REPORT TO CONGRESS ON FINANCIAL IMPLICATIONS OF U.S. PARTICIPATION IN THE INTERNATIONAL MONETARY FUND

FY 2022

This report has been prepared in compliance with section 504(b) of Appendix E, Title V of the Consolidated Appropriations Act for FY 2000, Public Law No. 106-113 (Nov. 29, 1999). The report focuses on the direct (although typically unrealized) financial implications of U.S. participation in the International Monetary Fund (IMF) and does not attempt to quantify the broad and substantial economic benefits to the United States and the global economy resulting from U.S. participation in the IMF.

This report provides quarterly data for fiscal year 2022 and annual data for fiscal years 2003-2022. It provides estimates of the financial implications of U.S. participation in the IMF's General Department and Special Drawing Rights (SDR) Department. During the last 20 years, the cumulative net valuation and interest effects for U.S. participation in the IMF overall have reached negative $3.5 billion, primarily driven by valuation effects from the appreciation of the dollar in 2022. These estimates can vary considerably from year to year depending on movements in the value of the dollar. For example, the estimated valuation effect for the first nineteen years of this twenty-year window is roughly zero, with nearly all of the negative $3.5 billion in valuation effects generated in fiscal year 2022. A portion of those estimated valuation effects have since reversed in fiscal year 2023.

As required, the report provides financial information on the net interest income and valuation changes associated with U.S. participation in the IMF. These data vary over time and may be positive or negative for any given quarter or year. Negative net interest income could arise when U.S. interest rates (associated with financing U.S. transactions with the IMF) are higher than the SDR[1] interest rate (which is the basis for the rate that the IMF pays the United States for the use of U.S. financing). For example, the interest cost to United States in FY2022 was about $360 million due to high U.S. interest rates relative to the SDR interest rate. Negative valuation changes occur when the U.S. dollar strengthens relative to the SDR.

Economic theory suggests that the fluctuations in interest rates or exchange rates should not result in either net gains or net losses over time as exchange rates among major currencies are generally expected to move inversely with interest rate differentials. According to theory, the currency of a country with a lower interest rate is expected to appreciate against the currency of a country with a higher interest rate in an amount that would offset the interest differential. In practice, however, changes in exchange rates and interest rates differential rarely fully offset one another for any given period. Hence, the computations reported below reflect substantial fluctuations, with significant gains or losses often arising for a given period in time.

The methodology used in deriving these figures has been laid out in previous reports, with the most recent revisions described in the FY2017-20 report. The methodology is also summarized briefly in the footnotes attached to the tables. Reports prepared under section 504(b) are made

[1] The SDR is an international reserve asset created by the IMF. The SDR is used as a unit of account by the IMF and other international organizations. Its value is determined as a weighted average of a basket of currencies. The SDR carries a market-based interest rate determined on the basis of a weighted average of interest rates on short-term instruments in the markets of the currencies included in the SDR valuation basket.

available to the public on the Treasury website: https://home.treasury.gov/policy-issues/international/international-monetary-fund.

Data on the average annual and cumulative income effects and valuation changes related to U.S. participation in the IMF's General Department over the 20-year period from fiscal year 2003 to 2022 are provided in Table 1a. Data on the net interest income and valuation changes for fiscal year 2022 are provided in Table 1b.

Similarly, data on the average annual and cumulative income effects and valuation changes related to U.S. participation in the SDR Department of the IMF over the 20-year period from 2003 to 2022 are provided in Table 2a. Data on net interest income and valuation changes during fiscal year 2022 is provided in Table 2b.

There are broad and substantial economic benefits that flow to the United States from its participation in the IMF, beyond the net interest and valuation effects described in this report. The IMF's work ultimately supports U.S. jobs, exports, and financial markets. During financial crises abroad, the United States leverages the IMF as the first responder to protect our domestic economy by promoting global growth and stability. Through its three main activities—surveillance, lending, and technical assistance—the IMF promotes economic stability and helps prevent and resolve financial crises when they occur. When foreign economies are in crisis, they import less from U.S. businesses, they invest less in the United States, and they can negatively affect our financial markets, hurting the value of retirement savings for American households. U.S. participation in the IMF brings broad benefits for America, for the health of the U.S. economy, and for the prosperity shared by American workers.

