18. CREDIT AND INSURANCE

The Federal Government offers direct loans and loan guarantees to support a wide range of activities including home ownership, student loans, small business, farming, energy, infrastructure investment, and exports. In addition, Government-sponsored enterprises (GSEs) operate under Federal charters for the purpose of enhancing credit availability for targeted sectors. Through its insurance programs, the Federal Government insures deposits at depository institutions, guarantees private-sector defined-benefit pensions, and insures against some other risks such as flood and terrorism.

This chapter discusses the roles of these diverse programs. The first section discusses individual credit programs and GSEs. The second section reviews Federal deposit insurance, pension guarantees, disaster insurance, and insurance against terrorism and other security-related risks. This year's chapter includes a brief analysis of the Troubled Asset Relief Program (TARP), which was previously contained in a separate chapter. The last section discusses "fair value" cost estimates for Federal credit programs.

I. CREDIT IN VARIOUS SECTORS

Housing Credit Programs

Through housing credit programs, the Federal Government promotes homeownership among various target groups, including low- and moderate-income people, veterans, and rural residents. In times of economic crisis, the Federal Government's role and target market can expand dramatically.

Federal Housing Administration

The Federal Housing Administration (FHA) guarantees mortgage loans to provide access to homeownership for people who may have difficulty obtaining a conventional mortgage. FHA has been a primary facilitator of mortgage credit for first-time and minority homebuyers, a pioneer of products such as the 30-year self-amortizing mortgage, and a vehicle to enhance credit for many low- to moderate-income households. One of the major benefits of an FHA-insured mortgage is that it provides a homeownership option for borrowers who can make only a modest down-payment, but show that they are creditworthy and have sufficient income to afford the house they want to buy. In 2019, 83 percent of FHA purchase mortgages were obtained by first-time homebuyers. Of all FHA loans (purchase and refinance), 33 percent served minority borrowers and 58 percent served low- to moderate-income borrowers.

In addition to traditional single-family "forward" mortgages, FHA insures "reverse" mortgages for seniors and loans for the construction, rehabilitation, and refinancing of multifamily housing, hospitals and other healthcare facilities.

FHA and the Single-Family Mortgage Market

FHA's share of the mortgage market tends to fluctuate with economic conditions and other factors. In the early 2000s, FHA's market presence diminished greatly as low interest rates increased the affordability of mortgage financing and more borrowers used emerging non-prime mortgage products, including subprime and Alt-A mortgages. Many of these products had risky and hard-to-understand features such as low "teaser rates" offered for periods as short as the first two years of the mortgage, high loan-to-value ratios (with some mortgages exceeding the value of the house), and interest-only loans with balloon payments that require full payoff at a set future date. The Alt-A mortgage made credit easily available by waiving documentation of income or assets. This competition eroded the market share by dollar volume of FHA's single-family purchase and refinance loans, reducing it from 9 percent in 2000 to less than 2 percent in 2005. [1]

During the financial crisis, starting at the end of 2007, the availability of credit guarantees from the FHA and Government National Mortgage Association (which supports the secondary market for federally-insured housing loans by guaranteeing securities backed by mortgages guaranteed by FHA, VA, and USDA) was an important factor countering the tightening of private-sector credit. FHA's share of the mortgage market increased to a peak of 18 percent in 2009. Since then, FHA market share has declined (12 percent in 2018) but remains higher than it was in the early 2000s.

FHA Home Equity Conversion Mortgages

Home Equity Conversion Mortgages (HECMs) are designed to support aging in place by enabling elderly homeowners to borrow against the equity in their homes without having to make repayments during their lifetime (unless they move, refinance or fail to meet certain requirements). A HECM is also known as a "reverse" mortgage because the change in home equity over time is generally the opposite of a forward mortgage. While a traditional forward mortgage starts with a small amount of equity and builds equity with amortization of the loan,

[1] FHA market share is reported by calendar year throughout this section.

a HECM starts with a large equity cushion that declines over time as the loan accrues interest and premiums. The risk of HECMs is therefore weighted toward the end of the mortgage, while forward mortgage risk is concentrated in the first 10 years.

FHA Mutual Mortgage Insurance (MMI) Fund

FHA guarantees for forward and reverse mortgages are administered under the Mutual Mortgage Insurance (MMI) Fund. At the end of 2019, the MMI Fund had $1,288 billion in total mortgages outstanding and a capital ratio of 4.84 percent, remaining above the 2 percent statutory minimum for the fifth straight year and increasing from the 2018 level of 2.76 percent. Although its financial condition has improved, the HECM portfolio continues to have a negative impact on the MMI Fund, offsetting the positive capital position of the forward mortgage portfolio. While the 2019 capital ratio for forward mortgages was 5.44 percent, the HECM portfolio had a capital ratio of –9.22 percent. For more information on the financial status of the MMI Fund, please see the Annual Report to Congress Regarding the Financial Status of the FHA Mutual Mortgage Insurance Fund, Fiscal Year 2019.[2]

Since 2018, FHA has implemented several policies to reduce risk to the MMI Fund and protect taxpayers, including lowering the maximum loan-to-value (LTV) ratio for cash-out refinances, increasing the share of higher-risk loans referred to manual underwriting, lowering the share of home equity a homeowner can borrow against in the HECM program and requiring a second appraisal for certain HECM transactions.

FHA's new origination volume in 2019 was $215 billion for forward mortgages and $11 billion for HECMs, and the Budget projects $200 billion and $11 billion, respectively, for 2021.

FHA Multifamily and Healthcare Guarantees

In addition to the single-family mortgage insurance provided through the MMI Fund, FHA's General Insurance and Special Risk Insurance (GISRI) loan programs continue to facilitate the construction, rehabilitation, and refinancing of multifamily housing, hospitals and other healthcare facilities. The credit enhancement provided by FHA enables borrowers to obtain long-term, fixed-rate financing, which mitigates interest rate risk and facilitates lower monthly mortgage payments. This can improve the financial sustainability of multifamily housing and healthcare facilities and may also translate into more affordable rents/lower healthcare costs for consumers.

GISRI's new origination loan volume for all programs in 2019 was $18 billion and the Budget projects $20 billion for 2021. The total amount of guarantees outstanding on mortgages in the FHA GISRI Fund were $162 billion at the end of 2019.

VA Housing Loan Program

The Department of Veterans Affairs (VA) assists veterans, members of the Selected Reserve, and active duty personnel in purchasing homes in recognition of their service to the Nation. The VA housing loan program effectively substitutes the Federal guarantee for the borrower's down payment, making the lending terms more favorable than loans without a VA loan guarantee. VA does not guarantee the entire mortgage loan to veterans but provides a 100 percent guarantee on the first 25 percent of losses upon default. In 2019, mortgage interest rates remained low and the strong economy provided opportunities for returning veterans to purchase homes. VA guaranteed a total of 624,546 new purchase home loans in 2019, providing approximately $43.5 billion in guarantees. Additionally, 94,861 veteran borrowers lowered interest rates on their home mortgages through refinancing. VA provided approximately $40 billion in guarantees to assist 610,513 borrowers in 2018. That followed $47 billion and 740,389 borrowers in 2017.

VA, in cooperation with VA-guaranteed loan servicers, also assists borrowers through home retention options and alternatives to foreclosure. VA intervenes when needed to help veterans and service members avoid foreclosure through loan modifications, special forbearances, repayment plans, and acquired loans, as well as assistance to complete compromised sales or deeds-in-lieu of foreclosure. These joint efforts helped resolve over 87 percent of defaulted VA-guaranteed loans and assisted over 101,000 veterans retain homeownership or avoid foreclosure in 2019. These efforts resulted in $2.63 billion in avoided guaranteed claim payments.

Rural Housing Service

The Rural Housing Service (RHS) at the U.S. Department of Agriculture (USDA) offers direct and guaranteed loans to help very-low- to moderate-income rural residents buy and maintain adequate, affordable housing. RHS housing loans and loan guarantees differ from other Federal housing loan programs in that they are means-tested, making them more accessible to low-income, rural residents. The single family housing guaranteed loan program is designed to provide home loan guarantees for moderate-income rural residents whose incomes are between 80 percent and 115 percent (maximum for the program) of area median income.

Historically, RHS has offered both direct and guaranteed homeownership loans. In recent years, the portfolio has shifted to more efficient loan guarantees, an indication the direct loan program has achieved its goal of graduating borrowers to commercial credit and lowering costs to the taxpayer. The single family housing guaranteed loan program was authorized in 1990 at $100 million and has grown into a $24 billion loan program annually. The shift to guaranteed lending is in part attributable to the mortgage banking industry offering historically low mortgage rates, resulting in instances where the average 30-year fixed commercial mortgage rate has been at or below the average borrower rate for the RHS single family direct loan. Furthermore, financial markets have become more efficient and have increased the reach of mortgage credit to lower credit qualities and incomes. The number of rural areas isolated from broad credit availability has

[2] https://www.hud.gov/sites/dfiles/Housing/documents/2019FHAAnnualReportMMIFund.pdf

shrunk as access to high speed broadband has increased and correspondent lending has grown.

Education Credit Programs

The Department of Education (ED) direct student loan program is one of the largest Federal credit programs with $1.165 trillion in Direct Loan principal outstanding at the end of 2019. The Federal student loan programs provide students and their families with the funds to help meet postsecondary education costs. Because funding for the loan programs is provided through mandatory budget authority, student loans are considered separately for budget purposes from other Federal student financial assistance programs (which are largely discretionary), but should be viewed as part of the overall Federal effort to expand access to higher education.

Loans for higher education were first authorized under the William D. Ford program—which was included in the Higher Education Act of 1965. The direct loan program was authorized by the Student Loan Reform Act of 1993 (Public Law 103–66). The enactment of the Student Aid and Fiscal Responsibility Act (SAFRA) of 2010 (Public Law 111–152) ended the guaranteed loan program (FFEL). On July 1, 2010, ED became the sole originator of Federal student loans through the Direct Loan program.

Under the current direct loan program, the Federal Government partners with over 6,000 institutions of higher education, which then disburse loan funds to students. Loans are available to students and parents of students regardless of income and only the Parent PLUS program includes a minimal credit check. There are three types of Direct Loans: Federal Direct Subsidized Stafford Loans, Federal Direct Unsubsidized Stafford Loans, and Federal Direct PLUS Loans, each with different terms. The Federal Government does not charge interest while the borrowers are in school and during certain deferment periods for Direct Subsidized Stafford loans—which are available only to undergraduate borrowers from low and moderate income families.

The Direct Loan program offers a variety of repayment options including income-driven repayment ones for all student borrowers. Depending on the plan, monthly payments are capped at no more than 10 or 15 percent of borrower discretionary income with any remaining balance after 20 or 25 years forgiven. In addition, under current law, borrowers working in public service professions while making 10 years of qualifying payments are eligible for Public Service Loan Forgiveness (PSLF).

The 2021 President's Budget includes several policy proposals for this program. For a detailed description of these proposals, please see the Federal Direct Student Loan Program Account section of the Budget *Appendix*.

Small Business and Farm Credit Programs

The Government offers direct loans and loan guarantees to small businesses and farmers, who may have difficulty obtaining credit elsewhere. It also provides guarantees of debt issued by certain investment funds that invest in small businesses. Two GSEs, the Farm Credit System and the Federal Agricultural Mortgage Corporation, increase liquidity in the agricultural lending market.

Small Business Administration

The Congress created the U.S. Small Business Administration (SBA) in 1953 as an independent agency of the Federal Government to aid, counsel, assist and protect the interests of small business concerns; preserve free competitive enterprise; and maintain and strengthen the overall economy of the Nation. The SBA began making direct business loans and guaranteeing bank loans to small business owners, and providing inexpensive and immediate disaster relief to those hard-hit by natural disasters. By 1958, The Investment Company Act had established the Small Business Investment Company (SBIC) Program, under which the SBA continues to license, regulate, and guarantee funds for privately-owned and operated venture capital investment firms. The SBA continues to complement credit markets by guaranteeing credit-worthy small business borrowers access to affordable credit provided through private lenders when they cannot obtain financing on reasonable terms or conditions elsewhere.

The SBA has grown significantly since its creation, both in terms of its total assistance provided and its array of programs offered to micro-entrepreneurs and small business owners. From its Washington, D.C. headquarters, it leverages its field personnel and diverse network of private sector and nonprofit partners across each U.S. State and territory. The SBA ensures that small businesses across America have the tools and resources needed to start and develop their operations, drive U.S. competitiveness, help grow the economy, and promote economic security.

