DEFAULT RATE REPORT

AS OF
JUNE 2020

EXPORT-IMPORT BANK
OF THE UNITED STATES

FISCAL YEAR 2020 (Q3) DEFAULT EXPERIENCE
EXPORT-IMPORT BANK OF THE UNITED STATES

Table of Contents

Statutory Requirement

This report is prepared in accordance with the requirements of 12 U.S.C. § 635g(g)(1).

"(g) Monitoring of default rates on bank financing; reports on default rates; safety and soundness review

"(1) MONITORING OF DEFAULT RATES.—Not less frequently than quarterly, the Bank shall calculate the rate at which the entities to which the Bank has provided short-, medium- , or long-term financing are in default on a payment obligation under the financing, by dividing the total amount of the required payments that are overdue by the total amount of the financing involved.

"(2) ADDITIONAL CALCULATION BY TYPE OF PRODUCT, BY KEY MARKET, AND BY INDUSTRY SECTOR; REPORT TO CONGRESS—In addition, the Bank shall, not less frequently than quarterly-

(A) calculate the rate of default-

(i) with respect to whether the products involved are short-term loans, medium-term loans, long-term loans, insurance, medium-term guarantees, or long-term guarantees;

(ii) with respect to each key market involved; and

(iii) with respect to each industry sector involved; and

(B) submit to the Committee on Banking, Housing, and Urban Affairs of the Senate and the Committee on Financial Services of the House of Representatives a report on each such rate and any information the Bank deems relevant.

Executive Summary

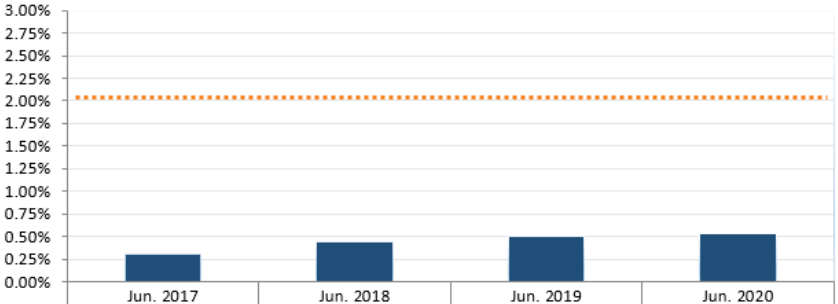
About EXIM

The Export-Import Bank of the United States (EXIM) supports and promotes American jobs through exports. EXIM provides export financing through its loan, guarantee, and insurance programs in cases where the private sector is unable or unwilling to provide financing. For some American exporters, accessing needed export financing may be difficult for certain creditworthy transactions because of regulatory constraints; the credit risk of the country acquiring the exports; and/or competition from foreign export promotion efforts. EXIM offers needed support to facilitate these transactions that are creditworthy but face unique challenges.

Default Rate

The default rate, as defined in this report, reflects actual defaults at a point in time.[1] EXIM's default rate as of June 30, 2020, is **0.531 percent** as shown in Exhibit 1. This rate was calculated pursuant to the requirements of 12 U.S.C. § 635g(g)(1) and, accordingly, reflects a "total amount of required payments that are overdue" (claims paid on guarantees and insurance transactions plus loans past due) divided by a "total amount of financing involved" (disbursements).[2] The default rate of 0.531 percent is well below the statutory two percent cap at which EXIM's lending cap would immediately freeze.[3] While EXIM's default rate has remained relatively steady, claim payments due to the outbreak of COVID-19 caused the June 2020 default rate to slightly increase from the March 2020 default rate of 0.473 percent. The low default rates are the result of the agency's continuous efforts to improve its strong underwriting processes, employee expertise, and effective portfolio management in the monitoring of exposure and recoveries on those credits that default.

Exhibit 1: Default Rate



	Jun. 2017	Jun. 2018	Jun. 2019	Jun. 2020
Default Rate	0.303%	0.439%	0.504%	0.531%
Amount Overdue	$398.03	$543.10	$567.35	$552.32
Total Financing	$131,437.05	$123,761.39	$112,559.34	$104,036.24

Data used to calculate the default rate is sourced from the agency's financial management system of records.

[1] This default differs from the default rates published in the Federal Credit Supplement for the President's Annual Budget. The reported rate in the Budget Appendix reflects projected defaults over the life of the loan while the default rate in this report reflects actual defaults at a point in time. The Federal Credit Supplement can be found at https://www.whitehouse.gov/omb/supplemental-materials/.
[2] The default rate is based on actual disbursements and not authorized financing amounts.
[3] 12 U.S.C. § 635e(b)

DEFAULT RATE

DEFINED

Statute requires that EXIM calculate the "*default on a payment obligation [...] by dividing the total amount of the required payments that are overdue by the total amount of the financing involved.*" [4]

$$\frac{\text{Overdue Payments}}{\text{Total Financing}} = \frac{\text{Defaults Paid} + \text{Expenses} - \text{Recoveries}}{\text{Disbursements (Active)}}$$

EXIM calculates its default rate on the total financing of its active credit portfolio. Any disbursed loan, guarantee, or insurance policy that will mature after the date of this report is included as part of the active portfolio. Any claim payments made for guarantees and insurance transactions and any direct loan payments in arrears in EXIM's active portfolio are considered to be in default.