Estimating the Financial Implications of U.S. Participation in the General Department

Four elements go into estimating the financial implications of U.S. participation in the IMF in the IMF's General Department:

- Interest forgone by the United States on reserve assets transferred to the IMF.[2]
- Interest paid by the United States on increased borrowing to finance U.S. transfers of U.S. dollars and SDRs to the IMF (under the letter of credit, as part of the quota subscription) and U.S. loans to the IMF (under the second-line of IMF resources, the New Arrangements to Borrow (NAB)).
- Interest received by the United States on the U.S. reserve position in the IMF[3] and remuneration on U.S. loans to the IMF (under the NAB).
- Changes to the value of the U.S. reserve position in the IMF, as a result of fluctuations in the value of the U.S. dollar relative to the SDR.

Over the period fiscal year 2003 through fiscal year 2022 (Table 1a), the average annual net interest income effect of U.S. participation in the General Department was negative $59 million, while the cumulative net interest income effect was negative $1,181 million. Negative net interest income arose over this period because the interest rate associated with financing U.S. transactions with the IMF was higher than the interest rate that the IMF provides to repayments to the United States during that same period. The average annual valuation change in the U.S.

[2] When the United States transfers reserve assets including foreign currencies to the IMF to satisfy obligations resulting from a quota increase, the United States incurs a decrease in interest-bearing assets. The SDR interest rate is used in estimating the interest foregone, since assets transferred are currencies that make up the SDR.

[3] The U.S. reserve position in the IMF comprises all outstanding transfers from the United States to the IMF as a part of the U.S. quota subscription. This includes any loans under quota, reserve asset payments under a quota increase, and all gold transfers prior to 1978 (gold transfers totaled SDR 1.675 billion). The United States earns interest on the entire reserve position, except for gold.

reserve position was negative $117 million, while the cumulative valuation change was negative $2,337 million, reflecting a U.S. dollar that appreciated relative to the SDR over the selected period.

The annual and quarterly figures can fluctuate considerably at times. The financial implications of U.S. participation in the General Department reflected a net interest income effect of negative $301 million for FY2022 (Table 1b). The valuation changes in the U.S. Reserve Position were negative $3,177 million for FY2022.[4] Valuation changes on the reserve position are unrealized and can fluctuate significantly from year to year. Clear evidence of this is the fact that the unrealized losses last year were greater than the total unrealized losses for the total twenty years. That is, in the nineteen years from 2003-2021, the total valuation changes were positive, but the size of last year's unrealized losses were large enough to reverse that.

It is worth noting that the dollar significantly appreciated throughout the first ten months of calendar year 2022 before reversing back towards long term historical levels during the first half of calendar year 2023. As such, many of the unrealized losses at the end of fiscal year 2022 have already been reversed which will be reflected in next year's report.

Estimating the Financial Implications of U.S. Participation in the SDR Department

Three elements go into estimating the financial implications of U.S. participation in the IMF in the IMF's SDR Department:

- Interest paid by the United States on increased borrowing to finance acquisition of SDRs.
- Interest received by the United States on the U.S. holdings of SDRs.
- Changes to the value of U.S. holdings of SDRs, as a result of fluctuations in the value of the U.S. dollar relative to the SDR.

In August 2021, the United States received an allocation of SDR 79.5 billion (about $112.8 billion[5]) of the SDR 456 billion (about $646.8 billion) total as part of the IMF's effort to boost global liquidity; however, this allocation does not impact the calculations regarding U.S. participation in the IMF, because the SDRs are accounted for as both an asset and liability. The IMF SDR Department pays interest on the SDR holdings of each member country and levies charges on each member's SDR allocation. Thus, there are no interest or foreign exchange implications for the United States as a result of the allocation. The United States can increase its holdings of SDRs by exchanging dollars for SDRs. This transaction reduces the U.S. cash position, increasing federal borrowing requirements. The United States can decrease its holdings of SDRs by exchanging SDRs for dollars, which reduces the federal borrowing requirement. Whether SDR exchanges are a net cost to the US depends on the interest rate differential between the SDR interest rate and Treasury's cost of borrowing. If the United States transfers SDRs to the IMF as a part of a quota increase, U.S. holdings of SDRs decline but the U.S. cash position and federal borrowing requirements remain unchanged.[6]