In 2019, the SBA provided $21.5 billion in loan guarantees to assist small business owners with access to affordable capital through its largest program, the 7(a) General Business Loan Guarantee program. This program provides access to financing for general business operations, such as operating and capital expenses. Through the 504 Certified Development Company (CDC) and Refinance Programs, the SBA also supported about $5.0 billion in guaranteed loans for fixed-asset financing and the opportunity for small businesses to refinance existing 504 CDC loans. These programs enable small businesses to secure financing for assets such as machinery and equipment, construction, and commercial real estate, and to take advantage of current low interest rates and free up resources for expansion.

The SBA also creates opportunities for very small and emerging businesses to grow. Through the 7(m) Direct Microloan program, which supports non-profit intermediaries that provide loans of up to $50,000 to rising entrepreneurs, the SBA provided $42 million in direct lending to the smallest of small businesses and startups. By supporting innovative financial instruments such as the SBA's SBIC program that partners with private investors to finance small businesses through professionally managed investment funds, the SBA supported $1.6 billion in venture capital investments in small businesses in 2019.

SBA continues to be a valuable source for American communities who need access to low-interest loans to recovery quickly in the wake of disaster. In 2019, the SBA delivered $1.4 billion in disaster relief lending to businesses, homeowners, renters, and property owners.

For a detailed description of the 2021 President's Budget policy proposals for these programs, please see the SBA Business Loans Program Account and Disaster Loans Program Account sections of the Budget *Appendix*.

Community Development Financial Institutions

Since its creation in 1994, the Department of the Treasury's Community Development Financial Institutions (CDFI) Fund has—through different grant, loan, and tax credit programs—worked to expand the availability of credit, investment capital, and financial services for underserved people and communities by supporting the growth and capacity of a national network of CDFIs, investors, and financial service providers. Today, there are over 1,000 Certified CDFIs nationwide, including a variety of loan funds, community development banks, credit unions, and venture capital funds. CDFI certification also enables some non-depository financial institutions to apply for financing programs offered by certain Federal Home Loan Banks.

Unlike other CDFI Fund programs, the CDFI Bond Guarantee Program (BGP)—enacted through the Small Business Jobs Act of 2010—does not offer grants, but is instead a Federal credit program. The BGP was designed to provide CDFIs greater access to low-cost, long-term, fixed-rate capital.

Under the BGP, Treasury provides a 100-percent guarantee on long-term bonds of at least $100 million issued to qualified CDFIs, with a maximum maturity of 30 years. To date, Treasury has issued $1.6 billion in bond guarantee commitments to 25 CDFIs, $1.1 billion of which has been disbursed to help finance affordable housing, charter schools, commercial real estate, community healthcare facilities and other eligible uses in 27 States and the District of Columbia. The Budget continues to propose reforms such as eliminating the requirement for a relending account, which adds unnecessary cost and complexity to the program

Farm Service Agency

Farm operating loans were first offered in 1937 by the newly created Farm Security Administration to assist family farmers who were unable to obtain credit from a commercial source to buy equipment, livestock, or seed. Farm ownership loans were authorized in 1961 to provide family farmers with financial assistance to purchase farmland. Presently, the Farm Service Agency (FSA) assists low-income family farmers in starting and maintaining viable farming operations. Emphasis is placed on aiding beginning and socially disadvantaged farmers. Legislation mandates that a portion of appropriated funds are set-aside for exclusive use by underserved groups.

FSA offers operating loans and ownership loans, both of which may be either direct or guaranteed loans. Operating loans provide credit to farmers and ranchers for annual production expenses and purchases of livestock, machinery, and equipment, while farm ownership loans assist producers in acquiring and developing their farming or ranching operations. As a condition of eligibility for direct loans, borrowers must be unable to obtain private credit at reasonable rates and terms. As FSA is the "lender of last resort," default rates on FSA direct loans are generally higher than those on private-sector loans. FSA-guaranteed farm loans are made to more creditworthy borrowers who have access to private credit markets. Because the private loan originators must retain 10 percent of the risk, they exercise care in examining the repayment ability of borrowers. The subsidy rates for the direct programs fluctuate largely because of changes in the interest component of the subsidy rate. Since the early 1990's, the majority of FSA loan assistance has been guaranteed rather than direct lending.

In 2019, FSA provided loans and loan guarantees to more than 32,000 family farmers totaling $5.7 billion. In recent years, FSA assistance has been at record levels from a downturn in the agricultural economy. The average size of farm ownership loans remained consistent over the past few years, with new customers receiving the bulk of the direct loans. Direct and guaranteed loan programs provided assistance totaling $2.7 billion to more than 18,300 beginning farmers although the number of beginning farmer loans decreased slightly by seven percent. The majority of assistance provided in the operating loan program during 2019 was to beginning farmers. Sixty-two percent of direct operating loans were made to beginning farmers. A beginning farmer is an individual or entity who: has operated a farm for not more than 10 years; substantially participates in the operation; and for farm ownership loans, the applicant cannot own a farm greater than 30 percent of the average size farm in the county, at time of application. If the applicant is an entity, all members must be related by blood or marriage, and all entity members must be eligible beginning farmers.

Loans for socially disadvantaged farmers totaled $789 million, of which $506 million was in the farm ownership program and $283 million in the farm operating program. Lending to minority and women farmers was a significant portion of overall assistance provided, with $789 million in loans and loan guarantees provided to more than 6,550 farmers. Loan assistance provided to beginning and socially disadvantaged farmers increased in 2019 compared to 2018, fulfilling an initiative of the Department to expand lending to underserved groups as a percentage of total loans made.

The FSA Microloan program increases overall direct and guaranteed lending to small niche producers and minorities. This program dramatically simplifies application procedures for small loans and implement more flexible eligibility and experience requirements. Demand for the micro-loan program continues to grow while delinquencies and defaults remain at or below those of the regular FSA operating loan program.

Energy and Infrastructure Credit Programs

The Department of Energy (DOE) administers three credit programs: Title XVII (a loan guarantee program to support innovative energy technologies), the Advanced Technology Vehicle Manufacturing loan program (a direct loan program to support advanced automotive technologies), and the Tribal Energy Loan Guarantee Program (a loan guarantee program to support tribal energy development). Title XVII of the Energy Policy Act of 2005 (Public Law 109–58) authorizes DOE to issue loan guarantees for projects that employ innovative technologies to reduce air pollutants or man-made greenhouse gases. The Congress provided DOE $4 billion in loan volume authority in 2007, and the 2009 Consolidated Appropriations Act provided an additional $47 billion in loan volume authority, allocated as follows: $18.5 billion for nuclear power facilities, $2 billion for "front-end" nuclear enrichment activities, $8 billion for advanced fossil energy technologies, and $18.5 billion for energy efficiency, renewable energy, and transmission and distribution projects. The 2011 appropriations reduced the available loan volume authority for energy efficiency, renewable energy, and transmission and distribution projects by $17 billion and provided $170 million in credit subsidy to support renewable energy or energy efficient end-use energy technologies, $9 million of which was subsequently repurposed for the Tribal Energy Loan Guarantee Program in 2017 appropriations. From 2014 to 2015, DOE issued three loan guarantees totaling over $8 billion to support the construction of two new commercial nuclear power reactors. In 2019, DOE issued an additional $3.7 billion to support completion of the nuclear power project.

The American Reinvestment and Recovery Act of 2009 (Public Law 111–5) amended the program's authorizing statute and provided $2.5 billion in credit subsidy to support loan guarantees on a temporary basis for commercial or advanced renewable energy systems, electric power transmission systems, and leading edge biofuel projects. Authority for the temporary program to extend new loans expired September 30, 2011. Prior to expiration, DOE issued loan guarantees to 28 projects totaling over $16 billion in loan volume. Four projects withdrew prior to any disbursement of funds.

Section 136 of the Energy Independence and Security Act of 2007 (Public Law 110–140) authorizes DOE to issue loans to support the development of advanced technology vehicles and qualifying components. In 2009, the Congress appropriated $7.5 billion in credit subsidy to support a maximum of $25 billion in loans under ATVM. From 2009 to 2011, DOE issued five loans totaling over $8 billion to support the manufacturing of advanced technology vehicles. DOE has not issued any ATVM loans since 2011.

Title XXVI of the Energy Policy Act of 1992, as amended (Public Law 102-486, Public Law 109-58) authorizes DOE to guarantee up to $2 billion in loans to Indian tribes for energy development. In 2017, the Congress appropriated $8.5 million in credit subsidy to support tribal energy development. DOE issued a solicitation in 2018, but has not yet issued any loan guarantees under this authority.

Electric and Telecommunications Loans

Rural Utilities Service (RUS) programs of the USDA provide grants and loans to support the distribution of rural electrification, telecommunications, distance learning, and broadband infrastructure systems.

In 2019, RUS delivered $5.77 billion in direct electrification loans (including $4.99 billion in FFB Electric Loans, $750 million in electric underwriting, and $34.2 million rural energy savings loans), $181.5 million in direct telecommunications loans, and $47.8 million in direct broadband loans.

USDA Rural Infrastructure and Business Development Programs

USDA, through a variety of Rural Development (RD) programs, provides grants, direct loans, and loan guarantees to communities for constructing facilities such as healthcare clinics, police stations, and water systems, as well as to assist rural businesses and cooperatives in creating new community infrastructure (e.g., educational and healthcare networks) and to diversify the rural economy and employment opportunities. In 2019, RD provided $853 million in Community Facility (CF) direct loans, which are for communities of 20,000 or less. The CF programs have the flexibility to finance more than 100 separate types of essential community infrastructure that ultimately improve access to healthcare, education, public safety and other critical facilities and services. RD also provided $1.8 billion in water and wastewater (W&W) direct loans, and guaranteed $1.2 billion in rural business loans, which will help create and save jobs in rural America. The 2018 Farm Bill gave CF and W&W loan guarantees new authorization to serve communities of 50,000 or less and allowed the programs to charge a fee to offset the loan subsidy cost. RD began executing the programs with the new authorities in 2020.

Water Infrastructure

The Environmental Protection Agency's (EPA) Water Infrastructure Finance and Innovation Act (WIFIA) program accelerates investment in the Nation's water infrastructure by providing long-term, low-cost supplemental loans for projects of regional or national significance. During 2019, EPA solicited the second round of loans, selecting thirty-nine entities with projects in sixteen States to apply for up to $5 billion in WIFIA loans. Those projects will leverage more than $5 billion in private capital, in addition to other funding sources, to help finance a total of over $10 billion in water infrastructure investments. The selected projects demonstrate the broad range of project types that the WIFIA program can finance, including wastewater, drinking water, stormwater, and water recycling projects.

Transportation Infrastructure

The Department of Transportation (DOT) administers credit programs that fund critical transportation infrastructure projects, often using innovative financing methods. The two predominant programs are the Transportation Infrastructure Finance and Innovation Act (TIFIA) and the Railroad Rehabilitation and Improvement Financing (RRIF) loan programs. DOT's Build America Bureau administers these programs, as well as Private Activity Bonds (PABs) and the Nationally Significant Freight and Highway Projects (INFRA) grant program, all under one roof. The Bureau serves as the single point of contact for States, municipalities, and other project sponsors looking to utilize Federal transportation expertise, apply for Federal transportation credit and grant programs, and explore ways to access private capital in public-private partnerships. For the first time, the 2021 Budget will reflect the TIFIA and RRIF programs' accounts in the Office of the Secretary, where the Bureau is housed, rather than in the Federal Highway Administration and Federal Railroad Administration.

Established by the Transportation Equity Act of the 21st century (TEA–21) (Public Law 105–178) in 1998, the TIFIA program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital to projects of national or regional significance. Through TIFIA, DOT provides three types of Federal credit assistance to highway, transit, rail, and intermodal projects: direct loans, loan guarantees, and lines of credit.

TIFIA can help advance qualified, large-scale projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues at a relatively low budgetary cost. Each dollar of subsidy provided for TIFIA can provide approximately $14 in credit assistance, and leverage additional non-Federal transportation infrastructure investment. The Fixing America's Surface Transportation (FAST) Act of 2015 (Public Law 114–94) authorizes $300 million for TIFIA in 2020.

DOT has also provided direct loans and loan guarantees to railroads since 1976 for facilities maintenance, rehabilitation, acquisitions, and refinancing. Federal assistance was created to provide financial assistance to the financially-challenged portions of the rail industry. However, following railroad deregulation in 1980, the industry's financial condition began to improve, larger railroads were able to access private credit markets, and interest in Federal credit support began to decrease.