***Active Credit Example**: A long-term guarantee authorized in FY 2011 with a 10-year repayment term (the transaction matures in FY 2021)*

***Inactive Credit Example**: A long-term guarantee in FY 1994 with a 10-year repayment term (the transaction matured in FY 2004)*

Data used to calculate the default rate is derived from information contained in EXIM's financial system of record, which records all accounting data for all authorized transactions. EXIM uses this data to calculate the components of the default rate.

RISK MANAGEMENT

Providing support to United States exporters is key to the mission of EXIM as an institution and an effective comprehensive risk management framework is an integral, underlying requisite for the agency to properly utilize its authority, provide transparency, and strengthen taxpayer protections. EXIM continues to conduct prudent oversight and due diligence through a comprehensive risk management framework. This framework starts with effective underwriting to ensure a reasonable assurance of repayment. Risk management continues after a transaction is approved with proactive monitoring efforts to minimize defaults and aggressively pursue recoveries, when appropriate. EXIM also engages in oversight and governance of the agency's portfolio, which includes setting aside adequate loan loss reserves for all transactions.

[4] 12 U.S.C. § 635g(g)(1)

Components of the Default Rate

Numerator – Overdue Payments

The "total amount of required payments that are overdue," representing the numerator, is defined as claims paid on guarantees and insurance transactions as well as unpaid past due installments on loans in EXIM's active portfolio, net of any recovered amounts collected and expenses incurred related to recovery efforts. The breakdown of the components of overdue payments is provided below.

Overdue Payments	=	$580M *(Defaults Paid)*	-	$28.3M *(Recoveries)*	+	$0.5M *(Expenses)*	=	$552.3M

Defaults Paid

Defaults paid is calculated differently for direct loans, loan guarantees and insurance transactions. For loan guarantees and insurance transactions, upon default of a payment obligation by the foreign buyer of the U.S. export, EXIM pays a claim to the guarantors or the insured parties. These claim payments represent defaults paid. For loans, all monies 30 days or more past due are considered defaults. As of June 2020, EXIM paid out $161.5 million in claims and had $418.5 million loans past due in its active portfolio for a total of $580 million in defaults paid.

Recoveries

Recoveries made after a default are applied to the specific claim paid or to the loan in arrears and thereby reduce the amount overdue. All recovered amounts are discounted to the time of claim payment or when the direct loan went into arrears. As of June 2020, EXIM recovered $28.3 million. These recoveries, as well as fees collected from borrowers, are used to offset default claims paid. Recovery efforts occur on a continuous basis, and EXIM frequently collects recoveries for several years after the initial default.

Expenses

All expenses incurred related to EXIM's recovery efforts are added to the amount overdue. As of June 2020, EXIM incurred $0.5 million of expenses related to the recovery process.

Denominator – Total Financing

The "total amount of financing involved," the denominator, is defined as the disbursed financing associated with EXIM's active portfolio.

Total Financing	=	$104,036.2M *(Disbursements)*

As of June 2020, EXIM provided a total financing of $104,036.2 million under its loan, guarantee, and insurance programs.

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[4] 12 U.S.C. § 635g(g)(1)

Reserves

In addition to reserve requirements under the *Federal Credit Reform Act of 1990*, as amended, EXIM must maintain a certain level of total reserves to protect against future losses.[8]

> *"6(b) **Reserve Requirement**. The Bank shall build to and hold in reserve, to protect against future losses, an amount that is not less than 5 percent of the aggregate amount of disbursed and outstanding loans, guarantees, and insurance of the Bank.*

As of September 30, 2019, EXIM total reserves equaled $3.3 billion, which was 7.0 percent of EXIM's outstanding exposure ($47.3 billion).

[8] 12 U.S.C. § 635e(b)

DEFAULT RATE – BY SUBCATEGORIES

DEFAULT RATE: BY SUBCATEGORY

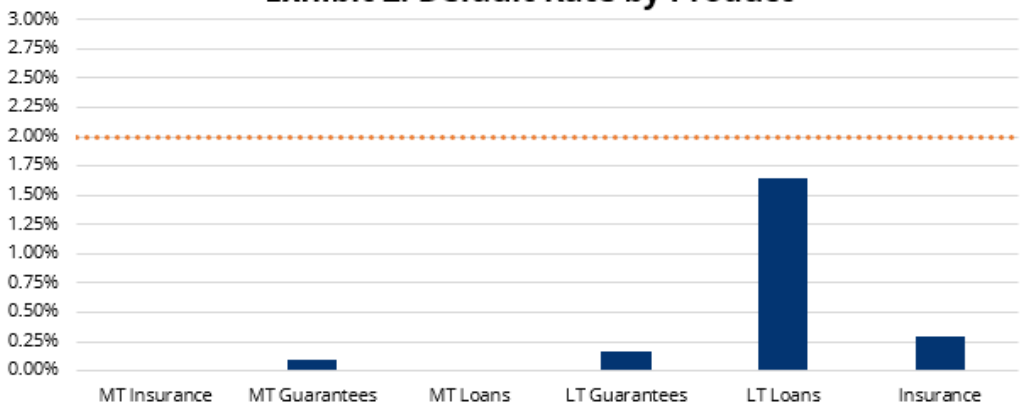
As required by statute, EXIM has calculated default rates based on each subcategory as of June 30, 2020.[9]