As shown in Table 2a, over the period fiscal year 2003 through fiscal year 2022, the average annual net interest income effect of U.S. participation in the SDR Department was negative $6 million, while the cumulative net interest income effect was negative $111 million. During

[4] For an explanation of the methodology used in deriving these figures, see the annex of the report prepared for the fiscal years 2017-2020 available at https://home.treasury.gov/system/files/206/FY17-20_Report_Financial_Implications_US_Participation_IMF_0.pdf.
[5] As valued on August 23,2021. The SDR exchange rate can be found at https://www.imf.org/external/np/fin/data/rms_sdrv.aspx.
[6] These costs are accounted for under "U.S. participation in the General Department."

the same period, the average annual valuation change on U.S. SDR holdings was positive $9 million, while the cumulative valuation change was positive $187 million.

As shown in Table 2b, the net interest income effect of U.S. participation in the SDR Department was negative $62 million for FY2022. The valuation change on U.S. SDR holdings was negative $426 million for FY2021.[7]

After transmittal, this report, as with previous reports, will be posted on the Treasury website.

[7] For an explanation of the methodology used in deriving these figures, see the annex of the report prepared for the fiscal years 2017-2020 available at https://home.treasury.gov/system/files/206/FY17-20_Report_Financial_Implications_US_Participation_IMF_0.pdf.

Table 1a - Annual U.S. Participation in the IMF's General Department

-- General Department --
U.S. Fiscal Year, Annually
(millions of U.S. Dollars)

Year	Transactions with the IMF			Interest Calculations			Valuation	Total
	Outstanding Credit under U.S. Quota (Letter of Credit & Transfers of Reserve Assets)	Outstanding U.S. Loans to IMF (Under GAB, NAB)	Total Outstanding U.S. Credit with the IMF/1	Interest Expense Associated with Financing U.S. Transactions with the IMF	Remuneration Received by U.S. from IMF & Refund of Burden Sharing	Net Interest Income	Valuation Changes on U.S. Reserve Position	Total
			(Col. 1 + 2)	(Col. 4a + 4b)		(Col. 4 + 5)		(Col. 6 + 7)
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
2003	$24,200	$0	$24,200	-$286	$348	$62	$1,722	$1,784
2004	$19,577	$0	$19,577	-$282	$300	$18	$648	$666
2005	$13,428	$0	$13,428	-$357	$316	-$41	-$54	-$95
2006	$6,756	$0	$6,756	-$205	$210	$5	$107	$112
2007	$4,616	$0	$4,616	-$78	$107	$29	$259	$288
2008	$4,838	$0	$4,838	-$81	$59	-$22	-$95	-$117
2009	$13,513	$0	$13,513	-$45	$40	-$5	$548	$543
2010	$13,082	$0	$13,082	-$43	$23	-$20	-$166	-$186
2011	$22,810	$6,148	$28,958	-$87	$63	-$24	-$226	-$250
2012	$23,654	$11,753	$35,407	-$92	$52	-$40	-$298	-$338
2013	$19,990	$13,624	$33,614	-$102	$24	-$78	-$184	-$262
2014	$14,854	$13,665	$28,519	-$119	$28	-$91	-$643	-$734
2015	$9,507	$9,528	$19,035	-$74	$10	-$64	-$1,088	-$1,152
2016	$10,024	$8,619	$18,643	-$64	$8	-$56	-$85	-$141
2017	$11,964	$7,372	$19,336	-$140	$52	-$89	$156	$67
2018	$15,813	$4,502	$20,315	-$266	$123	-$143	-$204	-$346
2019	$23,404	$2,518	$25,922	-$431	$210	-$221	-$486	-$707
2020	$31,724	$1,701	$33,425	-$174	$123	-$51	$919	$868
2021	$33,261	$937	$34,198	-$71	$23	-$48	$10	-$38
2022	$31,795	$487	$32,281	-$397	$95	-$301	-$3,177	-$3,478
Total						**-$1,181**	**-$2,337**	**-$3,518**
Annual Average						**-$59**	**-$117**	**-$176**

