FINANCIAL ECONOMISTS ROUNDTABLE

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Statement on

Accounting for the Cost of Government Credit Assistance

The Financial Economist Roundtable (FER) is a group of senior financial economists who have made significant contributions to the finance literature and seek to apply their knowledge to current policy debates. The Roundtable focuses on microeconomic issues in investments, corporate finance, and financial institutions and markets, both in the U.S. and internationally. Its major objective is to create a forum for intellectual interaction that promotes in-depth analyses of current policy issues in order to raise the level of public and private policy debate and improve the quality of policy decisions.

FER was founded in 1993 and meets annually. Members attending a FER meeting discuss specific policy issues on which statements may be adopted. When a statement is issued, it reflects a consensus among at least two-thirds of the attending members and is signed by all the members supporting it. The statements are intended to increase the awareness and understanding of public policy makers, the financial economics profession, the communications media, and the general public. FER statements are distributed to relevant policy makers and the media.

This statement is the product of the FER's discussion at its annual meeting on July 21-23, 2012, at Niagara-on-the-Lake, Ontario, Canada. The statement examines the current government accounting rules used to calculate the budgetary costs of government credit programs and concludes that that the use of these rules results in the systematic understatement of the cost of federal credit programs. This deficiency occurs because of the failure to capture all of the risks associated with federal credit programs, which must ultimately be borne by taxpayers. The FER concludes that this deficiency can be remedied by amending current government accounting rules to require the use of discount rates that reflect all of the risks associated with federal credit programs.

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<center>Statement of the Financial Economists Roundtable (FER)

on</center>

Accounting for the Cost of Government Credit Assistance

The federal government provides extensive credit support for mortgages, student loans, and a variety of commercial endeavors through its traditional direct loan and loan guarantee programs. Those programs-- which are accounted for under the rules of the Federal Credit Reform Act of 1990 (FCRA)[1]--have grown rapidly in recent years, with outstanding balances reaching more than $2.5 trillion in 2011.[2]

The FER believes that use of FCRA accounting rules to calculate the budgetary costs of these credit programs has resulted in the systematic understatement of the cost of federal credit programs. This distortion occurs because of the failure of FCRA rules to account for the full cost of all of the risks associated with providing such credit.

The failure to fully account for the cost of risk has several significant consequences. For one, it has sometimes resulted in the budgetary illusion that government credit programs reduce the government budget deficit. For example, in 2011 the Office of Management and Budget (OMB) reported that new credit extensions reduced the budget deficit by $20.5 billion.[3]

The apparent cost advantage of government credit assistance over private lenders is, in the opinion of the FER, primarily due to FCRA accounting rules, rather than to any inherent economic advantage of the government. Under FCRA rules the recorded budgetary costs of most federal credit programs are calculated by discounting to the present the projected expected cash flows over the life of the loan or guarantee using current, maturity-matched, Treasury interest rates as the discount factors. Use of Treasury rates as discount factors, however, fails to account for the costs of the risks associated with government credit assistance -- namely, market risk, prepayment risk, and liquidity risk. Those costs must ultimately be borne by taxpayers, just as they must be borne by the equity holders (owners) of private lenders that make private loans. Also, the government's practice of using Treasury rates to discount risky cash flows would generally be precluded by private sector accounting practices. Thus, FCRA rules cause government

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[1] See Appendix I for a discussion of the role of FCRA accounting rules.

[2] In addition, Fannie Mae and Freddie Mac, which are now federally owned and controlled, back more than $5 trillion in mortgages. However, those institutions are not accounted for under FCRA.

[3] The biggest reductions came from direct student loans ($21.7 billion) and Federal Housing Administration mortgage guarantees ($6.7 billion). Many smaller programs, however, showed a budgetary cost which offset some of those gains. For 2013, the Congressional Budget Office (CBO) projects that programs under FCRA will reduce the reported budget deficit by about $45 billion. But when the cost of risk is taken into account, CBO projects that the same programs will cost taxpayers $11 billion, a swing of $56 billion.

accounting to be inconsistent both with basic economic valuation principles and with financial reporting by the private sector. [4]

The FER believes that, to correct this undervaluation of costs, current FCRA rules should be amended to require an approach to cost estimation that fully recognizes the cost of risk in the government's credit programs. This can be accomplished by the use of discount rates that capture all risks borne by taxpayers, and in particular by the use of discount rates consistent with market-based or fair value estimates of cost. [5] This proposal, it should be noted, is consistent with Title 1 of HR 3581, the "Budget and Accounting Transparency Act of 2012," now before the Congress, which would amend FCRA by mandating a fair-value approach to credit cost estimates.