> *"(2) ADDITIONAL CALCULATION BY TYPE OF PRODUCT, BY KEY MARKET, AND BY INDUSTRY SECTOR; REPORT TO CONGRESS.—"*

By Type of Product

EXIM offers loans, guarantees, and insurance products. EXIM reports the default rate for[10]: medium-term loans; long-term loans; insurance; medium-term guarantees; and long-term guarantees.[11] In general, medium-term transactions have a tenor greater than one year and are under $25 million and long-term transactions are all transactions greater than seven years or more than $25 million. As of June 30, 2020, all products had a default rate below 2 percent. Exhibit 2 provides a breakout of the default rate by product.

Exhibit 2: Default Rate by Product



	MT Insurance	MT Guarantees	MT Loans	LT Guarantees	LT Loans	Insurance
Amount Overdue ($ millions)	$ -	$ 0.7	$ -	$ 128.2	$ 418.5	$ 4.9
Total Financing ($ millions)	$ 262.9	$ 759.8	$ -	$ 74,780.0	$ 25,391.7	$ 1,695.9
Default Rate (%)	0.000%	0.091%	0.000%	0.171%	1.648%	0.290%

[9] 12 U.S.C. § 635g(g)(2)

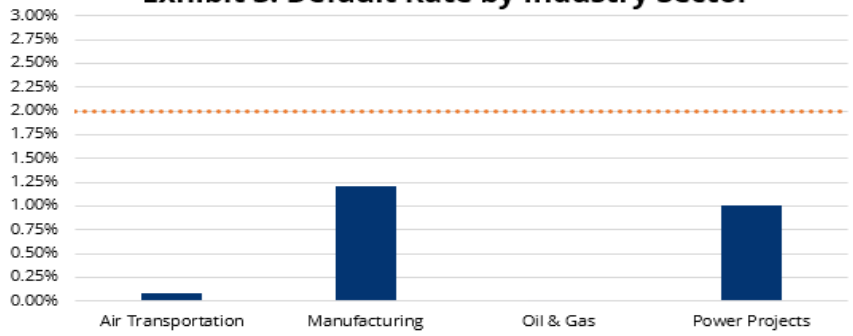
[10] In compliance with 12 U.S.C. § 635g(g)(1), EXIM reports the default rates for: short-term loans; medium-term loans; long-term loans; insurance; medium-term guarantees; and long-term guarantees. Currently, there are no short-term loans in its active portfolio, and therefore no short-term loan default rate is reported.

[11] Consistent with Section 54002(a) of the *Export-Import Bank Reform and Reauthorization Act of 2015* (P.L. 114-94), the medium-term program's financing cap was expanded from $10 million to $25 million, effective May 2019. The default rate of medium-term financing is calculated on the categorization of the transaction at the time of authorization.

By Industry Sector

The four largest industries in EXIM's active portfolio are Air Transportation, Manufacturing, Oil & Gas, and Power Projects. These sectors account for 88.2 percent of the total amount of EXIM financing, and all sectors have experienced a default rate below 2 percent as shown in Exhibit 3.

Exhibit 3: Default Rate by Industry Sector

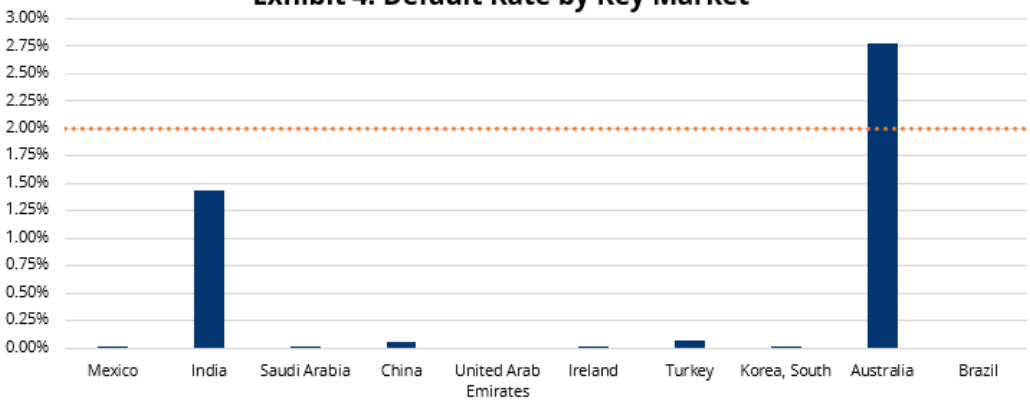


	Air Transportation	Manufacturing	Oil & Gas	Power Projects
Amount Overdue ($ millions)	$ 52.9	$ 141.2	$ 0.0	$ 42.6
Total Financing ($ millions)	$ 61,353.3	$ 11,683.0	$ 14,556.7	$ 4,200.5
Default Rate (%)	0.086%	1.209%	0.000%	1.014%

