academic Facilities Loans
- Historically Black Colleges and Universities
- TEACH Grants

Energy

- Advanced Technology Vehicle Manufacturing Fund
- Title 17 Innovative Technology Fund

Health and Human Services

- Consumer Operated and Oriented Plan
- Consumer Operated and Oriented Plan Program Contingency Fund

Homeland Security

Disaster Assistance

Housing and Urban Development

Green Retrofit Program for Multifamily Housing

Interior

Bureau of Reclamation Loans

Bureau of Indian Affairs Direct Loans

Assistance to American Samoa

State

Repatriation Loans

Transportation

Alameda Corridor Loan

Transportation Infrastructure Finance and Innovation

Railroad Rehabilitation and Improvement Program

Highway Infrastructure Investment, Recovery Act

Treasury

GSE Mortgage-Backed Securities Purchase Program

Community Development Financial Institutions Fund

Troubled Asset Relief Program Direct Loan

Troubled Asset Relief Program Equity

Small Business Lending Fund

Veterans Affairs

Veterans Housing Benefit Program Fund

Native American Veteran Housing

Vocational Rehabilitation Loans

Environmental Protection Agency

Abatement, Control, and Compliance

International Assistance Programs

Foreign Military Financing

U.S. Agency for International Development, Micro and Small Enterprise Development

Overseas Private Investment Corporation, OPIC Direct Loans

IMF Quota 4

Loans to the IMF Direct Loan Program

Debt Reduction

Small Business Administration

Business Loans

Disaster Loans

Other Independent Agencies

Export–Import Bank Direct Loans
Federal Communications Commission

Loan Guarantees

Agriculture

Agriculture Credit Insurance Fund
Agriculture Resource Conservation Demonstration
Biorefinery Assistance
Commodity Credit Corporation Export Guarantees
Rural Electrification and Telecommunications Loans
Rural Housing Insurance Fund
Rural Business and Industry Program
Rural Community Facilities Program
Rural Water and Waste Disposal Program
Rural Community Advancement Program
Rural Energy for America
Rural Business Investment Program

Commerce

Fisheries Finance
Emergency Steel Guaranteed Loans
Emergency Oil and Gas Guaranteed Loans

Defense–Military Programs

Military Housing Improvement Fund
Defense Export Loan Guarantee
Arms Initiative Guaranteed Loan Program

Education

Federal Family Education Loan Program

Energy

Title 17 Innovative Technology Fund

Health and Human Services

Health Center Loan Guarantees
Health Education Assistance Loans

Housing and Urban Development

- Indian Housing Loan Guarantee
- Title VI Indian Guarantees
- Native Hawaiian Housing
- Community Development Loan Guarantees
- FHA-Mutual Mortgage Insurance
- FHA-General and Special Risk
- Guarantees of Mortgage-Backed Securities

Interior

- Bureau of Indian Affairs Guaranteed Loans
- Bureau of Indian Affairs Insured Loans

Transportation

- Maritime Guaranteed Loans (Title XI)
- Minority Business Resource Center

Treasury

- Air Transportation Stabilization Program
- Troubled Asset Relief Program
- Troubled Asset Relief Program, Housing Programs

Veterans Affairs

- Veterans Housing Benefit Fund Program

International Assistance Programs

- U.S. Agency for International Development
 - Development Credit Authority
 - Micro and Small Enterprise Development
 - Urban and Environmental Credit
 - Assistance to the New Independent States of the Former Soviet Union
 - Loan Guarantees to Israel
 - Loan Guarantees to Egypt
 - Loan Guarantees to Middle East and North Africa
- Overseas Private Investment Corporation, OPIC Guaranteed Loans

Small Business Administration

- Business Loans

Other Independent Agencies

- Export-Import Bank Guarantees



Diane Katz is a Senior research fellow in regulatory policy at The Heritage Foundation.

A policy analyst from Detroit, Katz joined Heritage's Thomas A. Roe Institute for Economic Policy Studies in August 2010.

She previously was director of risk, environment and energy policy for three years at the Fraser Institute, an independent policy research and educational organization in Canada.

From 2002 to 2008, she was director of science, environment and technology for the Mackinac Center for Public Policy, a free market think tank in Midland, Mich.

As a member of the editorial board of the Detroit News for nine years, Katz specialized in writing about science and the environment, telecommunications and technology, and the auto industry.

She also covered national issues as a reporter in the newspaper's Washington bureau. Her work won top honors from the Michigan Press Association in 1994, 1996, 1997 and 1998.

Katz's analyses and commentary have been published by The Wall Street Journal, The Washington Times, National Review, The Weekly Standard and Reason Magazine in addition to dozens of regional and local newspapers.

She has testified before Congress and several state legislatures.

Katz was awarded fellowships by the Jack R. Howard Science Institute for Journalists at the California Institute of Technology, the Paul Miller Washington Reporting Fellowship of the National Press Foundation and programs at the Kinship Conservation Institute and the Political Economy Research Center.

She holds a bachelor's degree in philosophy from Thomas Jefferson College and a master's degree in journalism from the University of Michigan.