Adoption of our proposed remedy would make the true budgetary implications of credit assistance more transparent to program administrators, policy makers and the public. It would also eliminate a number of perverse incentives caused by use of current FCRA rules. In particular, (1) credit and non-credit assistance would be made more comparable in the budgetary process;[6] (2) the government would be able to buy and sell loans at market prices without significant budgetary effects, eliminating the current budgetary arbitrage opportunity in buying loans at market prices and booking them at higher FCRA values;[7] and (3) the privatization of Fannie Mae and Freddie Mac would be facilitated.[8] While the FER recognizes that adopting new procedures will entail additional administrative costs for the government, we believe that the potential benefits of improved cost estimates for government credit programs will significantly exceed the costs.

Lastly, the FER wants to emphasize that the focus of this statement is on the appropriate methodology to use when measuring and accounting for the costs associated with government credit programs. It does not deal with the potential benefits of these programs. Determining whether a particular government credit program is in the public interest requires a careful assessment of both costs and benefits.

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[4] See Appendix II for a discussion of the appropriate discount to use for evaluating the cost of government credit assistance.

[5] For loan guarantees, which are equivalent to financial put options, the most accurate way to impute values and discount rates is often through the use of an options pricing model.

[6] For example, in deciding between offering credit assistance or a grant (e.g., to support higher education or to encourage development of alternative energy technologies), current budgetary treatment favors the choice of credit assistance over grants with the same economic cost to taxpayers.

[7] The government has an incentive to buy loans at fair market prices because it can record a gain equal to the difference between the market price and FCRA value of the loans. Following that strategy, in 2009 the Treasury reported a gain of about $5 billion from open-market purchases of $220 billion of Agency MBSs. Also, Congress prescribed FCRA accounting for preferred stock investments in small banks under the Small Business Financing and Investment Act of 2009, significantly understating the cost of that program. Conversely, were the government to sell loans at a fair market price, it would incur a budgetary loss from an economically neutral transaction.

[8] The Administration accounts for Fannie Mae and Freddie Mac on a cash basis as if they were non-governmental entities, and CBO accounts for them on a fair value basis. Neither approach produces cost estimates that are directly comparable with those for other federal mortgage programs, which are accounted for under FCRA. See Congressional Budget Office, "The Budgetary Impact of Fannie Mae and Freddie Mac," Letter to the Honorable Barney Frank, Congressional Budget Office, September 2010,
http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/117xx/doc11745/09-16-frank-letter.pdf

Nevertheless, a critical component of such analyses is to obtain an accurate measure of the budgetary cost associated with a government credit program, which adoption of our proposed remedy would accomplish.

Appendix I: The Role of FCRA Accounting Rules

The federal budget serves as a record of federal revenue and expenditures. It also articulates the government's priorities by allocating limited funds among various federal programs. For policymakers and the public to make informed decisions, the federal budget should reflect the full cost of both credit and non-credit programs.

The budgetary costs of most federal programs are recorded on a cash basis, which means that only actual cash flows in and out of the government in a given year are reported for that year. Those cash flows reflect the market prices of the goods and services purchased by the government. By contrast, the costs of most federal credit programs are accounted for on an accrual basis. In principle an accrual approach for credit programs makes their costs more comparable to those of most other programs because the accruals aim to capture the lifetime cost of credit extended in a given year. For instance, a cash grant for tuition in the current year can be compared with the lifetime cost of a subsidized student loan made in the same year.

Accrual costs for credit programs are calculated under the guidelines set forth in the Federal Credit Reform Act of 1990 (FCRA). Under that statute, the "subsidy cost" associated with new loans and loan guarantees is measured by discounting all of the expected future cash flows associated with the loan or loan guarantee to a present value at the date the loan is disbursed. FCRA requires the use of maturity-matched Treasury rates for discounting, without any risk-adjustment.