By Key Market

As of June 30, 2020, EXIM has exposure in more than 160 countries. As shown in Exhibit 4, the top ten markets, except for Australia, have experienced a default rate well below two percent.[12] The default rate for Australia is primarily driven by one default that occurred in 2015 that is a relatively large share of the total financing. Excluding the single defaulted credit, the default rate for the balance of exposure to Australia is 0.000 percent.

Exhibit 4: Default Rate by Key Market



	Mexico	India	Saudi Arabia	China	United Arab Emirates	Ireland	Turkey	Korea, South	Australia	Brazil
Amount Overdue ($ millions)	$ 0.3	$ 75.5	$ 0.0	$ 3.1	$ -	$ 0.0	$ 3.5	$ 0.2	$ 136.3	$ -
Total Financing ($ millions)	$ 9,340.7	$ 5,252.6	$ 6,837.0	$ 6,100.2	$ 6,181.7	$ 5,366.1	$ 5,213.6	$ 4,824.3	$ 4,920.8	$ 3,316.9
Default Rate (%)	0.004%	1.438%	0.000%	0.050%	0.000%	0.001%	0.067%	0.004%	2.769%	0.000%

[12] The ten key markets reflect top ten markets by total financing.

Default Rate: By Mandate

EXIM has congressional mandates to support small business, environmentally beneficial, and Sub-Saharan Africa transactions.

EXIM Mandates

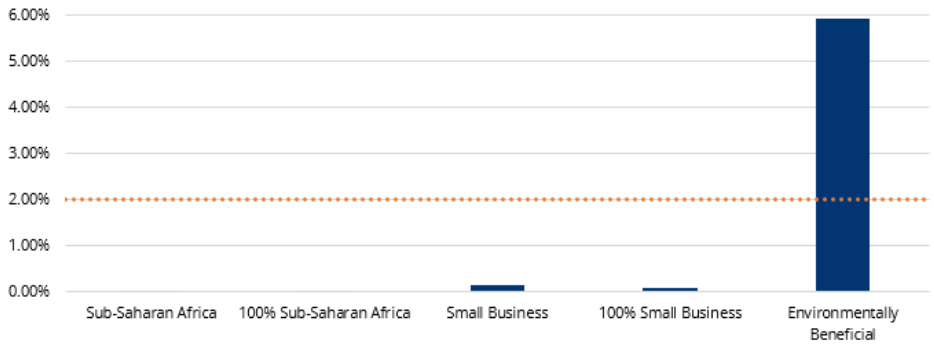
Small Business Mandate (12 U.S.C. § 635(b)(1)(E)(v)): "the Bank shall make available… an amount to finance exports directly by small business concerns (as defined under section 632 of title 15) which shall be not less than 30 percent of such authority for each fiscal year."

Environmentally Beneficial Mandate (12 U.S.C. § 635i-5(b)(1)): "The Bank shall encourage the use of its programs to support the export of goods and services that have beneficial effects on the environment or mitigate potential adverse environmental effects…."

Sub-Saharan Africa Mandate (12 U.S.C. § 635(b)(9)(A)): "The Board of Directors of the Bank shall … promote the expansion of the Bank's financial commitments in sub-Saharan Africa…."

Transactions associated with these mandates account for 11 percent of the total amount of EXIM financing. As of June 30, 2020, all mandates, except for Environmentally Beneficial, have experienced a default rate below two percent as shown in Exhibit 5. The Environmentally Beneficial default rate stood at 5.936 percent in June 2020. The elevated default rate was caused by two transactions that defaulted in March 2020 due to financial and operational issues that pre-existed the outbreak of COVID-19.

Exhibit 5: Default Rate by Mandates



	Sub-Saharan Africa	100% Sub-Saharan Africa	Small Business	100% Small Business	Environmentally Beneficial
Amount Overdue ($ millions)	$ 1.2	$ 1.2	$ 7.0	$ 3.1	$ 82.9
Total Financing ($ millions)	$ 5,331.7	$ 5,304.2	$ 4,729.2	$ 2,967.5	$ 1,396.6
Default Rate (%)	0.022%	0.022%	0.149%	0.104%	5.936%

Note: "Sub-Saharan Africa" and "Small Business" categories include all transactions that are partially or wholly attributed to these respective categories. The "100% Sub-Saharan Africa" and "100% Small Business" categories only include transactions that are wholly attributed to these categories.

