















Evaluation Report



Report Number: OIG-SBLF-12-001

SMALL BUSINESS LENDING FUND: Treasury Should Consider Supervisory Concerns Regarding participant Management and Historical Retained Earnings When Estimating the Cost of the SBLF Program

December 22, 2011

Office of Inspector General

Department of the Treasury

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Abbreviations

FBA	federal banking agency
FCRA	Federal Credit Reform Act of 1990
OIG	Office of Inspector General
OMB	Office of Management and Budget
SBLF	Small Business Lending Fund

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OIG

The Department of the Treasury Office of Inspector General

December 22, 2011

Don Graves, Jr. Deputy Assistant Secretary for Small Business, Housing, and Community Development

This report summarizes our evaluation of the initial cost estimate of the Small Business Lending Fund (SBLF) program that Treasury prepared in December 2010, and the re-estimate made in October 2011 for inclusion in Treasury's Fiscal Year 2011 financial statements. The objectives of our evaluation were to: (1) identify the key inputs and assumptions used to prepare the cost estimate; and (2) determine how the current status of the program will impact future cost re-estimates.

We reviewed documentation provided by Treasury concerning the structure of the model used to generate the cost estimates, the inputs and assumptions used in the model, and corresponding sources of information. We discussed the model's operation with personnel from Treasury and the Office of Management and Budget (OMB), re-performed the model's calculations with Treasury's assistance, and discussed with Treasury possible effects of changes in key inputs and assumptions on the cost estimate.

Instead of costing taxpayers \$1.26 billion as originally estimated, Treasury is currently projecting that the SBLF program will generate a savings of \$0.08 billion, primarily due to lower than expected participation volume. To a lesser extent, changes in projected default¹ rates and market interest rates also contributed to the difference in estimates. Treasury believes that the SBLF program will incur fewer defaults due to higher participant quality than expected, as evidenced by numerous financial and operational metrics of participants that have proven to have predictive value with respect to historical defaults. However, the metrics used by Treasury may not, in themselves, be sufficient to project default rates for banks, particularly de novo banks, which represent many SBLF participants, and which frequently have financial problems because of inadequate controls and risk management practices. Further, while Treasury reviewed the current earnings of applicant banks, it did not consider historical retained earnings as an indicator of earnings

¹ A default constitutes nonpayment of Treasury's principal investment by SBLF participants. Treasury Should Consider Supervisory Concerns Regarding Participant Management and Historical Retained Earnings When Estimating the Cost of the SBLF Program Page 1 (OIG-SBLF-12-001)

performance. We believe that these issues could impact the default rate used to estimate the cost of the SBLF program.

We recommend that in estimating default rates for future program cost reestimates, Treasury obtain and consider: (1) supervisory information regarding the adequacy of bank internal controls and risk management practices; and (2) public information regarding participants' historical retained earnings.

Background

Treasury established the SBLF program in accordance with the Small Business Jobs Act of 2010 (the Act). The program was authorized to provide \$30 billion in equity capital to qualified community banks and other eligible financial institutions to encourage lending to small businesses, help create jobs, and promote economic growth.

In December 2010, before accepting any applicants, Treasury estimated the cost of the SBLF program to be \$1.26 billion.² Treasury excluded administrative costs from its estimate in accordance with guidelines for the Federal Credit Reform Act of 1990 (FCRA).³ The \$1.26 billion cost estimate was based on a 7.24 percent subsidy rate, which represents a cost to taxpayers of \$7.24 for each \$100 disbursed through the program.

In preparing the estimate, Treasury anticipated that over half of the funding (about \$17 billion) provided by the SBLF would be disbursed, primarily based on the then-current Tier 1 capital ratios of expected applicants and the number of institutions in the Capital Purchase Program that were likely to refinance. Treasury also anticipated that by increasing lending to small businesses, participants could reduce their average annual dividend rate paid on SBLF securities to between 2.60 and 2.76 percent, until the rate automatically increased to 9 percent after 4.5 years in the program. In total, Treasury estimated that dividend payments to the government would total roughly \$3.6 billion over the life of the program, which would be partially offset by \$2.5 billion in estimated defaults.