Table 1b – Quarterly U.S. Participation in the IMF's General Department

-- General Department --

U.S. Fiscal Year, Quarterly

(millions of U.S. Dollars)

Quarter	Transactions with the IMF			Interest			Valuation	Total
	Outstanding Credit under U.S. Quota (Letter of Credit & Transfers of Reserve Assets)	Outstanding U.S. Loans to IMF (Under GAB, NAB)	Total Outstanding U.S. Credit with the IMF/1	Interest Expense Associated with Financing U.S. Transactions with the IMF	Remuneration Received by U.S. from IMF & Refund of Burden Sharing	Net Interest Income	Valuation Changes on U.S. Reserve Position	Total
			(Col. 1 - 2)			(Col. 4 + 5)		(Col. 6 + 7)
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
FY 2022								
Q1: Oct - Dec 2021	$35,211	$920	$36,130	-$26	$4	-$22	-$231	-$253
Q2: Jan - Mar 2022	$34,322	$776	$35,098	-$53	$6	-$48	-$427	-$474
Q3: Apr - June 2022	$32,836	$509	$33,345	-$117	$21	-$96	-$1,345	-$1,441
Q4: July - Sept 2022	$31,795	$487	$32,281	-$200	$65	-$135	-$1,174	-$1,309
Total						**-$301**	**-$3,177**	**-$3,478**

TABLE 1
Footnotes to Columns

Column 1: Total outstanding credit under the U.S. quota, including drawings by the IMF under the U.S. letter of credit, the transfers of reserve assets to the IMF, and gold transfers prior to 1978.

Column 2: Total outstanding dollar funding through loans to the IMF made by the U.S. under the General Arrangements to Borrow (GAB, in FY 1998) and the New Arrangements to Borrow (NAB, in FY 1999 and in FY 2011-present). U.S. loans under the GAB in FY 1998 and NAB in FY 1999 have been repaid. The GAB expired in 2018.

Column 3: Total outstanding U.S. credit with the IMF (horizontal summation of columns 1 and 2).

Column 4: Total interest expense associated with total cumulative transactions shown in column 3. This includes interest paid on incremental public borrowing to fund the IMF's use of U.S. dollars and SDRs under quota and any transfer of U.S. dollars to the IMF under loan arrangements (Supplementary Financing Facility, GAB, NAB), as well as interest income forgone on foreign currencies transferred to the IMF at the time of a quota increase. As Treasury increases its net borrowing from the public in order to provide U.S. dollars or SDRs to the IMF under quota or other loan arrangements, the interest cost associated with such borrowing is calculated using Treasury's average cost of funds. This interest cost enters the federal budget as part of interest on the public debt. For purposes of calculating forgone interest on the transfer of foreign currencies to the IMF, the SDR interest rate is used.

Column 5: Total interest income received through the U.S. reserve position and loans under GAB and NAB. The U.S. reserve position in the IMF is an interest-bearing asset of the Treasury General Account (TGA). This interest ("remuneration") is paid by the IMF every IMF fiscal quarter and is recorded in the federal budget as a negative outlay. The IMF normally pays remuneration in SDRs, which become resources of the Exchange Stabilization Fund (ESF). In return, the ESF transfers an equivalent dollar amount to the TGA. The transfer of dollars from the ESF to the TGA has no effect on Treasury's cash position. If the United States were to request payment in dollars, the payment would be in the form of a decrease in the U.S. letter of credit and a counterpart increase in the U.S. reserve position, but no flow of cash to the TGA.

Column 6: Total net interest paid, forgone, or received as a result of U.S. participation in the General Department of the IMF.