Risk Rating: By Mandate

EXIM risk rates its portfolio using a 1 – 11 budget cost level (BCL) scale. The ratings are based, in general, on a borrower's (1) ability to make payments, as indicated by relevant economic factors and (2) willingness to pay, as indicated by payment record and political and social factors. Four categories, ratings 1 through 4, are roughly equivalent to "creditworthy" or "investment grade" private bond ratings. Three categories, ratings 9 to 11, are for countries either unable to pay fully, even with extended repayment periods, or currently unwilling to make a good faith effort at repayment. EXIM does not use the BCL scale for its working capital and multi-buyer insurance products, as these products are evaluated using a portfolio analysis approach.

Using the BCL at the time of authorization and based on the authorized amount, EXIM's active portfolio's weighted average risk rating is 3.89, corresponding to an investment grade portfolio. The following table provides the weighted average BCLs for the various EXIM mandates.

Category	Budget Cost Level
Sub-Saharan Africa	5.77
100% Sub-Saharan Africa	5.77
Small Business	4.27
100% Small Business	5.52
Environmentally Beneficial	4.05
Active Portfolio	3.89

DEFAULT RATE REPORT

STRESS TEST ADDENDUM

AS OF
JUNE 2020

EXPORT-IMPORT BANK
OF THE UNITED STATES

FISCAL YEAR 2020 (Q3) DEFAULT EXPERIENCE
EXPORT-IMPORT BANK OF THE UNITED STATES

Stress Tests

In addition to measuring the current default rate, EXIM regularly examines the current portfolio to measure the future default rate under stressed scenarios, as well as to identify how the current portfolio may perform in the future under stressed scenarios.[1] As the Basel Committee on Banking Supervision states, "Stress testing should be used as risk management tool" for risk identification, monitoring, and assessment.[2] The following section describes what stress testing is, why it is important, how to conduct stress testing, EXIM stress test protocol, and recent results from EXIM's stress tests.

What is Stress Testing?

The Federal Deposit Insurance Corporation defines stress testing as "a forward-looking quantitative evaluation of stress scenarios that could impact a banking institution's financial condition and capital adequacy." [3] The Federal Reserve has provided a similar definition: "For purposes of this guidance, stress testing refers to exercises used to conduct a forward-looking assessment of the potential impact of various adverse events and circumstances on a banking organization." [4] In sum, stress testing is forward-looking in nature and there are multiple stressed scenarios that could impact the current portfolio and current default rates.

Why is Stress Testing Important?

EXIM follows a formalized stress testing protocol. Consistent with Federal Reserve guidance, EXIM's stress testing builds capacity to understand EXIM's risks and the potential impact of stressful events and circumstances on EXIM's financial condition.[5] Stress testing is an important tool for portfolio management and risk mitigation. Furthermore, the International Monetary Fund states: "Stress testing has become an essential and very prominent tool in the analysis of financial sector stability and development of financial sector policy."[6] The World Bank concurs, stating, "Regular stress testing of the financial system is the main tool of macroprudential monitoring."[7] Finally, EXIM's Inspector General recommended that "EXIM should develop a systematic approach to stress testing and should conduct stress testing at least annually as part of its re-estimate

[1] See also Government Accountability Office. (2013). Recent Growth Underscores Need for Continued Improvements in Risk Management. (GAO Publication No. 13-303). Washington, D.C.: U.S. Government Printing Office.
[2] Bank of International Settlements. "Basel Committee on Banking Supervision: Stress Testing Principles." October 2018. https://www.bis.org/bcbs/publ/d450.pdf
[3] Baxter, William R. and Thomas F. Lyons. "Stress Testing Credit Risk at Community Banks," *Supervisory Insights*. The Federal Deposit Insurance Corporation. Vol. 9, No. 1 (Summer 2012). https://www.fdic.gov/regulations/examinations/supervisory/insights/sisum12/index.html
[4] Guidance on Stress Testing for Banking Organizations with Total Consolidated Assets of More than $10 Billion. SR Letter 12-7 Attachment. Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency. May 14, 2012. https://www.federalreserve.gov/bankinforeg/srletters/sr1207a1.pdf
[5] Ibid.
[6] "European Union: Publication of Financial Sector Assessment Program Documentation—Technical Note on Stress Testing of Banks," IMF Country Report No. 13/68, March 2013. International Monetary Fund. https://www.imf.org/external/pubs/ft/scr/2013/cr1368.pdf
[7] Buncic, Daniel; Melecky, Martin. 2012. Macroprudential stress testing of credit risk: a practical approach for policy makers. Policy Research working paper ; no. WPS 5936. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/994091468251373046/Macroprudential-stress-testing-of-credit-risk-a-practical-approach-for-policy-makers

process."[8] Based on industry best practices and EXIM's commitment to a comprehensive risk management framework EXIM implemented a stress testing protocol in FY 2014.

How Does Stress Testing Work?