Also established by TEA–21 in 1998, the RRIF program provides loans or loan guarantees with an interest rate equal to the Treasury rate for similar-term securities. TEA–21 also stipulates that non-Federal sources pay the subsidy cost of the loan (a "Credit Risk Premium"), thereby allowing the program to operate without Federal subsidy appropriations. The RRIF program assists projects that improve rail safety, enhance the environment, promote economic development, or enhance the capacity of the national rail network. While refinancing existing debt is an eligible use of RRIF proceeds, capital investment projects that would not occur without a RRIF loan are prioritized. Since its inception, over $6.3 billion in direct loans have been made under the RRIF program.

The FAST Act included programmatic changes to enhance the RRIF program to mirror the qualities of TIFIA, including broader eligibility, a loan term that can be as long as 35 years from project completion, and a fully subordinated loan under certain conditions. Additionally, in 2016 the Congress appropriated $1.96 million to assist Class II and Class III Railroads in preparing and applying for direct loans and loan guarantees.

In the Consolidated Appropriations Act, 2018 (Public Law 115-141), for the first time in RRIF's history, the Congress appropriated $25 million in subsidy budget authority for direct loans and loan guarantees to the RRIF program. This appropriation allows DOT to issue RRIF loans without requiring credit risk premiums from borrowers to cover the subsidy costs of the loans.

International Credit Programs

Through 2020, seven Federal agencies—USDA, the Department of Defense, the Department of State, the Department of the Treasury, the Agency for International Development (USAID), the Export-Import Bank (ExIm), and the International Development Finance Corporation (DFC)—provide direct loans, loan guarantees, and insurance to a variety of private and sovereign borrowers. These programs are intended to level the playing field for U.S. exporters, deliver robust support for U.S. goods and services, stabilize international financial markets, enhance security, and promote sustainable development. The Better Utilization of Investments Leading to Development (BUILD) Act of 2018 (Public Law 115-254), discussed further below, made significant changes to modernize and consolidate several of these functions to promote efficiency and transparency.

Federal export credit programs counter official financing that foreign governments around the world, largely in Europe and Japan, but also increasingly in emerging markets such as China and Brazil, provide their exporters, usually through export credit agencies (ECAs). The U.S. Government has worked since the 1970's to constrain official credit support through a multilateral agreement in the Organization for Economic Cooperation and Development (OECD). This agreement has established standards for Government-backed financing of exports. In addition to ongoing work in keeping these OECD standards up-to-date, the U.S. Government established the International Working Group (IWG) on Export Credits to set up a new framework that will include China and other non-OECD countries, which until now have not been subject to export credit standards. The process of establishing these new standards, which is not yet complete, advances a congressional mandate to reduce subsidized export financing programs.

Export Support Programs

When the private sector is unable or unwilling to provide financing, the Export-Import Bank, the U.S. ECA, fills the gap for American businesses by equipping them with the financing support necessary to level the playing field against foreign competitors. ExIm support includes direct loans and loan guarantees for creditworthy foreign buyers to help secure export sales from U.S. exporters, as well as working capital guarantees and export credit insurance to help U.S. exporters secure financing for overseas sales. USDA's Export Credit Guarantee Programs (also known as GSM programs) similarly help to level the playing field. Like programs of other agricultural exporting nations, GSM programs guarantee payment from countries and entities that want to import U.S. agricultural products but cannot easily obtain credit. The GSM 102 program provides guarantees for credit extended with short-term repayment terms not to exceed 18 months.

Exchange Stabilization Fund

Consistent with U.S. obligations in the International Monetary Fund regarding global financial stability, the Exchange Stabilization Fund managed by the Department of the Treasury may provide loans or credits to a foreign entity or government of a foreign country. A loan or credit may not be made for more than six months in any 12-month period unless the President gives the Congress a written statement that unique or emergency circumstances require that the loan or credit be for more than six months.

Sovereign Lending and Guarantees

The U.S. Government can extend short-to-medium-term loan guarantees that cover potential losses that might be incurred by lenders if a country defaults on its borrowings; for example, the U.S. may guarantee another country's sovereign bond issuance. The purpose of this tool is to provide the Nation's sovereign international partners access to necessary, urgent, and relatively affordable financing during temporary periods of strain when they cannot access such financing in international financial markets, and to support critical reforms that will enhance long term fiscal sustainability, often in concert with support from international financial institutions such as the International Monetary Fund. The long term goal of sovereign loan guarantees is to help lay the economic groundwork for the Nation's international partners to graduate to an unenhanced bond issuance in the international capital markets. For example, as part of the U.S. response to fiscal crises, the U.S. Government has extended sovereign loan guarantees to Tunisia, Jordan, Ukraine, and Iraq to enhance their access to capital markets, while promoting economic policy adjustment.

Development Programs

Credit is an important tool in U.S. bilateral assistance to promote sustainable development. On January 2, 2020, the U.S. International Development Finance Corporation (DFC) launched to consolidate, modernize, and reform the U.S. Government's "development finance" capabilities. The DFC provides loans, guarantees, and other investment tools such as equity and political risk insurance to facilitate and incentivize private-sector investment in emerging markets that will have positive developmental impact, meet national security objectives, and open markets for U.S. trade. Through the DFC's equity program, the U.S. Government will partner with allies and deliver financially-sound alternatives to State-led initiatives from countries like China.

The Government-Sponsored Enterprises (GSEs)

Fannie Mae and Freddie Mac

The Federal National Mortgage Association, or Fannie Mae, created in 1938, and the Federal Home Loan Mortgage Corporation, or Freddie Mac, created in 1970, were established to support the stability and liquidity of a secondary market for residential mortgage loans. Fannie Mae's and Freddie Mac's public missions were later broadened to promote affordable housing. The Federal Home Loan Bank (FHLB) System, created in 1932, is comprised of eleven individual banks with shared liabilities. Together they lend money to financial institutions—mainly banks and thrifts—that are involved in mortgage financing to varying degrees, and they also finance some mortgages using their own funds. The mission of the FHLB System is broadly defined as promoting housing finance, and the System also has specific requirements to support affordable housing.

Together these three GSEs currently are involved, in one form or another, with approximately half of residential mortgages outstanding in the U.S. today.

History of the Conservatorship of Fannie Mae and Freddie Mac and Budgetary Effects

Growing stress and losses in the mortgage markets in 2007 and 2008 seriously eroded the capital of Fannie Mae and Freddie Mac. Legislation enacted in July 2008 strengthened regulation of the housing GSEs through the creation of the Federal Housing Finance Agency (FHFA), a new independent regulator of housing GSEs, and provided the Department of the Treasury with authorities to purchase securities from Fannie Mae and Freddie Mac.

On September 6, 2008, FHFA placed Fannie Mae and Freddie Mac under Federal conservatorship. In its Strategic Plan for the Conservatorships of Fannie Mae and Freddie Mac, updated in 2019, FHFA outlined three key objectives for conservatorship: 1) focus on the GSEs' core mission responsibilities to foster competitive, liquid, efficient, and resilient national housing finance markets that support sustainable homeownership and affordable rental housing; 2) operate in a safe and sound manner appropriate for entities in conservatorship; and 3) prepare for the GSEs' eventual exits from conservatorship.

On September 7, 2008, the U.S. Treasury launched various programs to provide temporary financial support to Fannie Mae and Freddie Mac under the temporary authority to purchase securities. Treasury entered into agreements with Fannie Mae and Freddie Mac to make investments in senior preferred stock in each GSE in order to ensure that each company maintains a positive net worth. Based on the financial results reported by each company as of December 31, 2012, the cumulative funding commitment through these Preferred Stock Purchase Agreements (PSPAs) with Fannie Mae and Freddie Mac was set at $445.5 billion. In total, as of December 31, 2019, $191.5 billion has been invested in Fannie Mae and Freddie Mac.

The PSPAs also require that Fannie Mae and Freddie Mac pay quarterly dividends to Treasury, equal to the GSE's positive net worth above a minimum capital reserve amount for each company. Through December 31, 2019, the GSEs have paid a total of $301.0 billion in dividend payments to Treasury on the senior preferred stock. The Budget estimates additional dividend receipts of $150.6 billion from January 1, 2020, through 2030.

The Temporary Payroll Tax Cut Continuation Act of 2011 (Public Law 112–78) required that Fannie Mae and Freddie Mac increase their credit guarantee fees on single-family mortgage acquisitions between 2012 and 2021 by an average of at least 0.10 percentage point. Revenues generated by this fee increase are remitted directly to the Treasury for deficit reduction and are not included in the PSPA amounts. The Budget proposes to increase this fee by 0.10 percentage point for single-family mortgage acquisitions in 2021, and then extend the 0.20 percentage point fee for acquisitions through 2025. This proposal will help to level the playing field for private lenders seeking to compete with Fannie Mae and Freddie Mac. With this proposal, combined with the existing authority under the Temporary Pay-roll Tax Cut Continuation Act, the Budget estimates resulting deficit reductions of $88.4 billion from 2012 through 2030.

In addition, in 2014 FHFA directed Fannie Mae and Freddie Mac to set aside 0.042 percentage point for each dollar of the unpaid principal balance of new business purchases (including but not limited to mortgages purchased for securitization) in each year to fund several Federal affordable housing programs created by Housing and Economic Recovery act of 2008, including the Housing Trust Fund and the Capital Magnet Fund. These set-asides were suspended by FHFA in November 2008 and reinstated effective January 1, 2015. The 2021 Budget again proposes to eliminate the 0.042 percentage point set-aside and discontinue funding for these funds, resulting in an increase to the estimated PSPA dividends.

Future of the Housing Finance System

On March 27, 2019, the President issued a Presidential Memorandum directing the Departments of the Treasury and HUD to reform the housing finance system to reduce taxpayer risks, expand the private sector's role, modernize Government housing programs, and make sustainable home ownership for American families our benchmark of success. On September 5, 2019, Treasury and HUD published plans with legislative and administrative recommendations to accomplish the goals set forth in the Presidential Memorandum. Treasury's plan made recommendations to define a limited role for the Federal Government in the housing finance system, enhance taxpayer protections against future bailouts, and promote private sector competition in the housing finance system. Additionally, Treasury made recommendations and listed preconditions for ending the GSEs' conservatorships. HUD's plan made recommendations to refocus FHA to its core mission, protect taxpayers, modernize FHA and Ginnie Mae, and provide liquidity to the housing finance system.

The Administration's preference is to work with the Congress to enact comprehensive housing finance reform legislation. Legislation could achieve lasting structural reform that tailors explicit Government support of the secondary market and eliminates the GSEs' competitive advantages over private-sector entities. At the same time, the Administration believes that reform can and should proceed, and pending legislation, it will continue to support the administrative actions described in the plans. Any reform of the housing system likely will impact 2021 Budget projections in ways that cannot be estimated at this time.

The Farm Credit System (Banks and Associations)

The Farm Credit System (FCS or System) is a Government-sponsored enterprise (GSE) composed of a nationwide network of borrower-owned cooperative lending institutions originally authorized by the Congress in 1916. The FCS's mission continues to be providing sound and dependable credit to American farmers, ranchers, producers or harvesters of aquatic products, their cooperatives, and farm-related businesses. The institutions serve rural America by providing financing for rural residential real estate, rural communication, energy and water infrastructure, and agricultural exports. In addition, maintaining special policies and programs for the extension of credit to young, beginning, and small farmers and ranchers is a legislative mandate for the System.

The financial condition of the System's banks and associations remains fundamentally sound. The ratio of capital to assets remained stable at 17.6 percent on September 30, 2019, compared with 17.4 percent on September 30, 2018. Capital consisted of $57.2 billion that is available to absorb losses. For the first nine months of calendar year 2019, net income equaled $4.1 billion compared with $4.0 billion for the same period of the previous year.

Over the 12-month period ending September 30, 2019, System assets grew 5.7 percent, primarily due to higher cash and investment balances and increased real estate mortgage loans from continued demand by new and existing customers. During the same period, nonperforming assets as a percentage of loans and other property owned was unchanged at 0.92 percent.

The number of FCS institutions continues to decrease because of consolidation. As of September 30, 2019, the System consisted of four banks and 68 associations, compared with seven banks and 104 associations in September 2002. Of the 72 FCS banks and associations rated, 65 of them had one of the top two examination ratings (1 or 2 on a 1 to 5 scale) and accounted for 97.7 percent of gross

Systems assets. Seven FCS institutions had a rating of 3 or lower.

From 2017 to 2018, dollar volume outstanding for total System loans grew by 3.2 percent. Loan dollar volume outstanding to young farmers grew by 6.2 percent, to beginning farmers by 4.5 percent, and to small farmers by 1.8 percent.