The cost estimate was produced using an equity model⁴ that had been developed by Treasury's Office of Financial Stability. The model was adjusted so that the cost of SBLF could be estimated in accordance with FCRA, which

² This estimate was included in the President's fiscal year 2012 budget.

³ Program administrative costs must be excluded from subsidy cost estimates, according to OMB Circular A-11, section 185.2.

⁴ The model employs statistical software to generate a value for preferred stock.

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required consideration of credit risk and not total market risk.⁵ In accordance with FCRA, the SBLF cost estimate is computed on a present-value basis, and represents the net present value of expected disbursements, repayments, and receipts from dividends over the life of the program. Net present value expresses a flow of current and future income or payments in terms of an equivalent lump sum received or paid today. It is dependent on the rate of interest known as the discount rate that is used to translate future cash flows into current dollars.

After Treasury prepared its December 2010 cost estimate, the volume of applications and the rate of disbursements fell below budget projections. By the September 27, 2011, funding deadline, only 935 institutions had applied to the program, of which 332 received total investments of \$4.03 billion.

In October 2011, Treasury re-estimated the cost of the program for inclusion in Treasury's Fiscal Year 2011 financial statements, maintaining standard model assumptions but using actual participant data. This data consisted of the total amount of investment, market interest rates at the time investments were made, initial dividend rates, and 14 financial and operating metrics for each participant. Projected future cash flows were based on assumptions about bank defaults, prepayments, and dividend rates given historical trends in these areas for financial institutions of comparable size to SBLF participants.

Treasury must report semiannually to Congress on the SBLF program's actual and projected costs, liabilities, and transactions in accordance with Section 4106(2) of the Act.⁶ The first semiannual cost report was issued on July 19, 2011, and disclosed that Treasury had invested \$123 million in capital in 6 institutions since June 2011. The report also projected total operating expenses in fiscal year 2011 of approximately \$40 million, less than the initial estimate of \$55 million. The next semiannual cost report is due in January 2012.

Program Re-estimate Projects a Cost Savings

Instead of costing taxpayers \$1.26 billion as originally estimated, Treasury is currently projecting that the SBLF program will generate a savings of \$0.08

⁵ Total market risk includes credit risk plus the risk that losses from defaults will be higher during periods of market stress.

⁶ Treasury must report to Congress all projected costs and liabilities, operating expenses,

compensation for financial agents, and investment transactions after March and September of each year.

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billion. This estimate represents a decrease of \$1.34 billion from the initial cost estimate, and corresponds to a downward adjustment of the program subsidy rate from 7.24 percent to -1.98 percent. This excludes administrative costs, projected to be \$26 million in fiscal year 2012, for monitoring the performance and compliance of participants, reporting on the program's performance and costs, and managing the securities purchased through the program. Treasury estimates that repayments of principal and dividend payments will exceed the amount disbursed, and the present value of cash flows through the SBLF program will be more than the amount disbursed in 2011.

The majority of the decrease in Treasury's total cost estimate is due to a lower-than-expected participation volume, from \$17.4 billion estimated for the President's fiscal year 2012 budget, to an actual total investment of \$4.03 billion. The remainder of the decrease is due to lower-than-projected: participant default rates; interest rates at the time investments were made; and projected market interest rates.

Treasury initially estimated that default losses by the end of the program's tenth year would be \$2.5 billion or 14.4 percent of the \$17.39 billion in total program investment expected at the time of the initial estimate. However, the re-estimate assumed total default losses of \$173 million, or 4.3 percent of the \$4.03 billion actual total program investment. Treasury estimated the default losses by first simulating a credit rating for each SBLF participant using 14 financial and operating metrics that correlate with the published credit ratings provided by a credit ratings agency for peer institutions. The metrics included information on capital level, asset quality, earnings, operating expenses, and liquidity. Treasury applied the historical default tables provided by the ratings agency to project the likelihood of default for each SBLF institution based on these correlations. Treasury then calculated an aggregate default rate for the entire portfolio of SBLF participants based on the default rates of non-SBLF institutions that had ratings similar to those calculated by Treasury.