The International Association of Credit Portfolio Managers made two overarching recommendations for portfolio stress testing:[9]

1. The institution should have a "top down" stress-testing process in place to analyze the impact of extreme economic events on the credit risk of the overall credit portfolio; and
2. The institution should supplement the "top down" approach with a "bottom up" stress-testing process to measure the impact of adverse events on obligors, or sets of obligors, with significant exposures in the credit portfolio.

EXIM Stress Testing Protocol

On an annual basis, EXIM looks at different ways to perform both a top-down analysis on the entire portfolio as well as a bottom-up approach on certain sets of obligors. For the top-down stress test EXIM decided to use a Monte Carlo simulation approach, consistent with best practice. This approach allows EXIM to look at numerous scenarios. A report published by the Society of Actuaries found that "the Monte Carlo simulation is one of the most widely used methods of stress testing."[10] This allows EXIM to use a forward-looking approach that looks at numerous scenarios. The simulation takes every transaction in EXIM's exposure and simulates whether it defaulted or not during the remainder of its term, based on EXIM's most current loss rate model. In the default simulation, the total default amount less recoveries is calculated. This loss rate model is reviewed annually by the Office of Management and Budget and audited by KPMG. Each portfolio simulation takes every transaction and sums their respective default amounts. The total is EXIM's loss for that simulation. EXIM then runs this same simulation 20,000 times to create a distribution of possible losses. There are a variety of outcomes. By creating a distribution of possible losses, EXIM is able to look at the extreme tails of the distribution to see how the portfolio performs at its worst. In essence, this means EXIM looked at 20,000 different "lives" of the portfolio. In some lives perhaps many more defaults occur than expected, others have fewer defaults than expected. By running so many different lives of the portfolio, EXIM can isolate those times where many more defaults occur and look at the impact. EXIM is also able to put probabilities around the chance that these events could occur. Furthermore, EXIM looks at the results of these scenarios if no recoveries occur. This is an extreme scenario as EXIM regularly recoups more than 50 cents on the dollar after payments have been made to financial institutions as a result of borrower non-

[8] "Report on Portfolio Risk and Loss Reserve Allocation Policies." OIG-INS-12-02, September 28, 2012. Office of the Inspector General, Export-Import Bank of the United States. http://www.exim.gov/sites/default/files/oig/reports/Final-20Report-20Complete-20Portfolio-20Risk-20120928-1.pdf
[9] *Sound Practices in Credit Portfolio Management*. Ed. Gene D. Guill and Charles Smithson. The International Association of Credit Portfolio Managers. 2005. www.iacpm.org/about-us/IACPM_Sound_Practices.pdf
[10] Guo, Lijia. "Effective Stress Testing in Enterprise Risk Management." (2008). https://soa.org/library/monographs/other-monographs/2008/april/mono-2008-m-as08-1-guo.pdf

payment or insurance payouts. Recoveries do take time and this scenario can show what the stressed default rate could reach with no recoveries, albeit temporarily.

For the bottom-up approach, EXIM looks at applicable data from the Federal Reserve's Comprehensive Capital Analysis and Review adverse and severely adverse scenarios. These scenarios are applied to the largest obligors to determine the adverse scenario the average risk rating. In doing this, EXIM is able to measure the risk of each obligor similar to a Moody's or S&P credit rating but using a 1-8 scale. EXIM measures the impact on these obligors under the adverse and severely adverse scenario, resulting in 1.2 notch and 2.5 notch downgrades, respectively. In effect, this scenario would increase the riskiness for a typical transaction by 30 percent for adverse scenarios and 63 percent for severely adverse scenarios.

Next, EXIM runs another 20,000 trial simulations of the entire portfolio based on the results of the obligor specific stress tests, each obligor is downgraded by two notches. This effectively moves an A1 rated credit to a Baa3 credit or a Baa3 to a Ba3 on the Moody's scale. These scenarios allow EXIM to look at its risk profile from a variety of perspectives and helps EXIM ascertain the current risk within the portfolio.

As part of its stress testing process, EXIM reviews its stress testing protocol on an annual basis.

EXIM Standard Stress Testing Results

EXIM stress tests its portfolio semiannually. The results of EXIM's 20,000 trial Monte Carlo simulations from June 2020 can be seen in the table below. The default rate at the end of June 2020 was 0.531 percent. Under the baseline forecast the median default rate for the current non-overdue portfolio is 0.38 percent with a 95 percent confidence level that it will be below 1.94 percent. Under a stressed scenario where all of the ratings were downgraded by two BCL notches, the median default rate would increase to 1.89 percent with a 95 percent confidence level that the default rate would be below 3.21 percent. Finally, under a stressed scenario where none of the defaults were ever recovered the median default rate would be 0.80 percent, with a 95 percent confidence level that it would be below 3.99 percent.