While the dollar volume of loans outstanding grew, the number of total System loans outstanding declined by 9.5 percent. The number of loans outstanding to young farmers declined by 5.3 percent, to beginning farmers by 3.8 percent, and to small farmers by 6.8 percent. The decreases in the number of loans were primarily due to the way System institutions had been tracking loan participations—which are loans that are shared by two or more institutions. Young, beginning, and small farmers are not mutually exclusive groups and, thus, cannot be added across categories.

The System's overall new loan dollar volume increased by 12.2 percent in 2018. New loan dollar volume to young farmers increased by 7.6 percent, to beginning farmers by 7.1 percent, and to small farmers by 6.8 percent.

For total System loans, the number of new loans made in 2018 declined by 21.4 percent compared with 2017. The number of loans to young farmers declined by 17.7 percent, to beginning farmers by 15.5 percent, and to small farmers by 16.1 percent.

The loans to young farmers in 2018 represented 18.1 percent of all loans the System made during the year and 11.4 percent of the dollar volume of loans made. The loans made to beginning farmers in 2018 represented 24.2 percent of all System loans made during the year and 15.6 percent of the dollar volume of loans made. The loans in 2018 to small farmers represented 44.6 percent of all loans made during the year and 14.6 percent of the dollar volume of loans made.

The System, while continuing to record strong earnings and capital growth, remains exposed to a variety of risks associated with its portfolio concentration in agriculture and rural America. In 2019, continued pressure on grain and soybean prices due to large supplies relative to demand, along with trade issues, has stressed less efficient producers and those with significant leverage are feeling financial pressure or renting a large share of their acreage. Producers most vulnerable to financial stress are farmers with crop losses (particularly corn and soybeans in parts of the Midwest in 2019) in combination with today's weaker prices. Another segment under stress is smaller or higher-cost dairy farms despite an improvement in milk prices. Amid the challenging economic environment, the combination of farm commodity programs, disaster assistance, crop insurance, and the 2018 and 2019 Market Facilitation Program payments is supporting the U.S. farm sector.

The general economy continues to expand slowly, which benefits demand for high-value agricultural products as well as the housing-related sectors such as timber and nurseries. Overall, the agricultural sector remains subject to risks such as changes in farmland values, which have declined since 2014 in the Midwest; continued volatility in commodity prices; and weather-related catastrophes.

Federal Agricultural Mortgage Corporation (Farmer Mac)

Farmer Mac was established in 1988 as a federally chartered instrumentality of the United States and an institution of the System to facilitate a secondary market for farm real estate and rural housing loans. Farmer Mac is not liable for any debt or obligation of the other System institutions, and no other System institutions are liable for any debt or obligation of Farmer Mac. The Farm Credit System Reform Act of 1996 expanded Farmer Mac's role from a guarantor of securities backed by loan pools to a direct purchaser of mortgages, enabling it to form pools to securitize. The Food, Conservation, and Energy Act of 2008 expanded Farmer Mac's program authorities by allowing it to purchase and guarantee securities backed by rural utility loans made by cooperatives.

Farmer Mac continues to meet core capital and regulatory risk-based capital requirements. As of September 30, 2019, Farmer Mac's total outstanding program volume (loans purchased and guaranteed, standby loan purchase commitments, and AgVantage bonds purchased and guaranteed) amounted to $20.9 billion, which represents an increase of 7.1 percent from the level a year ago. Of total program activity, $17.0 billion were on-balance sheet loans and guaranteed securities, and $3.9 billion were off-balance-sheet obligations. Total assets were $21.3 billion, with non-program investments (including cash and cash equivalents) accounting for $3.7 billion of those assets. Farmer Mac's net income attributable to common stockholders ("net income") for the first three quarters of calendar year 2019 was $64.6 million. Net income decreased compared to the same period in 2018 during which Farmer Mac reported net income of $75.3 million.

II. INSURANCE PROGRAMS

Deposit Insurance

Federal deposit insurance promotes stability in the U.S. financial system. Prior to the establishment of Federal deposit insurance, depository institution failures often caused depositors to lose confidence in the banking system and rush to withdraw deposits. Such sudden withdrawals caused serious disruption to the economy. In 1933, in the midst of the Great Depression, a system of Federal deposit insurance was established to protect depositors and to prevent bank failures from causing widespread disruption in financial markets.

Today, the Federal Deposit Insurance Corporation (FDIC) insures deposits in banks and savings associations (thrifts) using the resources available in its Deposit Insurance Fund (DIF). The National Credit Union

Administration (NCUA) insures deposits (shares) in most credit unions through the National Credit Union Share Insurance Fund (SIF). (Some credit unions are privately insured.) As of September 30, 2019, the FDIC insured $7.7 trillion of deposits at 5,265 commercial banks and thrifts, and the NCUA insured nearly $1.2 trillion of shares at 5,281 credit unions.

Since its creation, the Federal deposit insurance system has undergone many reforms. As a result of the 2008 financial crisis, several reforms were enacted to protect both the immediate and longer-term integrity of the Federal deposit insurance system. The Helping Families Save Their Homes Act of 2009 (P.L. 111–22) provided NCUA with tools to protect the SIF and the financial stability of the credit union system. Notably, the Act:

- Established the Temporary Corporate Credit Union Stabilization Fund (TCCUSF), allowing NCUA to segregate the losses of corporate credit unions and providing a mechanism for assessing those losses to federally insured credit unions over an extended period of time; On September 28, 2017, the NCUA Board voted unanimously to close the TCCUSF effective October 1, 2017, ahead of its sunset date of June 30, 2021, the assets and liabilities of the TCCUSF were distributed into the SIF;

- Provided flexibility to the NCUA Board by permitting use of a restoration plan to spread insurance premium assessments over a period of up to eight years, or longer in extraordinary circumstances, if the SIF equity ratio fell below 1.2 percent; and

- Permanently increased the Share Insurance Fund's borrowing authority to $6 billion.

The Dodd-Frank Wall Street Reform and Consumer Protection (Dodd-Frank) Act of 2010 (P.L. 111–203) established new DIF reserve ratio requirements. The Act requires the FDIC to achieve a minimum DIF reserve ratio (ratio of the deposit insurance fund balance to total estimated insured deposits) of 1.35 percent by 2020, up from 1.15 percent in 2016. On September 30, 2018, the DIF reserve ratio reached 1.36 percent. In addition to raising the minimum reserve ratio, the Dodd-Frank Act also:

- Eliminated the FDIC's requirement to rebate premiums when the DIF reserve ratio is between 1.35 and 1.5 percent;

- Gave the FDIC discretion to suspend or limit rebates when the DIF reserve ratio is 1.5 percent or higher, effectively removing the 1.5 percent cap on the DIF; and

- Required the FDIC to offset the effect on small insured depository institutions (defined as banks with assets less than $10 billion) when setting assessments to raise the reserve ratio from 1.15 to 1.35 percent. In implementing the Dodd-Frank Act, the FDIC issued a final rule setting a long-term (i.e., beyond 2028) reserve ratio target of 2 percent, a goal that FDIC considers necessary to maintain a positive fund balance during economic crises while permitting steady long-term assessment rates that provide transparency and predictability to the banking sector.

The Dodd-Frank Act also permanently increased the insured deposit level to $250,000 per account at banks or credit unions insured by the FDIC or NCUA.

Recent Fund Performance

As of September 30, 2019, the FDIC DIF balance stood at $108.9 billion, a one-year increase of $8.7 billion. The growth in the DIF balance is primarily a result of assessment revenue inflows. The reserve ratio on September 30, 2019, was 1.41 percent.

As of September 30, 2019, the number of insured institutions on the FDIC's "problem list" (institutions with the highest risk ratings) totaled 55, which represented a decrease of nearly 94 percent from December 2010, the peak year for bank failures during the financial crisis. Furthermore, the assets held by problem institutions were nearly 88 percent below the level in December 2009, the peak year for assets held by problem institutions.

The NCUA-administered SIF ended September 2019 with assets of $16.7 billion and an equity ratio of 1.33 percent. On September 28, 2017, NCUA raised the normal operating level of the SIF equity ratio to 1.39 percent and lowered it to 1.38 percent in December 2018. If the ratio exceeds the normal operating level, a distribution is normally paid to insured credit unions to reduce the equity ratio.

The health of the credit union industry has markedly improved since the financial crisis. As of September 30, 2019, NCUA reserved $116 million in the SIF to cover potential losses, a decrease of 26 percent from the $156 million reserved as of September 30, 2018. The ratio of insured shares in problem institutions to total insured shares decreased slightly from 0.91 percent in September 2018 to 0.84 percent in September 2019. This is a significant reduction from a high of 5.7 percent in December 2009.

Restoring the Deposit Insurance Funds

Pursuant to the Dodd-Frank Act, the restoration period for the FDIC's DIF reserve ratio to reach 1.35 percent was extended to 2020. (Prior to the Act, the DIF reserve ratio was required to reach the minimum target of 1.15 percent by the end of 2016.) On March 25, 2016, the FDIC published a final rule to implement this requirement no later than 2019. The Dodd-Frank Act placed the responsibility for the cost of increasing the reserve ratio to 1.35 percent on large banks (generally, those with $10 billion or more in assets). FDIC regulations provided that when the reserve ratio exceeds 1.35 percent, surcharges on insured depository institutions (IDIs) with total consolidated assets of $10 billion or more would cease. The last surcharge was collected in December 2018. As of June 30, 2019, the reserve ratio reached 1.38 percent for the first time, resulting in small IDIs receiving assessment credits for the portion of their assessments that contributed to the growth in the reserve ratio from 1.15 to 1.35 percent. Under a final rule adopted at the FDIC November 2019 board meeting, these credits will continue to be provided to small IDIs until they have received the equivalent of their full contributions, so long as the reserve ratio is in excess of 1.35 percent. Any remaining credits not applied to banks' assessments after four quarters in June 2020 are expected to be disbursed to small IDIs in a one-time lump sum payment.

Budget Outlook

The Budget estimates DIF net outlays of -$53.2 billion over the current 10-year budget window (2021–2030). This $53.2 billion in net inflows to the DIF is a $12.7 billion reduction of net inflows over the previous 10-year window (2020–2029) for the 2020 President's Budget. Growth in the DIF balance and in the size of the banking sector accounted for most of this change, as the latest public data on the banking industry led to minimal changes in projections of failed assets as a share of the banking system, or to the receivership proceeds, resolution outlays, and premiums necessary to reach the long-run DIF target of 1.5 percent. Although the FDIC has authority to borrow up to $100 billion from Treasury to maintain sufficient DIF balances, the Budget does not anticipate FDIC utilizing its borrowing authority because the DIF is projected to maintain positive operating cash flows over the entire 10-year budget horizon.

Pension Guarantees

The Pension Benefit Guaranty Corporation (PBGC) insures the pension benefits of workers and retirees in covered defined-benefit pension plans. PBGC operates two legally distinct insurance programs: single-employer plans and multiemployer plans.

Single-Employer Program

Under the single-employer program, PBGC pays benefits, up to a guaranteed level, when a company's plan closes without enough assets to pay future benefits. PBGC's claims exposure is the amount by which guaranteed benefits exceed assets in insured plans. In the near term, the risk of loss stems from financially distressed firms with underfunded plans. In the longer term, loss exposure results from the possibility that well-funded plans become underfunded due to inadequate contributions, poor investment results, or increased liabilities, and that the healthy firms sponsoring those plans become distressed.

PBGC monitors companies with underfunded plans and acts to protect the interests of the pension insurance program's stakeholders where possible. Under its Early Warning Program, PBGC works with companies to strengthen plan funding or otherwise protect the insurance program from avoidable losses. However, PBGC's authority to manage risks to the insurance program is limited. Most private insurers can diversify or reinsure their catastrophic risks as well as flexibly price these risks. Unlike private insurers, Federal law does not allow PBGC to deny insurance coverage to a defined-benefit plan or adjust premiums according to risk. Both types of PBGC premiums—the flat rate (a per person charge paid by all plans) and the variable rate (paid by underfunded plans) are set in statute.

Claims against PBGC's insurance programs are highly variable. One large pension plan termination may result in a larger claim against PBGC than the termination of many smaller plans. The future financial health of the PBGC will continue to depend largely on the termination of a limited number of very large plans.

Single employer plans generally provide benefits to the employees of one employer. When an underfunded single employer plan terminates, usually through the bankruptcy process, PBGC becomes trustee of the plan, applies legal limits on payouts, and pays benefits. The amount of benefit paid is determined after taking into account (a) the benefit that a beneficiary had accrued in the terminated plan, (b) the availability of assets from the terminated plan to cover benefits, and (c) the legal maximum benefit level set in statute. In 2020, the maximum annual payment guaranteed under the single-employer program was $69,750 for a retiree aged 65.