Additionally, interest rates that were provided by OMB at the time of the SBLF disbursements were lower than originally estimated. A rate of 2.1 percent was used to determine the government's cost of funds on disbursements, compared to the 2.7 percent rate used in the original estimate. The 2.1 percent interest rate was used to discount expected future cash flows for the re-estimate. This interest rate was also the rate at which interest was paid to Treasury's Bureau of Public Debt on funds borrowed to make the SBLF investments, and the rate at which interest was earned on funds in the SBLF financing account. Projected future rates provided by OMB are used as the

market rate to support assumptions about the amount of prepayments that would occur throughout the life of the program. The cost model used by Treasury assumes that participants are more likely to prepay⁷ their principal when market interest rates are lower relative to an institution's dividend rate and their financial position is strong enough to allow them to do so as indicated by their asset-to-liability ratio. The initial SBLF estimate projected \$10.3 billion in prepayments by the end of the tenth year, representing only 59 percent of the \$17.39 billion total expected investment. In contrast, the reestimate projects total prepayments to be \$3.32 billion, representing 82 percent of the \$4.03 billion total investment.

While a higher-than-expected prepayment rate might have raised the cost of the program due to the loss of scheduled future dividend payments, the higher prepayment rate was more than offset by fewer expected defaults and lower interest rates both at the time of investment and in the future, all of which resulted in a higher present value of expected future cash flows from the program.

The significant change in Treasury's cost and subsidy estimates for the SBLF program is not unusual for a new program as initial estimates are based largely on assumptions. Given that Treasury now has actual data on the size of its investment and the health of participating institutions, it believes that future re-estimates should not deviate that significantly from its 2011 estimate, assuming that market conditions are consistent with current projections. This may not hold true, however, if banks default at a higher rate than expected, which we believe could occur because Treasury did not consider the impact of supervisory management issues or historical retained earnings when projecting bank defaults.

Treasury's Re-estimate Did Not Consider Supervisory Concerns Regarding Participant Management and Historical Retained Earnings that Could Impact the Default Rate

Recent reviews of 23 of the first 55 approved institutions conducted by the Treasury Office of Inspector General (OIG) determined that 12 had multiple supervisory issues documented in bank examinations that could impair their ability to pay dividends to Treasury and repay their SBLF investments. Bank examination reports showed that regulators were concerned about the bank's management for 8 of the 12 approved banks, and 8 had negative or weak earnings. Further, Treasury expects one of the 12 banks to use the SBLF funds

⁷ Principal repaid by participants before the end of the program's tenth year represents prepayment. Treasury Should Consider Supervisory Concerns Regarding Participant Management and Historical Retained Earnings When Estimating the Cost of the SBLF Program Page 5 (OIG-SBLF-12-001)

to pay SBLF dividends. These factors could lead to a higher than expected default rate among participant banks, which could result in Treasury receiving less income than expected over the life of the SBLF program, thereby increasing program costs.

While Treasury evaluated the ability of institutions to generate cash in the future based on their capital levels, asset quality, earnings, operating expenses, and liquidity, it did not consider supervisory concerns about bank controls and risk management practices. We believe Treasury should consider supervisory concerns about bank management in evaluating whether a participant's future cash flow will be sufficient to meet its obligations under the SBLF program.

These factors are particularly important to the financial stability of de novo banks, which have a higher failure rate than other banks. De novo institutions represent approximately 14 percent of SBLF institutions participating in the SBLF program by dollar value, and 10 of the 12 institutions with multiple supervisory issues discussed above. Concerned that such banks have management issues which have led to increased financial problems, in 2009 the Federal Deposit Insurance Corporation implemented enhanced supervisory procedures for de novo institutions, subjecting them to closer supervision for 7 years, up from 3 years.

Treasury also did not consider concerns regarding participants' historical retained earnings. Retained earnings trends over time reflect management's risk management strategy and tolerance for risk, and information on historical retained earnings can reveal concerns regarding the stability and strength of an institution.

Recommendation

We recommend that in estimating default rates for future program cost reestimates, Treasury obtain and consider: (1) supervisory information regarding the adequacy of bank internal controls and risk management practices; and (2) public information regarding participants' historical retained earnings.