In addition to calculating the default percentages, which is on the same scale as the default rates discussed earlier in this report, EXIM calculated the total dollar loss of this distribution. The amount overdue for the portfolio at the end of June 2020 is $0.55 billion. Under the baseline forecast the median loss amount for the current non-overdue portfolio is $0.36 billion. Under a stressed scenario in which all of the ratings were downgraded by two notches, the median loss

amount would increase to $1.77 billion. In a stressed scenario where none of the defaults were ever recovered, the median loss amount would be $0.75 billion.

	Median		Average		95 Percentile	
	Percent	Amount	Percent	Amount	Percent	Amount
Total	0.38%	$ 0.36	0.70%	$ 0.66	1.94%	$ 1.82
No Recoveries	0.80%	$ 0.75	1.45%	$ 1.36	3.99%	$ 3.74
Downgraded 2 Notches	1.89%	$ 1.77	1.73%	$ 1.63	3.21%	$ 3.01
($billions)						

These results are comparable to the results from the last stress test performed at the end of March 2020. The median under the baseline forecast in June 2020 is 0.38 percent compared to 0.37 percent in March 2020.

For June 2020, EXIM ran additional stress test scenarios to analyze the financial and economic impact of COVID-19 on its portfolio. These results are discussed in the next section called "COVID-19 Impact Analysis."

Overall, the results of EXIM's standard stress tests are in line with prior stress tests given that, up until June 30, 2020, transactions have been generally repaying, leading to a reduction in exposure. The outbreak of COVID-19, however, could potentially affect the risk profile of the portfolio in the coming months and accordingly change the results of upcoming standard stress. EXIM will continue to monitor the situation, and the next section provides additional analysis on the potential impact of COVID-19 on its default rate and losses.

COVID-19 One-Year Outlook: Impact Analyses

COVID-19's impact on EXIM's portfolio has the potential of impacting most of its borrowers as each of them responds in their own way to the economic fallout caused by this virus. Over the next six months, EXIM expects its borrowers will focus on maintaining sufficient liquidity over the short-term and cutting costs as much as possible to offset the sharp decline in revenue.

Three-Month Outlook Impact Analysis – Default Rate Scenario

EXIM assessed what the impact on the default rate would be if borrowers were exhibiting a relatively moderate or high risk of missing individual debt service payments between July 1, 2020, and September 30, 2020. Because of the exigent circumstances presented by the COVID-19 crisis, individual missed installment payments do not necessarily translate to a default of the entire credit; instead, most credits will likely continue to perform over the long-term. As such, the assessment of high concern does not necessarily translate to a high probability of default for the entire credit, but the classification can serve as a basis for a short-term analysis of the potential range of the default rate in the coming three months. In keeping with this assumption, the analysis does not add the total exposure for these credits into the analysis, but rather includes only those individual payments during the period.

Three-Month Outlook Impact Analysis – Default Rate Scenario Results

The three-month outlook analysis builds off the June 2020 default rate calculation outlined earlier in this report. Since the period for this analysis covers July 2020 to September 2020, EXIM assumed the Total Financing (i.e., the denominator of the default rate calculation) would remain unchanged from June 30, 2020 at $104,036.2 million.[11] The June 2020 Overdue Payments of $552.3 million (i.e., the numerator of the default rate calculation) served as a starting point for assessing the impact of potential short-term defaults of borrowers that are experiencing liquidity issues. EXIM assumed that it would not collect any recoveries or pay any expenses related to recovery efforts during this period.

If all the borrowers with a high level of immediate payment concern defaulted on their upcoming individual payments through September 30, 2020, then EXIM's overdue payments would increase to $673.8 million and thereby increase the default rate to 0.648 percent. In addition to these borrowers with a high level of concern, if all borrowers with a medium level of immediate payment concern defaulted during the same period, the overdue payments would increase to $1,069.1 million, increasing the default rate to 1.028 percent.

COVID-19 Three-Month Outlook Impact Analysis

Scenario	*Total Overdue Payment (Million)*	*Total Financing (Million)*	*Default Rate*
June 2020	552.3	104,036.2	0.531%
High Concern Level	673.8	104,036.2	0.648%
High & Medium Concern Levels	1,069.1	104,036.2	1.028%

Overall, even as certain borrowers are experiencing elevated risk of missing their immediate debt service payments, within the next three months the default rate is not expected to reach the statutory two percent cap at which EXIM's lending cap would immediately freeze.