Multiemployer Plans

Multiemployer plans are collectively bargained pension plans maintained by one or more labor unions and more than one unrelated employer, usually within the same or related industries. PBGC's role in the multiemployer program is more like that of a re-insurer; if a company contributing to a multiemployer plan fails, its liabilities are assumed by the other employers in the plan, not by PBGC. PBGC becomes responsible for insurance coverage when the plan runs out of money to pay benefits at the statutorily guaranteed level, which usually occurs after most or all contributing employers have withdrawn from the plan, leaving the plan without sufficient income. PBGC provides insolvent multiemployer plans with financial assistance in the form of loans sufficient to pay guaranteed benefits and administrative expenses. Since multiemployer plans do not receive PBGC assistance until their assets are fully depleted, financial assistance is almost never repaid. Benefits under the multiemployer program are calculated based on the benefit that a participant would have received under the insolvent plan, subject to the legal multiemployer maximum set in statute. The maximum guaranteed amount depends on the participant's years of service and the rate at which benefits are accrued. For example, for a participant with 30 years of service, PBGC guarantees 100 percent of the pension benefit up to a yearly amount of $3,960. If the pension exceeds that amount, PBGC guarantees 75 percent of the rest of the pension benefit up to a total maximum guarantee of $12,870 per year. This limit has been in place since 2001 and is not adjusted for inflation or cost-of-living increases.

In recent years, many multiemployer pension plans have become severely underfunded as a result of unfavorable investment outcomes, employers withdrawing from plans, and demographic challenges. In 2001, only 15 plans covering about 80,000 participants were under 40 percent funded using estimated market rates. By 2016, this had grown to over 350 plans covering over 4 million participants. While many plans have benefited from an improving economy and will recover, about 14 percent of all participants in the multiemployer system are in plans projected to become insolvent within twenty years.

As of September 30, 2019, the single-employer program reported a positive net position of $8.7 billion, while the multiemployer program reported a long-term actuarial deficit of $65.2 billion. The challenges facing the multiemployer program are immediate. In its 2019 Annual Report, PBGC reported that it had just $2.9 billion in accumulated assets from premium payments made by multiemployer plans, which it projected would be depleted by 2025. If the program runs out of cash, the only funds available to support benefits would be the premiums that continue to be paid by remaining plans; this could result in benefits being cut much more deeply, to a small fraction of current guarantee levels.

Premiums

PBGC's combined liabilities exceeded assets by $56.5 billion at the end of fiscal year 2019. While the single-employer program's financial position is projected to continue improving over the next 10 years, in part because the Congress has raised premiums in that program several times, the multiemployer program is projected to run out of funds in 2025. Particularly in the multiemployer program, premium rates remain much lower than what a private financial institution would charge for insuring the same risk and well below what is needed to ensure PBGC's solvency.

The Budget includes two policy proposals to reform PBGC premiums. For an in-depth discussion of these proposals, please see the Labor chapter of the Budget *Appendix*.

Disaster Insurance

Flood Insurance

The Federal Government provides flood insurance through the National Flood Insurance Program (NFIP), which is administered by the Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA). Flood insurance is available to homeowners, renters, businesses, and State and local governments in communities that have adopted and enforce minimum floodplain management measures. Coverage is limited to buildings and their contents. At the end of 2019, the program had over five million policies worth $1.31 trillion in force in more than 22,000 communities. The program is currently authorized until September 30, 2020.

The Congress established NFIP in 1968 to make flood insurance coverage widely available, to combine a program of insurance with flood mitigation measures to reduce the Nation's risk of loss from floods, and to reduce Federal disaster-assistance expenditures on flood losses. The NFIP requires participating communities to adopt certain land use ordinances consistent with FEMA's floodplain management regulations and take other mitigation efforts to reduce flood-related losses in high flood hazard areas ("Special Flood Hazard Areas") identified through partnership with FEMA, States, and local communities. These efforts have resulted in substantial reductions in the risk of flood-related losses nationwide. However, structures built prior to flood mapping and NFIP floodplain management requirements are eligible for discounted premiums. Currently, FEMA estimates that approximately 20 percent of the total policies in force pay less than fully actuarial rates while continuing to be at relatively high risk of flooding.

FEMA's Community Rating System offers discounts on policy premiums in communities that adopt and enforce more stringent floodplain land use ordinances than those identified in FEMA's regulations and/or engage in mitigation activities beyond those required by the NFIP. The discounts provide an incentive for communities to implement new flood protection activities that can help save lives and property when a flood occurs. Further, NFIP offers flood mitigation assistance grants for planning and carrying out activities to reduce the risk of flood damage to structures covered by NFIP, which may include demolition or relocation of a structure, elevation or flood-proofing a structure, and community-wide mitigation efforts that will reduce future flood claims for the NFIP. In particular, flood mitigation assistance grants targeted toward repetitive and severe repetitive loss properties not only help owners of high-risk property, but also reduce the disproportionate drain these properties cause on the National Flood Insurance Fund.

Due to the catastrophic nature of flooding, with hurricanes Harvey, Katrina, and Sandy as notable examples, insured flood damages can far exceed premium revenue and deplete the program's reserves. On those occasions, the NFIP exercises its borrowing authority through the Treasury to meet flood insurance claim obligations. While the program needed appropriations in the early 1980s to repay the funds borrowed during the 1970's, it was able to repay all borrowed funds with interest using only premium dollars between 1986 and 2004. In 2005, however, Hurricanes Katrina, Rita, and Wilma generated more flood insurance claims than the cumulative number of claims paid from 1968 to 2004. Hurricane Sandy in 2012 generated $8.8 billion in flood insurance claims. As a result, in 2013 the Congress increased the borrowing authority for the fund to $30.425 billion. After the estimated $2.4 billion and $670 million in flood insurance claims generated by the Louisiana flooding of August 2016 and Hurricane Matthew in October 2016, respectively, the NFIP used its borrowing authority again, bringing the total outstanding debt to Treasury to $24.6 billion.

In the fall 2017, Hurricanes Harvey and Irma struck the southern coast of the United States, resulting in catastrophic flood damage across Texas, Louisiana, and Florida. To pay claims, NFIP exhausted all borrowing authority. The Congress provided $16 billion in debt cancellation to the NFIP, bringing its debt to $20.525 billion. To pay Hurricane Harvey flood claims, NFIP also received more than $1 billion in reinsurance payments as a result of transferring risk to the private reinsurance market at the beginning of 2017. FEMA continues to mature its reinsurance program and transfer additional risk to the private market.

In July 2012, resulting largely from experiences during Hurricanes Katrina, Rita, and Wilma in 2005, the Biggert Waters Flood Insurance Reform Act of 2012 (Public Law 112–141; BW–12) was signed into law. In addition to re-authorizing the NFIP for five years, the bill required the NFIP generally to move to full risk-based premium rates and strengthened the NFIP financially and operationally. In 2013, the NFIP began phasing in risk-based premiums for certain properties, as required by the law, and began collecting a policyholder Reserve Fund assessment that is available to meet the expected future obligations of the flood insurance program.

In March 2014, largely in reaction to premium increases initiated by BW–12, the Homeowner Flood Insurance Affordability Act of 2014 (HFIAA) was signed into law, further reforming the NFIP and revising many sections of BW–12. Notably, HFIAA repealed and adjusted many of the major premium increases introduced by BW–12 and required retroactive refunds of collected BW–12 premium increases, introduced a phase-in to higher full-risk premiums for structures newly mapped into the Special Flood Hazard Area until full-risk rates are achieved, and created an Office of the Flood Insurance Advocate. HFIAA also introduced a fixed annual surcharge of $25 for primary residents and $250 for all other policies to be deposited into the Reserve Fund. In 2019, FEMA began utilizing its administrative authority to accelerate the premium increases required by BW-12 and HFIAA so that policyholders recognize the flood risk they face and to encourage financial soundness of the program. Beginning in October 2021, NFIP will begin charging policyholders based on its new rating system that are fairer, easier to understand, and better reflect a property's unique flood risk.

The 2018-2022 FEMA Strategic Plan creates a shared vision for the NFIP and other FEMA programs to build a more prepared and resilient Nation. The Strategic Plan sets out three overarching goals: Building a culture of preparedness, Readying the Nation for catastrophic events, and reducing the complexity of FEMA. While the NFIP supports all three goals, it is central to building a culture of preparedness. To that end, FEMA is pursuing initiatives including:

1. Providing products that clearly and accurately communicate flood risk;

2. Helping individuals, businesses, and communities understand their risks and the available options like the NFIP to best manage those risks;

3. Transforming the NFIP into a simpler, customer-focused program that policyholders value and trust; and

4. Doubling the number of properties covered by flood insurance (either the NFIP or private insurance) by 2022.

Crop Insurance

Subsidized Federal crop insurance, administered by USDA's Risk Management Agency (RMA) on behalf of the Federal Crop Insurance Corporation (FCIC), assists farmers in managing yield and revenue shortfalls due to bad weather or other natural disasters. The program is a cooperative partnership between the Federal Government and the private insurance industry. Private insurance companies sell and service crop insurance policies. The Federal Government, in turn, pays private companies an administrative and operating (A&O) expense subsidy to cover expenses associated with selling and servicing these policies. The Federal Government also provides reinsurance through the Standard Reinsurance Agreement (SRA) and pays companies an "underwriting gain" if they have a profitable year. For the 2021 Budget, the payments to the companies are projected to be $2.5 billion in combined subsidies. The Federal Government also subsidizes premiums for farmers as a way to encourage farmers to participate in the program.

The most basic type of crop insurance is catastrophic coverage (CAT), which compensates the farmer for losses in excess of 50 percent of the individual's average yield at 55 percent of the expected market price. The CAT premium is entirely subsidized, and farmers pay only an administrative fee. Higher levels of coverage, called "buy-up," are also available. A portion of the premium for buy-up coverage is paid by FCIC on behalf of producers and varies by coverage level – generally, the higher the coverage level, the lower the percent of premium subsidized. The remaining (unsubsidized) premium amount is owed by the producer and represents an out-of-pocket expense.

For 2019, the 10 principal crops (barley, corn, cotton, grain sorghum, peanuts, potatoes, rice, soybeans, tobacco, and wheat) accounted for over 78 percent of total liability, and approximately 86 percent of the total U.S. planted acres of those 10 crops were covered by crop insurance. Producers can purchase both yield and revenue-based insurance products which are underwritten on the basis of a producer's actual production history (APH). Revenue insurance programs protect against loss of revenue resulting from low prices, low yields, or a combination of both. Revenue insurance has enhanced traditional yield insurance by adding price as an insurable component.

In addition to price and revenue insurance, FCIC has made available other plans of insurance to provide protection for a variety of crops grown across the United States. For example, "area plans" of insurance offer protection based on a geographic area (most commonly, a county), and do not directly insure an individual farm. Often, the loss trigger is based on an index, such as a rainfall or vegetative index, which is established by a Government entity (for example, NOAA or USGS). One such plan is the pilot Rainfall and Vegetation Index plan, which insures against a decline in an index value covering Pasture, Rangeland, and Forage. These pilot programs meet the needs of livestock producers who purchase insurance for protection from losses of forage produced for grazing or harvested for hay. In 2019, there were 32,086 Rainfall Index policies earning premiums, covering over 140 million acres of pasture, rangeland and forage. In 2019, there was about $260 million in liability for those producers who purchased livestock coverage and $5.88 billion in liability for those producers who purchased coverage for milk.

A crop insurance policy also contains coverage compensating farmers when they are prevented from planting their crops due to weather and other perils. When an insured farmer is unable to plant the planned crop within the planting time period because of excessive drought or moisture, the farmer may file a prevented planting claim, which pays the farmer a portion of the full coverage level. It is optional for the farmer to plant a second crop on the acreage. If the farmer does, the prevented planting claim on the first crop is reduced and the farmer's APH is recorded for that year. If the farmer does not plant a second crop, the farmer gets the full prevented planting claim, and the farmer's APH is held harmless for premium calculation purposes the following year. Buy-up coverage for prevented planting is limited to 5 percent.

RMA is continuously working to develop new products and to expand or improve existing products in order to cover more agricultural commodities through internal development, and through the section 508(h) authority in the Federal Crop Insurance Act, where the private sector is allowed to develop and submit new concepts for policies or plan of insurance. In 2019, RMA added new coverage for hybrid vegetable seed, white and waxy corn, and increased caps on livestock insurance products. RMA also took numerous actions in response to the flooding disaster affecting the Midwest including deferring the accrual of interest for premium payments for several months, allowing for additional time to report acreage in affected States, and delivery of disaster funding via the private delivery system. In particular, RMA, via Approved Insurance Providers, directly paid an additional 10 percent to 15 percent (totaling roughly $600 million) to insureds on eligible preventing planting indemnities under the authority and funding of the Disaster Relief Act, 2019. This was on top of a record $4.3 billion in claims relating to preventing planting in 2019. For more information and additional crop insurance program details, please reference RMA's website *www.rma.usda.gov*.