Management Response

Treasury agreed that the SBLF program's credit reform model should include inputs that are likely to result in the most accurate program cost estimates. Management stated that it developed its existing model following extensive testing to identify variables that would provide predictive value with respect to defaults. The model is a quantitative analysis that draws from historical experience in order to generate estimates of future performance. Therefore, adding measures of internal controls and risk management practices to the credit reform model may decrease the objectivity of the model without increasing its predictive value. Incorporating information regarding internal controls and risk management practices would be unlikely to materially change the program's cost estimates. Further, management stated that Treasury's model already accounts for the heightened risks associated with de novo institutions, which comprise less than 15 percent of the program's portfolio value. Nevertheless, Treasury will continue to work with the OIG to identify ways to address default rates for de novo institutions in future re-estimates.

Additionally, management stated that it previously evaluated the impact of participants' historical retained earnings on the default rate, and found that it did not provide incremental predictive value in projecting expected defaults. Nonetheless, Treasury appreciates this recommendation and is committed to working with the OIG to incorporate inputs that enhance the accuracy of the program's cost estimates.

OIG Comments

We do not consider management's response to be fully responsive to the recommendation, as management's comments suggest that the recommended actions would have no predictive value and management did not identify specific actions it will take in response to the recommendation.

Although the model is a quantitative analysis, a substantial part of that analysis is a credit rating which Treasury simulates for each participant. We believe that in addition to using financial and operating metrics to simulate the credit rating, Treasury could consider and weight qualitative factors, such as a bank's credit management practices, in assigning each participant credit rating, similar to the process used in the repayment analysis supporting the SBLF investment decisions. Although the repayment analysis is quantitative in that it generates a repayment probability, qualitative factors are heavily considered in that analysis. We disagree with Treasury's assertion that there is little empirical research that correlates risk management practices and internal controls with historical default rates. Several studies performed by the Federal Reserve Bank⁸ have proven a strong correlation between management practices and bank failure.

⁸ See publications at http://www.philadelphiafed.org/bank-resources.

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Previous Treasury OIG and federal banking agencies' (FBA) reports have shown that poor bank management can contribute substantially to the decline of a bank. Management strategies of rapid asset growth and risky lending practices contributed to multiple recent financial institution failures reviewed by the Treasury OIG. FBAs regard bank management, which is the governance capability of an institution to identify, measure, monitor and control the risks of an institution's activities and to ensure safe, sound, and efficient operations, as the most important element for successful operation of a financial institution.

We believe that Treasury's response marginalizes our recommendation based on its misinterpretation that our finding applies only to de novo banks, which are a minor percentage of total SBLF participants. We believe that supervisory concerns about a bank's risk management practices and controls can affect the default rate for all SBLF participants.

Finally, while Treasury suggests that historical retained earnings would not provide incremental predictive value in projecting expected defaults, it has not demonstrated that it does not provide such value. We also believe that historical retained earnings serves as an indicator of a bank's ability to repay Treasury's investment and dividends, and should be considered in projecting the revenue stream expected from each bank.

Because management's comments were not fully responsive, we plan to pursue resolution of this recommendation through the audit resolution process.

We appreciate the courtesies and cooperation provided to our staff during the evaluation. If you wish to discuss the report, you may contact me at (202) 622-8253 or Lisa DeAngelis, Audit Director, at (202) 927-5621.

/s/

Debra Ritt Special Deputy Inspector General for Office of Small Business Lending Fund Program Oversight

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We conducted an evaluation of the initial cost estimate of the Small Business Lending Fund (SBLF) program that Treasury produced in December 2010. We determined which inputs and assumptions were used to prepare the cost estimate, and how the current status of the program will impact future cost re-estimates.

We reviewed documentation provided by Treasury supporting the structure of the model used to generate the original and revised cost estimates, the inputs and assumptions used in the model, and corresponding sources of information. We discussed the model with personnel from Treasury and the Office of Management and Budget, and operated the model with the assistance of Treasury personnel to understand the process used to run the model and the effect on the model's output of changes in key inputs and assumptions. We also reviewed SBLF investment decisions.

We planned and performed the evaluation to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our evaluation objectives.