Twelve-Month Outlook Impact Analysis – Short-Term Stress Test Scenario

EXIM also developed an additional stress test scenario to simulate potential full exposure defaults for these deals that have a high or medium level of immediate payment concern. The short-term stress test scenarios utilized the annual default rate data provided in Moody's Investor Service's *Annual Default Study* (February 2020) that tracks one-year corporate default rates between 1920 and 2019. By leveraging Moody's more expansive historical data to simulate "once in a century" annual default rates experienced by the corporate sector, EXIM could simulate the default rate over the next twelve-month period. Additionally, a risk rating downgrade was applied to borrowers

[11] While Total Financing would change over the next quarter, the impact on the overall default rate is approximately one-half of a basis point for every $1 billion added or subtracted to the denominator. As such, assuming a steady Total Financing amount would not have a material impact on the analysis.

that have an elevated risk of defaulting on repayments occurring in the next three to six months, as shown in the table below[12]:

COVID-19 Twelve-Month Outlook Impact Stress Test Scenario	
Immediate Payment Concern Classification	*Risk Rating Notch Downgrade*
Low	0
Medium	1
High	2

Twelve-Month Outlook Impact Analysis – Short-term Stress Test Results

By applying the Moody's loss rates and immediate payment concern parameters discussed above, the expected default rate (i.e., the median value of all the simulations) after 12 months would be 0.77 percent with a 95 percent confidence level that it will be below 2.26 percent. Relative to the base case scenario's median default rate of 0.38 percent discussed in the "Stress Test" section, these results show that COVID-19 could potentially increase the median default rate closer to the two percent threshold at which EXIM's lending cap would freeze at its current exposure level. Additionally, in a scenario where Moody's loss rates and the immediate payment concern classifications are applied and where EXIM does not make any recoveries on the defaults, the median default rate would be 1.77 percent with a 95 percent confidence level that it would be below 4.82 percent and therefore exceed the two percent threshold in a significant number of simulations. The results of these scenarios are provided in the table below.

Twelve-Month Outlook Impact Stress Test Results						
	Median		*Average*		*95 Percentile*	
	Percent	Amount	Percent	Amount	Percent	Amount
Total	0.77%	$0.72	1.01%	$0.95	2.26%	$2.12
No Recoveries ($billions)	1.77%	$1.66	2.25%	$2.11	4.82%	$4.52

COVID-19 One-to-Two Year Outlook: Impact Analysis

EXIM executed additional stress test scenarios that model the possible medium-term impact of the financial and economic fallout from the outbreak of the virus. COVID-19 is expected to have a major impact on Transportation, Commodities, and Sovereign (non-Transportation) portfolios, but may have a limited impact on Power and High-Tech portfolios. Additionally, the impact on a particular industry could vary depending on the geographic region.

[12] As described in the "EXIM Stress Testing Protocol" section, EXIM's internal risk rating system is similar to Moody's or S&P's credit rating, but utilizes a 1-to-8 scale.

Depending on the length and severity of the crisis, financial conditions could warrant rating downgrades for impacted industries or regions. Given this potential outcome, EXIM developed a stress test scenario that applies a risk rating downgrade to every transaction based on an assessment of the impact of COVID-19 on a particular region and industry risk. By applying a set risk rating downgrade to all transactions that fall into a given sub-portfolio, EXIM can simulate the potential deterioration of credit quality for key sectors in its portfolio and therefore assess COVID-19's impact on potential losses. The risk rating notch downgrade by risk classification for this scenario is outlined in the table below:

COVID-19 One-to-Two-Year Outlook Impact Scenario	
Region-Industry Risk Clarification	***Risk Rating Notch Downgrade***
Low	0
Low to Medium	1
Medium	2
Medium to High	3
High	4

For example, if EXIM determined that COVID-19 would have a "Medium to High" impact on the Transportation industry in the Asia-Pacific region, then in this stress scenario all Transportation transactions in the Asia-Pacific region would have their current risk rating downgraded by three notches. For regions and industries where COVID-19 is expected to have a "Low" impact, transactions would retain their current risk rating.

One-to-Two-Year Impact Analysis - Results

By applying the region and industry risk rating parameters discussed above, the expected default rate (i.e., the median value of all the simulations) would be 0.85 percent with a 95 percent confidence level that it will be below 2.63 percent. Relative to the base case scenario's median default rate of 0.38 percent discussed in the "Stress Test" section, these results show that COVID-19 could potentially increase the median default rate closer to the two percent threshold at which EXIM's lending cap would freeze at its current exposure level.

Additionally, in a scenario where the region and industry risk parameters are applied and EXIM does not make any recoveries on the defaults, the median default rate would be 2.02 percent with a 95 percent confidence level that it would be below 5.63 percent and therefore exceed the two percent threshold in a majority of simulations. As discussed in the EXIM Stress Testing Protocol section, a "no recoveries" scenario is an extreme scenario in the long-term given EXIM's historical recovery experience. This stress scenario, however, shows what could temporarily happen to the default rate after EXIM pays a claim but before recovery efforts are completed. Historically, EXIM

recoups more than 50 cents for every dollar paid out in claims. The results of these scenarios are provided in the table below.

One-to-Two-Year Outlook Impact Stress: Region-Industry Risk Clarification

	Median		Average		95 Percentile	
	Percent	Amount	Percent	Amount	Percent	Amount
Total	0.85%	$0.80	1.17%	$1.10	2.63%	$2.47
No Recoveries ($billions)	2.02%	$1.89	2.64%	$2.47	5.63%	$5.28

While EXIM is currently within the parameters of the two percent default rate, it is closely monitoring its credits and defaults and taking proactive measures to provide relief through restructuring efforts.