Farm Credit System Insurance Corporation (FCSIC)

Although not specifically disaster-related, FCSIC, an independent Government-controlled corporation, ensures the timely payment of principal and interest on FCS obligations on which the System banks are jointly and severally liable. On September 30, 2019, the assets in the Insurance Fund totaled $5.1 billion. As of September 30, 2019, the Insurance Fund as a percentage of adjusted insured debt was 2.08 percent. This was slightly above the statutory secure base amount of 2.00 percent. As of September 30, 2019, outstanding insured System obligations increased 5.2 percent compared with that of September 30, 2018, from $268.6 billion to $282.6 billion.

Insurance against Security-Related Risks

Terrorism Risk Insurance

The Terrorism Risk Insurance Program (TRIP) was authorized by the Terrorism Risk Insurance Act of 2002 to ensure the continued availability of property and casualty insurance following the terrorist attacks of September 11, 2001. TRIP's initial three-year authorization established a system of shared public and private compensation for insured property and casualty losses arising from certified acts of foreign terrorism.

TRIP was originally intended to be temporary, but has been repeatedly extended, and is currently set to expire on December 31, 2027, after it was reauthorized by the Terrorism Risk Insurance Program Reauthorization Act of 2019 (P.L. 116-94). The prior reauthorization, the Terrorism Risk Insurance Extension Act of 2015 (P.L. 114–1), made several program changes to reduce potential Federal liability. Over the first five of those extension years, the loss threshold that triggers Federal assistance is increased by $20 million each year to $200 million in 2020, and the Government's share of losses above the deductible decreases from 85 to 80 percent over the same period. The 2015 extension also required Treasury to recoup 140 percent of all Federal payments made under the program up to a mandatory recoupment amount, which increased by $2 billion each year until 2019 when the threshold was set at $37.5 billion. Since January 1, 2020, the mandatory recoupment amount has been indexed to a running three-year average of the aggregate insurer deductible of 20 percent of direct-earned premiums.

The Budget baseline includes the estimated Federal cost of providing terrorism risk insurance, reflecting current law. Using market data synthesized through a proprietary model, the Budget projects annual outlays and recoupment for TRIP. While the Budget does not forecast any specific triggering events, the Budget includes estimates representing the weighted average of TRIP payments over a full range of possible scenarios, most of which include no notional terrorist attacks (and therefore no TRIP payments), and some of which include notional terrorist attacks of varying magnitudes. On this basis, the Budget projects net spending of $256 million over the 2021–2025 period and $394 million over the 2021–2030 period.

Aviation War Risk Insurance

In December 2014, the Congress sunset the premium aviation war risk insurance program, thereby sending U.S. air carriers back to the commercial aviation insurance market for all of their war risk insurance coverage. The non-premium program is authorized through December 31, 2018. It provides aviation insurance coverage for aircraft used in connection with certain Government contract operations by a department or agency that agrees to indemnify the Secretary of Transportation for any losses covered by the insurance.

III. BUDGETARY EFFECTS OF THE TROUBLED ASSET RELIEF PROGRAM (TARP)

This section provides analysis consistent with Sections 202 and 203 of the Emergency Economic Stabilization Act (EESA) of 2008 (P.L. 110-343), including estimates of the cost to taxpayers and the budgetary effects of TARP transactions as reflected in the Budget. This section also explains the changes in TARP costs, and includes alternative estimates as prescribed under EESA. Under EESA, Treasury has purchased different types of financial instruments with varying terms and conditions.[3] The Budget reflects the costs of these instruments using the methodology as provided by Section 123 of EESA.

The estimated costs of each transaction reflect the underlying structure of the instrument. TARP financial instruments have included direct loans, structured loans, equity, loan guarantees, and direct incentive payments. The costs of equity purchases, loans, guarantees, and loss sharing are the net present value of cash flows to and from the Government over the life of the instrument, per the Federal Credit Reform Act (FCRA) of 1990; as amended (2 U.S.C. 661 et seq.), with an EESA-required adjustment to the discount rate for market risks. Costs for the incentive payments under TARP housing programs, other than loss sharing under the Federal Housing Administration (FHA) Refinance program, involve financial instruments without any provision for future returns and are recorded on a cash basis.[4] For further discussion of market-risk adjustments, please see the following section about fair value budgeting.

Tables 18–11 through 18–17 are available online. Table 18–11 summarizes the cumulative and anticipated activity under TARP, and the estimated lifetime budgetary cost reflected in the Budget, compared to estimates from the 2020 Budget. The direct impact of TARP on the deficit is projected to be $31.9 billion, down $0.6 billion from the $32.5 billion estimate in the 2020 Budget. The total programmatic cost represents the lifetime net present value cost of TARP obligations from the date of disbursement, which is now estimated to be $50.7 billion, a figure that excludes interest on reestimates.[5]

Table 18–12 shows the current value of TARP assets through the actual balances of TARP financing accounts as of the end of each fiscal year through 2019, and projected balances for each subsequent year through 2030.[6] Based on actual net balances in financing accounts at the end of 2009, the value of TARP assets totaled $129.9 billion. As of September 30, 2019, total TARP net asset value has decreased to -$46 million. This negative balance is due to a one-time recovery in excess of last year's estimated asset value. Updated estimates reflect a positive balance in the financing accounts in 2020. The overall balance of the financing accounts is estimated to continue falling as TARP investments continue to wind down.

Table 18-13 shows the estimated impact of TARP activity on the deficit, debt held by the public and gross Federal debt following the methodology required by EESA. Direct activity under TARP is expected to increase the 2020 deficit by $1.8 billion, the major components being:

- Outlays for TARP housing programs are estimated at $920 million in 2020.
- Administrative expense outlays for TARP are estimated at $47 million in 2020.
- Outlays for the Special Inspector General for TARP are estimated at $31 million in 2020.
- TARP reestimates and interest on reestimates will decrease the deficit by $67.8 million in 2020.
- The projected net financing account interest paid to Treasury at market risk adjusted rates is less than $1 million in 2020.
- Debt service is estimated at $815 million for 2020 and then expected to increase to $1.8 billion by 2030, largely due to outlays for TARP housing programs. Total debt service will continue over time after TARP winds down, due to the financing of past TARP costs.

Debt net of financial assets due to TARP is estimated to be $36.3 billion as of the end of 2020. This is $0.1 billion lower than the projected debt held net of financial assets for 2020 that was reflected in the 2020 Budget.

Table 18-14 reflects the estimated effects of TARP transactions on the deficit and debt, as calculated on a cash basis. Under cash basis reporting, the 2020 deficit would be $58 million higher than the $1.8 billion estimate now reflected in the Budget. However, the impact of TARP on the Federal debt, and on debt held net of financial assets, is the same on a cash basis as under FCRA and therefore these data are not repeated in Table 18–14.

Table 18-15 shows detailed information on upward and downward reestimates to program costs. The current reestimate of $68 million reflects a decrease in estimated TARP costs from the 2020 Budget. This decrease was due in large part to improved market conditions and continued progress winding down TARP investments over the past year.

[3] For a more detailed analysis of the assets purchased through TARP and its budgetary effects, please see the "Budgetary Effect of the Troubled Asset Relief Program chapter included in the *Analytical Perspectives* volume of prior budgets.

[4] Section 123 of EESA provides Treasury the authority to record TARP equity purchases pursuant to FCRA, with required adjustments to the discount rate for market risks. The HHF and Making Home Affordable (MHA) program involve the purchase of financial instruments that have no provision for repayment or other return on investment, and do not constitute direct loans or guarantees under FCRA. Therefore these purchases are recorded on a cash basis. Administrative expenses for TARP are recorded under the Office of Financial Stability and the Special Inspector General for TARP on a cash basis, consistent with other Federal administrative costs, but are recorded separately from TARP program costs.

[5] With the exception of MHA and HHF, all the other TARP investments are reflected on a present value basis pursuant to FCRA and EESA.

[6] Reestimates for TARP are calculated using actual data through September 30, 2019, and updated projections of future activity. Thus, the full impacts of TARP reestimates are reflected in the 2020 financing account balances.

The 2021 Budget, as shown in table 18–16, reflects a total TARP deficit impact of $31.9 billion. This is a decrease of $0.6 billion from the 2020 Budget projection of $32.5 billion. The estimated 2020 TARP deficit impact reflected in Table 18–16 differs from the programmatic cost of $50.7 billion in the Budget because the deficit impact includes $18.8 billion in cumulative downward adjustments for interest on subsidy reestimates. See footnote 2 in Table 18–16.

Table 18–17 compares the OMB estimate for TARP's deficit impact to the deficit impact estimated by CBO in its "Report on the Troubled Asset Relief Program—April 2019."[7]

CBO estimates the total cost of TARP at $31 billion, based on estimated lifetime TARP disbursements of $443 billion. The Budget reflects a total deficit cost of $32 billion, based estimated disbursements of $445 billion. CBO and OMB cost estimates for TARP have generally converged over time as TARP equity programs have wound down.

[7] Available at: *www.cbo.gov/system/files/2019-04/55124-TARP_April2019.pdf*

IV. SPECIAL TOPICS

FAIR VALUE BUDGETING FOR CREDIT PROGRAMS

As described in Section 1, the Federal Government utilizes a wide array of loan and loan guarantee programs to deliver services to the American people. Accurately estimating the costs of these programs is critical to ensuring that the Budget reflects the true position of the Federal Government, as well as how policymakers are allocating limited resources across competing needs and priorities.

The way that the Budget accounts for the costs of the loan and loan guarantees programs has changed over time in order to improve the accuracy and utility of cost estimates. Prior to 1990, budgeting for loans was done on a cash basis, meaning that the budgetary costs of a direct loan or loan guarantee was the net cash flows for that fiscal year. The Federal Credit Reform Act of 1990 (FCRA) updated this approach by requiring cost estimates for these programs to reflect the estimated lifetime costs of loans and loan guarantees up front on a net present value basis. This required policy officials to budget for those lifetime costs when making programmatic decisions. While this approach provides a more realistic portrayal of the costs of the Federal credit programs, it can be challenging to determine the present value of projected cash flows that can extend far into the future and may be highly uncertain.

The Administration supports proposals to improve the accuracy of cost estimates that are consistent with the original goals of FCRA—specifically, to provide better information on the costs of credit programs and improve resource allocation by placing them on a comparable basis to other forms of Federal spending.

One proposal that has recently gained some support is a "fair value" approach. Fair value is an alternative approach to measuring the cost of Federal direct loan and loan guarantee programs that would align budget estimates with the market value of Federal assistance, typically by including risk premiums observed in the market. Further, fair value would require programs to incorporate non-diversifiable, project-specific risks inherent to such loans or guarantees. Several outside experts have argued that the Federal Government should utilize fair value to estimate the cost of direct and guaranteed loans. The Congressional Budget Office (CBO), for instance, has stated that fair value would be a more comprehensive measure of the cost of Federal credit programs.[8] Prior Congressional Budget Resolutions have also endorsed fair value, and the Congress has periodically required fair value estimates in legislation for particular programs. Notably, the Emergency Economic Stabilization Act (EESA) of 2008 (P.L. 110– 343), as amended, required costs for Treasury's Troubled Asset Relief Program (TARP) to be estimated on a net present value, adjusted to reflect a premium for market risk.

Properly estimating the cost of providing credit assistance, as opposed to other forms of financial assistance such as grants, is an important consideration to policymakers as they allocate spending among programs. The ability to offer credit assistance on more generous terms than the most efficient private sector participants, fueled by the Federal Government's advantage in a lower cost of borrowing, can cause price distortions in the marketplace. While there is a conceptual debate about whether the Federal Government should be influenced by the same market risks as individual taxpayers, it is generally true that direct loans and loan guarantees are expected to perform worse when macroeconomic conditions are declining, and will be exposed to certain risks that are inherent to the project and not able to be diversified away. Therefore, any pricing differences may incentivize policymakers to choose for the Government to hold direct loan assets or be exposed to loan guarantee liabilities when individual taxpayers would not do so.

But while fair value analysis offers some useful insights and helps inform decision-making for specific programs, the Governmental Accountability Office (GAO) and others have noted that fair value may impose implementation costs and challenges, and that these challenges would need to be carefully addressed in order to prevent the distortion of credit estimates. Further, fair value cost estimates would reflect non-cash costs in the Budget, raising concerns about consistency and transparency.