We performed this evaluation in accordance with the Quality Standards for Inspection and Evaluation issued by the Council of the Inspectors General on Integrity and Efficiency. Consistent with the evaluation objectives, we did not assess SBLF's overall internal control or management control structure, obtain data from their information systems, or assess the effectiveness of their information system controls. We also did not perform a detailed compliance review of all of the Small Business Jobs Act requirement.

Appendix 2 Management Response

DEPARTMENT OF THE TREASURY WASHINGTON. D.C. 20220 December 21, 2011 Debra Ritt Special Deputy Inspector General for Office of Small Business Lending Fund Program Oversight U.S. Department of the Treasury 1500 Pennsylvania Avenue, NW Washington, DC 20220 Dear Ms. Ritt: Thank you for the opportunity to review your draft report regarding the cost estimate of the Small Business Lending Fund (SBLF) program. Enclosed please find our response to the recommendation in the draft report. We appreciate the valuable feedback your team has offered throughout the course of this audit, and look forward to continuing to work together as the SBLF program moves forward. Sincerely, Don Graves Jr. Deputy Assistant Secretary for Small Business, Community Development, and Affordable Housing Policy

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We recommend that in estimating default rates for future program cost re-estimates, Treasury obtain and consider (1): supervisory information regarding the adequacy of bank internal controls and risk management practices; and (2) public information regarding participants' historical retained earnings.

Management Response

Treasury agrees that the SBLF program's credit reform model should include inputs that are likely to result in the most accurate program cost estimates. Treasury developed its existing model – which incorporates 14 separate observable factors – following extensive testing to identify variables that would provide predictive value with respect to defaults. Treasury welcomes OIG's input on ways in which to further refine the model to enhance its accuracy.

The draft report recommends that Treasury consider supervisory information regarding internal controls and risk management practices in future cost re-estimates, stating that these factors are particularly important to the financial stability of de novo institutions. Treasury notes, however, that the model is a quantitative analysis that draws from historical experience in order to generate estimates of future performance. Measures of internal controls and risk management practices are inherently subjective, and there is little empirical research that correlates such measures with historical default rates; therefore, adding such measures to the credit reform model may decrease the objectivity of the model, without increasing its predictive value.

In addition, incorporating information regarding internal controls and risk management practices would be unlikely to materially change the program's cost estimates. For example, Treasury's model already accounts for the heightened risks associated with de novo institutions, projecting that such institutions will have, on average, a default rate that is 40 percent higher than that of other SBLF participants. But, as noted in the draft report, de novo institutions account for less than 15 percent of the program's portfolio value, so changes in the estimated default rates for these institutions are unlikely to significantly impact the program's overall cost estimate. For example, even if default rates for de novo institutions were twice the levels currently projected, the program's overall subsidy rate would be 1.7 percent – a shift of just 0.3 percentage points from the estimate that was included in Treasury's fiscal year 2011 financial statements.

Nevertheless, because additional refinements to the model's estimates of the default rates associated with de novo institutions may have some predictive value, Treasury will continue to work with OIG to identify ways to address these factors in future re-estimates.

OIG also recommends that Treasury consider public information regarding participants' historical retained earnings. Treasury previously evaluated this factor and found that it did not provide incremental predictive value in projecting expected defaults. Nonetheless, Treasury appreciates this recommendation and is committed to working with the OIG to incorporate inputs that enhance the accuracy of the program's cost estimates.

Treasury Should Consider Supervisory Concerns Regarding Participant Management and Historical Retained Earnings When Estimating the Cost of the SBLF Program Page 11 (OIG-SBLF-12-001) Appendix 3 Major Contributors

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Department of the Treasury

Deputy Secretary Office of Strategic Planning and Performance Management Office of Financial Management Office of Accounting and Internal Control

Office of Management and Budget

OIG Budget Examiner

United States Senate

Chairman and Ranking Member Committee on Small Business and Entrepreneurship

Chairman and Ranking Member Committee on Finance

Chairman and Ranking Member Committee on Banking, Housing and Urban Affairs

United States House of Representatives

Chairman and Ranking Member Committee on Small Business

Chairman and Ranking Member Committee on Financial Services

Government Accountability Office

Comptroller General of the United States