Appendix II: Appropriate Discount Rates for Valuing Government Loans and Loan Guarantees

The appropriate methodology for evaluating the cost of government credit assistance is to use the same discount rates that are used by private businesses and investors who might provide such assistance.[9] When the government makes or guarantees a risky loan, the transaction generates a stream of uncertain future cash flows into and out of the Treasury. If the present value of future cash flows from a loan falls short of the principal loaned out, the difference represents a cost to the government. Similarly, for a loan guarantee, when the present value of future cash outflows to cover default losses exceeds all upfront fees received there is a cost to the government.

Those costs ultimately must be borne by taxpayers and the general public. To see why that is true, consider a risky student loan funded by the federal government with Treasury debt. If the student repays the loan in full then the proceeds can be used to pay back the Treasury debt holders, and if there is money left over it can be used to increase other government spending or to reduce taxes. However, if the borrower fails to pay in full, the Treasury debt will be repaid either by new tax revenues or by reductions in current or future government spending. Taxpayers and the public therefore are the de facto equity-holders in government investments and must bear all of the associated costs, including the costs of the risks associated with those credit programs. (While in the event of a loss the government can avoid

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[9] The same principles apply to evaluating the costs of other types of government financial activities.

immediate tax increases or spending cuts by additional Treasury borrowing, the new borrowing eventually has to be repaid with interest; it does not erase the loss to taxpayers.)

A critical aspect of making accurate estimates of program costs is selecting appropriate discount rates to use when calculating present values of the cash flows associated with government credit assistance. Because present value calculations are very sensitive to the discount rates chosen, selecting appropriate discount rates is especially important. In the private sector, lenders typically use discount rates that reflect the time-value of money -- a dollar received today is worth more than a dollar received in the future – as well as the "risk premiums" demanded by investors as compensation for their having to bear certain associated risks: (1) market risk, (2) prepayment risk, and (3) liquidity risk.[10] For credit instruments such as loans and loan guarantees, discount rates reflect the risks associated with the uncertainty surrounding expected cash flows. (The average loss rate from defaults, however, is sometimes incorporated into expected cash flows rather than through an adjustment to discount rates.)

Furthermore, it is the riskiness of the underlying loan or guarantee, and not how it is financed, that affects the choice of discount rates for private sector financial institutions. The value of a bank loan which is financed 80 percent by debt and 20 percent by equity is approximately the same as if it were financed with 50 percent debt and 50 percent equity. Risk is distributed differently between debt and equity holders in the two financing schemes, but the total risk to be shared is the same. Hence the total cost of the risk is unaffected by how the loan is financed. The same principle applies to the government—it is the risk of the loan that determines the appropriate discount rate, not the government's cost of debt financing. Although the government can borrow at low Treasury rates, its full cost of capital when it makes a risky loan is higher because it also includes a fair return to taxpayers and the public, who bear the associated risks.

Some commentators have suggested that there is no liquidity risk associated with government credit assistance because the government never needs to sell loans to meet a cash shortfall. Regardless of market conditions, it is argued, the Treasury can always borrow at a low cost. This ability to borrow at low cost, however, depends on the government's power and willingness to raise taxes or print money to repay its debts, and the exercise of these powers can themselves impose significant costs on taxpayers and the public. Indeed, if government liquidity provision were truly a "free good" for everyone, it follows that the government should be made the sole or main provider of liquidity for the entire economy--a conclusion that few would embrace. (In any case, under normal market conditions liquidity premiums are typically small and difficult to separate from other discount rate components.)

Finally, as a practical matter, because most government credit programs do not result in publicly traded instruments, appropriate discount rates are not directly observable from market prices but must be imputed. However, the methodology for doing such calculations is already in use in the private sector,

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[10] Market risk is the aggregate economic risk that remains even after investors have diversified their portfolios to the fullest extent possible. Loans and loan guarantees expose the government to market risk because future repayments of loans tend to be lower when the economy is performing poorly and losses are more costly for the government to absorb because resources are scarce and hence more valuable. Prepayment risk arises when borrowers have the option to prepay a loan before its final maturity date. The option is costly to lenders because prepayments are most likely to occur when market interest rates have decreased and loan values have appreciated. Liquidity risk is the risk that market conditions may make it difficult to quickly find a buyer for an asset without large price concessions.

and private financial institutions already do this when reporting the fair values (market values) of their financial assets and liabilities. Thus, acceptable accountancy and valuation procedures exist which can be used to calculate appropriate discount rates for valuing government loans and guarantees.

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