The sections below will discuss cost estimation methods under FCRA and a fair value approach, analyze the differences between recent FCRA and fair value cost es-

[8] *https://www.cbo.gov/system/files/2019-05/55278-FairValue2020.pdf*

timates, and describe the conceptual and implementation challenges that need to be addressed.

Methodology for Estimating Costs under FCRA and Fair Value

Costs under FCRA

Before FCRA, the budget reflected the cash flows of loans and loan guarantees in the years that they occurred. The cost of new direct loans was greatly overstated—appropriations were required for the full face value of loans and did not consider expected repayment over time. In contrast, new loan guarantees appeared to not have a cost, and there was no requirement to set aside a reserve to cover anticipated losses. FCRA greatly improved the accuracy of cost estimates by capturing the lifetime expected cash flows for loans and loan guarantees up front. Under FCRA, the subsidy cost is equal to the net present value of the cash flows to and from the Government, netting out expected losses from default or other adverse events. The present value is estimated using the Government's cost of funds, as reflected in Treasury rates, to discount these cash flows.

Costs under Fair Value[9]

In contrast to FCRA where estimated cash flows are discounted by the Government's cost of funds (Treasury rates), under fair value cash flows would typically reflect estimated market-determined rates for the characteristics of the loan or loan guarantee (comparable market rates), instead of Treasury rates. A fair value cost estimate for loan guarantees would require determining the value that a private guarantor would charge for bearing the risk of providing the guarantee, or which a private lender would be willing to pay for the guarantee itself—a potentially more challenging task than calculating the private sector's discount rate for direct loans. Comparable market rates would need to be derived or estimated from available market data, and applied to cash flows. Discount rates would vary across programs, and in some cases by individual loan or guarantee. Because fair value estimates reflect market-determined rates that reflect the uncertainty associated with loan performance and other factors not included in FCRA estimates, fair value costs would be higher.

Budgetary Cost Estimates under FCRA and Fair Value

The Report of the 1967 President's Commission on Budget Concepts stressed the need to—amongst other purposes—provide accurate and transparent costs to the Government, allocate resources to serve national objectives, and provide the public with information about the Government's impact on the national economy. In order to present the budget on a truly comprehensive basis, the Commission evaluated the need to provide separate, substantive information on loan programs as distinct from other forms of expenditures. FCRA costs reflect estimated cash flows, including expected losses due to default and other adverse events. Actual experience may deviate from initial estimates; however, through the reestimates the subsidy costs are ultimately tied to actual cash flows and these reestimates help agencies learn from past experience to improve techniques for generating new estimates. In some instances, however, this has the impact of generally shifting cash flows upwards by changing the calculation from an overall expected estimate of cash flows, including project risks, to a "modal" estimate—i.e., the specific single path of cash flow that is most likely to occur. As the latter approach does not include information of the probability of all other outcomes, from a discounted cash flow perspective this can result in underestimation of costs. As a measure of expected budgetary cost ex-post (i.e. once the risk has been resolved in default or repayment), FCRA estimates have been fairly accurate overall, although not always on a program-by-program basis. Net lifetime reestimates of subsidy cost for credit programs[10] over the 27 years that FCRA has been in place are $113.8 billion upward—less than one percent of the $11.8 trillion in face value of loans and guarantees made under FCRA, or 2.7 percent of the $4.1 trillion currently outstanding.

However, there are additional costs beyond those captured under FCRA that could be reflected in the budget. Fair value cost estimates include the same underlying credit risk assumptions as FCRA estimates, and add an additional premium above the expected costs. Those costs could include certain factors such as the administrative costs which are budgeted separately under FCRA, a liquidity premium, and a component related to the exemption of Treasuries from the State income tax.

Producing a fair value cost estimates that isolates the market risk premium would need to disaggregate those other costs not currently specifically measured in FCRA estimates. CBO and others have produced numerous estimates over the last several years which can provide a starting point for developing an appropriate methodology for budget execution. On a FCRA basis, Federal credit programs in the 2020 Budget are expected to save $12 billion; by contrast, CBO's analysis on a fair value basis shows that these programs are expected to cost $35 billion.[11] The biggest driver of this difference is student loans, which accounts for $4.1 billion of savings under FCRA but which CBO estimates would cost $17.7 billion on a fair value basis. These differences may assist policy makers in their examination of these programs and let taxpayers know the true added cost or savings over time.

[9] Pages 393-398 of the *Analytical Perspectives* volume of the 2013 Budget include more discussion of the issues raised in this section and the following section on Implementation.

[10] Excludes the Troubled Asset Relief Program and the International Monetary Fund increases provided in the 2009 Supplemental Appropriations Act, where reestimates reflect the return of a market risk adjustment premium. Also excludes reestimates from the Small Business Lending Fund, an equity program presented on a FCRA basis pursuant to legislation.

[11] *https://www.cbo.gov/system/files/2019-05/55278-FairValue2020.pdf* (ibid 10) CBO's analysis includes Fannie Mae and Freddie Mac as Federal entities. Please see Chapter 9 Coverage of the Budget for an analysis of why the Administration does not include these entities.

Conceptual and Implementation Challenges of Fair Value

There are both conceptual and practical implementation issues that need to be addressed prior to moving to a fair value methodology. Key issues include:

- **Determining the right valuation methods across agencies with vastly different credit programs.**

Fair-value estimates require analysts to make judgments about discount rates for each program, which could create inconsistencies in the estimates of costs from program to program. Guidance would need to be developed that determined the appropriate granularity of market risk premia for specific programs and sectors, and to ensure that similarly situated programs are using similar market premia assumptions. This could be especially challenging for programs where costs are estimated based on individual borrower characteristics (i.e. creditworthiness, industry, collateral value, fee structure, and loan maturity).

While it may be relatively easier to adjust the discount rate methodology for direct loan programs, developing fair value estimates for guaranteed loan programs is more complex. Rather than computing cash flows to and from the Government—for example, guarantee fees received and default claims disbursed—agencies would instead need to determine the value that market participants would assign to the guarantee itself. There is additional complexity in determining the appropriate estimation methodology for direct loans or loan guarantees where market data is limited, or where a non-Federal counterpart does not exist in the market.

- **Ensuring that estimates are transparent to policymakers and the public.**

Changes in risk premia over time could create considerable swings in mandatory outlays and receipts, or make it challenging to determine the effects of modifying existing programs. These swings could be difficult to communicate to policymakers and the public, and create confusion over whether changes in program costs are due to identifiable, actionable policy decisions or because of outside market factors. In addition to the challenges of creating initial estimates, market-risk adjusted discounting for the reestimate process would need to be reconciled with the intragovernmental cash flow accounting process established by FCRA.

- **Managing the additional volatility of fair value estimates on the Federal Budget process.**

Fair-value cost estimates would be somewhat more volatile over time because of changes in market conditions—although factors that also affect FCRA estimates would continue to be the main cause of volatility. Favorable decreases in market risk might encourage policymakers to expand programs—only to see those market conditions change the next year. Conversely, unfavorable increases in market risk incentivize policymakers to constrain programs that are otherwise fundamentally sound.

Because fair value would reflect additional non-cash costs in the Budget, care would need to be taken to ensure that savings from changes to credit programs are not overstated. Further, decisions will need to be made whether to retroactively apply fair value estimates to currently outstanding loan programs, or to only apply fair value estimates to future activity.

- **Updating the various statutes, standards, and guidance that currently govern credit programs.**

There is an entire infrastructure surrounding the current FCRA approach that would need to overhauled. The Administration would also need to work with the audit and accounting community to make appropriate updates to various Federal accounting standards, implementation manuals, and associated guidance.

- **Obtaining necessary financial and human resources.**

Depending on the specifics of a fair value proposal, the issues described above could require a significant investment in resources to implement at OMB, Treasury, and the various Federal credit agencies. A key issue would be the Government's ability to recruit and train staff to develop the necessary infrastructure for implementation. In implementing current FCRA requirements, some Federal credit programs have faced significant administrative challenges in hiring staff with the right technical skill sets, and developing critical management infrastructure, including financial accounting systems, monitoring, and modeling capabilities. For example: the shift to fair value would likely require OMB to develop new discounting software to capture additional data points to ensure an appropriate level of transparency for budgetary and financial statement accounting. Fair value will likely place greater demands on agencies in all of these areas.

Summary

The Administration supports proposals to improve the accuracy of program cost estimates and is open to working with the Congress and knowledgeable members of the public to address any conceptual and implementation challenges necessary to develop fair value estimates for Federal credit programs in an efficient manner. Fair value cost of estimates for Federal credit programs have the potential to capture elements of program costs that are not included in FCRA-based cost estimates. The Budget is more informative when it shows the direct cost to the Government in an accurate and transparent manner, as well as the economic costs imposed on taxpayers for extending credit assistance. Further, other alternatives to fair value budgeting should also be evaluated—including greater investment in improving FCRA cost estimates, and strengthened cost-benefit analyses at the program level.

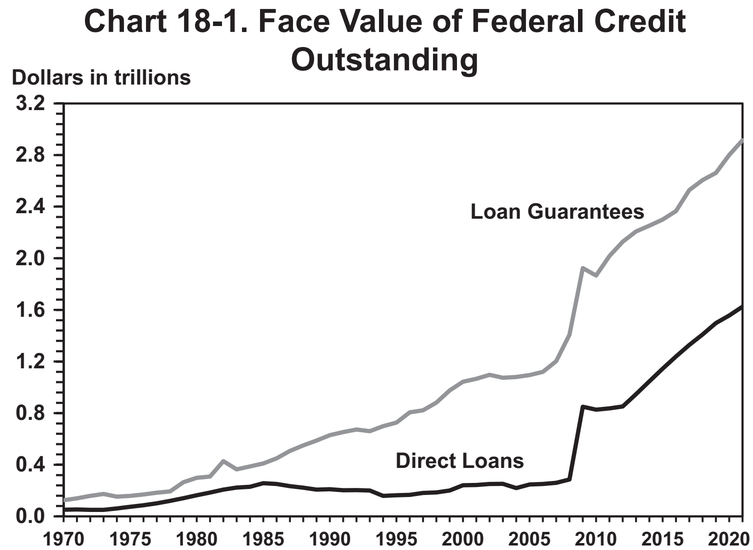

Table 18–1. PROJECTED COSTS OF FEDERAL CREDIT PROGRAMS UNDER FCRA AND FAIR VALUE IN 2020 [1]

	Number of Programs	Obligations or Commitments (Billions of dollars)	Subsidy Rate (Percent) Fair Value		Subsidy (Billions of dollars)	
			FCRA Estimate	Fair-Value Estimate	FCRA Estimate	Fair-Value Estimate
By Department or Agency						
Housing and Urban Development	17	245	–3.0	2.9	–7.3	7.1
Veterans Affairs	5	126	0.6	2.3	0.7	2.9
Education	7	102	–4.0	17.3	–4.1	17.7
Agriculture	26	44	–0.1	2.7	**	1.2
Small Business Administration	7	44	*	9.5	**	4.1
Export-Import Bank	4	22	–5.1	–1.8	–1.1	–0.4
International Assistance	9	13	–2.6	3.9	–0.3	0.5
Transportation	2	5	5.0	25.7	0.2	1.2
Other	7	3	2.1	20.5	0.1	0.6
All Departments and Agencies	**84**	**603**	**–2.0**	**5.8**	**–11.8**	**35.0**

* Denotes less than 0.05%.
** Denotes less than $50 million.

Table 18–2. ESTIMATED FUTURE COST OF OUTSTANDING FEDERAL CREDIT PROGRAMS[1]

(In billions of dollars)

Program	Outstanding 2018	Estimated Future Costs of 2018 Outstanding[2]	Outstanding 2019	Estimated Future Costs of 2019 Outstanding[2]
Direct Loans:[2]				
Federal Student Loans	1,122	64	1,203	154
Education Temporary Student Loan Purchase Authority	57	*	53	7
Farm Service Agency, Rural Development, Rural Housing	58	3	60	4
Rural Utilities Service and Rural Telephone Bank	53	2	53	2
Housing and Urban Development	31	15	38	17
Export-Import Bank	19	2	16	1
Advanced Technology Vehicle Manufacturing, Title 17 Loans	14	1	15	*
Transportation Infrastructure Finance and Innovation Act Loans	15	*	19	–1
Disaster Assistance	9	2	10	2
International Assistance	8	4	9	5
Other direct loan programs[3]	23	6	23	6
Total direct loans	1,410	99	1,498	197
Guaranteed Loans:[2]				
FHA Mutual Mortgage Insurance Fund	1,265	14	1,288	–2
Department of Veterans Affairs (VA) Mortgages	664	9	713	8
Federal Student Loan Guarantees	157	3	141	5
FHA General and Special Risk Insurance Fund	158	5	163	5
Farm Service Agency, Rural Development, Rural Housing	149	1	151	1
Small Business Administration (SBA) Business Loan Guarantees[4]	129	3	130	2
Export-Import Bank	42	1	34	1
International Assistance	26	4	25	3
Other guaranteed loan programs[3]	16	1	16	1
Total guaranteed loans[4]	2,606	39	2,662	22
Total Federal credit	**4,016**	**138**	**4,160**	**220**

* $500 million or less.

[1] Future costs represent balance sheet estimates of allowance for subsidy cost, liabilities for loan guarantees, and estimated uncollectible principal and interest.

[2] 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.

[3] As authorized by the statute, table includes TARP and SBLF equity purchases. Future costs for TARP are calculated using the discount rate required by the Federal Credit Reform Act adjusted for market risks, as directed in legislation.

[4] To avoid double-counting, outstandings for GNMA and SBA secondary market guarantees, and TARP FHA Letter of Credit program are excluded from the totals.

Table 18–3. DIRECT LOAN SUBSIDY RATES, BUDGET AUTHORITY, AND LOAN LEVELS, 2019–2021

(Dollar amounts in millions)

Agency and Program Account	2019 Actual			2020 Enacted			2021 Proposed		
	Subsidy rate [1]	Subsidy budget authority	Loan levels	Subsidy rate [1]	Subsidy budget authority	Loan levels	Subsidy rate [1]	Subsidy budget authority	Loan levels
Agriculture:									
Agricultural Credit Insurance Fund Program Account	0.99	27	2,633	2.03	82	4,070	–1.52	–70	4,641
Farm Storage Facility Loans Program Account	–0.52	–2	236	–0.23	–1	309	–0.88	–3	309
Rural Electrification and Telecommunications Loans Program Account	–3.63	–216	5,962	–2.42	–103	4,253	–1.94	–88	4,529
Distance Learning, Telemedicine, and Broadband Program	19.53	9	48	28.71	103	358	26.75	90	335
Rural Water and Waste Disposal Program Account	–0.27	–3	1,092	4.56	66	1,447	–1.53	–19	1,270
Rural Community Facilities Program Account	–7.61	–59	774	–4.96	–124	2,500	–6.56	–164	2,500
Multifamily Housing Revitalization Program Account	49.99	22	45	56.78	16	28	....	....	....
Rural Housing Insurance Fund Program Account	8.63	99	1,146	10.44	113	1,086	–2.46	–*	2
Rural Microenterprise Investment Program Account	9.52	*	3	14.88	2	13	....	....	....
Intermediary Relending Program Fund Account	22.01	4	19	27.63	4	19	....	....	....
Rural Economic Development Loans Program Account	13.35	6	48	16.78	8	48	....	....	....
Commerce:									
Fisheries Finance Program Account	–9.04	–2	19	–2.66	–9	321	–9.65	–11	124
Education:									
College Housing and Academic Facilities Loans Program Account	8.08	18	221	9.50	32	341	7.96	18	220
TEACH Grant Program Account	28.37	29	102	28.93	29	99	27.44	28	101
Federal Direct Student Loan Program Account	–1.15	–1,646	143,749	5.89	8,473	143,780	–5.76	–8,327	144,609
Energy:									
Title 17 Innovative Technology Loan Guarantee Program	–2.85	–105	3,703	....	....	....	....	....	....
Homeland Security:									
Disaster Assistance Direct Loan Program Account	95.13	37	39	74.61	116	155	76.25	36	47
Housing and Urban Development:									
FHA-Mutual Mortgage Insurance Program Account	0.00	....	1	0.00	....	1	0.00	....	1
FHA-General and Special Risk Program Account	–14.38	–98	623	....	....	....	....	....	....
State:									
Repatriation Loans Program Account	40.45	1	3	41.34	1	2	55.45	1	2
Transportation:									
Federal-aid Highways	2.48	38	1,535	....	....	....	....	....	....
Railroad Rehabilitation and Improvement Program	–1.04	–10	914	0.00	....	600	0.00	....	600
TIFIA Highway Trust Fund Program Account	....	....	....	2.84	272	9,577	0.97	311	32,062
Treasury:									
Community Development Financial Institutions Fund Program Account	–4.75	–5	100	2	1	507	[2]0.00	....	300
Veterans Affairs:									
Veterans Housing Benefit Program Fund	–5.30	–4	71	8.72	7	88	–22.12	–22	99
Native American Veteran Housing Loan Program Account	–9.59	–1	6	–4.07	–1	14	–17.37	–3	15
Environmental Protection Agency:									
Water Infrastructure Finance and Innovation Program Account	0.82	21	2,524	2	55	6,044	[2]1.08	20	1,845
International Assistance Programs:									
Foreign Military Financing Loan Program Account	....	....	....	....	....	....	[2]0.00	....	4,000
Overseas Private Investment Corporation Program Account	–5.90	–79	1,496	–13.99	–7	110	....	....	....
United States International Development Finance Corporation	....	....	....	–11.65	–332	2,770	[2]1.37	–60	4,350
Small Business Administration:									
Disaster Loans Program Account	12.29	173	1,406	13.62	150	1,100	8.92	98	1,100
Business Loans Program Account	8.77	4	42	9.29	5	50	8.99	4	41
Export-Import Bank of the United States:									
Export-Import Bank Loans Program Account	–13.59	–681	5,009	....	....	....	....	....	....
Total	**N/A**	**–2,423**	**173,569**	**N/A**	**8,958**	**179,690**	**N/A**	**–8,161**	**203,102**

N/A = Not applicable

* $500,000 or less

[1] Additional information on credit subsidy rates is contained in the Federal Credit Supplement.

[2] Rate reflects notional estimate. Estimates will be determined at the time of execution and will reflect the terms of the contracts and other characteristics.

Table 18–4. LOAN GUARANTEE SUBSIDY RATES, BUDGET AUTHORITY, AND LOAN LEVELS, 2019–2021

(Dollar amounts in millions)

Agency and Program	2019 Actual			2020 Enacted			2021 Proposed		
	Subsidy rate [1]	Subsidy budget authority	Loan levels	Subsidy rate [1]	Subsidy budget authority	Loan levels	Subsidy rate [1]	Subsidy budget authority	Loan levels
Agriculture:									
Agricultural Credit Insurance Fund Program Account	0.23	7	3,107	0.38	22	5,762	0.44	25	5,880
Commodity Credit Corporation Export Loans Program Account	–0.22	–5	2,024	–0.39	–22	5,500	–0.40	–22	5,500
Rural Water and Waste Disposal Program Account	0.38	*	11	0.14	*	57	0.12	*	67
Rural Community Facilities Program Account	2.89	5	187	–0.51	–3	500	–0.74	–4	500
Rural Housing Insurance Fund Program Account	–0.75	–114	15,026	–0.60	–105	17,409	–0.74	–127	17,063
Rural Business Program Account	2.32	31	1,343	2.05	28	1,390	0.83	14	1,704
Rural Energy for America Program	4.46	9	206	3.53	24	672	....	....	....
Biorefinery Assistance Program Account	25.03	94	375	14.93	45	303	16.16	65	400
Health and Human Services:									
Health Center Facility Loan Guarantee Program	....	....	....	2.57	2	60	2.78	2	66
Housing and Urban Development:									
Indian Housing Loan Guarantee Fund Program Account	0.26	1	548	0.11	1	600	0.30	1	600
Native Hawaiian Housing Loan Guarantee Fund Program Account	–0.32	–*	16	–0.34	–*	16	–0.15	–*	15
Native American Housing Block Grant	11.26	2	13	6.25	2	17	6.39	1	20
Community Development Loan Guarantees Program Account	0.00	....	59	–0.01	–*	100	....	....	....
FHA-Mutual Mortgage Insurance Program Account	–3.05	–6,887	225,571	–2.13	–4,665	218,615	–3.31	–6,976	210,728
FHA-General and Special Risk Program Account	–2.79	–480	17,169	–3.12	–637	20,432	–2.39	–474	19,753
Interior:									
Indian Guaranteed Loan Program Account	5.34	6	106	5.56	10	183	....	....	....
Veterans Affairs:									
Veterans Housing Benefit Program Fund	0.07	131	187,409	–0.30	–512	170,737	–0.50	–714	142,877
International Assistance Programs:									
Foreign Military Financing Loan Program Account	....	....	....	....	....	....	0.00	....	4,000
Loan Guarantees to Israel Program Account	0.00	....	2,000	0.00	....	500	0.00	....	500
Development Credit Authority Program Account	2.19	22	1,006	....	....	....	....	....	....
Overseas Private Investment Corporation Program Account	–11.41	–415	3,633	–9.51	–9	55	....	....	....
United State International Development Finance Corporation	....	....	....	....	....	....	[2]–2.26	–57	2,506
Small Business Administration:									
Business Loans Program Account	0.00	....	28,071	0.20	99	49,000	[2]0.00	....	42,500
Export-Import Bank of the United States:									
Export-Import Bank Loans Program Account	–0.19	–6	3,206	–4.87	–1,121	23,030	–4.97	–1,037	20,875
Total	**N/A**	**–7,599**	**491,086**	**N/A**	**–6,841**	**514,938**	**N/A**	**–9,303**	**475,554**
ADDENDUM: SECONDARY GUARANTEED LOAN COMMITMENT LIMITATIONS									
Government National Mortgage Association:									
Guarantees of Mortgage-backed Securities Loan Guarantee Program Account	–0.44	–1,987	451,555	–0.29	–1,183	408,000	–0.31	–1,207	389,237
Small Business Administration:									
Secondary Market Guarantee Program	0.00	....	8,498	0.00	....	12,000	0.00	....	13,000
Total, secondary guarantee loan commitments	**N/A**	**–1,987**	**460,053**	**N/A**	**–1,183**	**420,000**	**N/A**	**–1,207**	**402,237**

N/A = Not applicable.

* $500,000 or less

[1] Additional information on credit subsidy rates is contained in the Federal Credit Supplement.

[2] Rate reflects notional estimate. Estimates will be determined at the time of execution and will reflect the terms of the contracts and other characteristics.

Table 18–5. SUMMARY OF FEDERAL DIRECT LOANS AND LOAN GUARANTEES[1]

(In billions of dollars)

	Actual								Estimate	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Direct Loans:										
Obligations	191.1	174.4	174.0	181.3	175.6	180.0	169.7	173.6	179.7	203.1
Disbursements	170.0	157.5	155.4	161.4	158.5	164.4	151.9	150.8	154.5	164.0
Budget authority:										
New subsidy budget authority[2]	–27.2	–29.8	–22.4	4.9	–9.0	–1.0	–2.4	–1.2	9.5	–8.2
Reestimated subsidy budget authority[2,3]	16.8	–19.7	–0.8	10.1	8.0	32.5	–10.3	29.9	67.1	....
Total subsidy budget authority	**–10.4**	**–49.4**	**–23.2**	**15.1**	**–1.1**	**31.5**	**–12.8**	**28.7**	**76.5**	**–8.2**
Loan guarantees:										
Commitments[4]	479.7	536.6	350.8	478.3	537.6	530.2	461.7	491.1	517.6	476.8
Lender disbursements[4]	444.3	491.3	335.6	461.6	517.6	520.6	465.1	482.7	488.4	464.1
Budget authority:										
New subsidy budget authority[2]	–6.9	–17.9	–13.7	–11.9	–7.5	–8.8	–5.4	–9.6	–8.0	–10.7
Reestimated subsidy budget authority[2,3]	–4.9	20.8	1.2	–1.1	–13.6	16.8	9.4	–20.2	–15.9	....
Total subsidy budget authority	**–11.8**	**2.8**	**–12.5**	**–13.1**	**–21.1**	**8.0**	**4.0**	**–29.8**	**–23.9**	**–10.7**

[1] As authorized by statute, table includes TARP and SBLF equity purchases, and International Monetary Fund (IMF) transactions resulting from the 2009 Supplemental Appropriations Act.

[2] Credit subsidy costs for TARP and IMF transactions are calculated using the discount rate required by the Federal Credit Reform Act adjusted for market risks, as directed in legislation.

[3] Includes interest on reestimate.

[4] To avoid double-counting, the face value of GNMA and SBA secondary market guarantees and the TARP FHA Letter of Credit program are excluded from the totals.