Column 7: The U.S. reserve position in the IMF is denominated in SDRs. The valuation gain (if positive) or loss (if negative) refers to the exchange rate gain or loss on the reserve position due to changes in the dollar value of the SDR. For example, if the SDR appreciates/dollar depreciates, then the dollar value of the reserve position rises and a valuation gain is recorded. This column would also include valuation gains or losses experienced as a result of U.S. loans under the SFF, GAB and NAB.

Column 8: The total of net interest and valuation changes, obtained by summing column 6 and column 7.

Table 2a - Annual U.S. Participation in the IMF's SDR Department

-- SDR Department --
U.S. Fiscal Year, Annually
(millions of U.S. Dollars)

Year	Net SDR Holdings			Interest			Valuation	Total
	SDR Holdings	Cumulative SDR Allocation	Net SDR Holdings	Interest Income on Net SDR Holdings	Interest Expense to finance Net SDR Holdings	Net Interest Income	Valuation Changes	Total
			(Col. 1 - 2)			(Col. 4 + 5)		(Col. 6 + 7)
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
2003	$12,062	$7,005	$5,057	$97	-$68	$29	$396	$425
2004	$12,782	$7,197	$5,585	$87	-$79	$8	$137	$145
2005	$8,245	$7,102	$1,143	$114	-$106	$8	-$14	-$5
2006	$8,655	$7,234	$1,421	$44	-$62	-$17	$25	$8
2007	$9,301	$7,627	$1,674	$63	-$77	-$14	$81	$67
2008	$9,418	$7,630	$1,788	$59	-$44	$15	-$3	$12
2009	$57,945	$55,953	$1,992	$20	-$14	$7	$33	$40
2010	$57,410	$54,958	$2,453	$6	-$17	-$11	-$38	-$50
2011	$55,875	$55,150	$726	$7	-$6	$1	$34	$35
2012	$55,232	$54,463	$769	$1	-$3	-$1	-$9	-$10
2013	$54,966	$54,177	$789	$1	-$3	-$2	-$4	-$6
2014	$53,148	$52,358	$790	$1	-$4	-$3	-$27	-$31
2015	$50,332	$49,574	$758	$0	-$4	-$3	-$42	-$45
2016	$50,054	$49,294	$760	$0	-$4	-$4	-$4	-$8
2017	$51,443	$49,912	$1,532	$4	-$15	-$10	$45	$34
2018	$50,918	$49,274	$1,644	$12	-$31	-$18	-$22	-$40
2019	$49,976	$48,146	$1,830	$18	-$41	-$22	-$41	-$63
2020	$51,733	$49,709	$2,024	$10	-$15	-$6	$62	$57
2021	$163,874	$161,825	$2,049	$1	-$5	-$4	$2	-$2
2022	$153,175	$147,009	$6,166	$14	-$76	-$62	-$426	-$487
Total						**-$111**	**$187**	**$76**
Annual Average						**-$6**	**$9**	**$4**

Table 2b - Quarterly U.S. Participation in the IMF's SDR Department

-- SDR Department --
U.S. Fiscal Year, Quarterly
(millions of U.S. Dollars)

Quarter	Net SDR Holdings			Interest			Valuation	Total
	SDR Holdings	Cumulative SDR Allocation	Net SDR Holdings	Interest Income on Net SDR Holdings	Interest Expense to finance Net SDR Holdings	Net Interest Income	Valuation Changes	Total
			(Col. 1 - 2)			(Col. 4 + 5)		(Col. 6 + 7)
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8
FY 2022								
Q1: Oct - Dec 2021	$163,629	$160,760	$2,869	$0	-$3	-$2	-$13	-$16
Q2: Jan - Mar 2022	$163,131	$158,785	$4,346	$0	-$8	-$7	-$35	-$42
Q3: Apr - June 2022	$158,195	$152,511	$5,684	$3	-$23	-$20	-$172	-$192
Q4: July - Sept 2022	$153,175	$147,009	$6,166	$11	-$43	-$32	-$205	-$237
Total						**-$62**	**-$426**	**-$487**

TABLE 2
Footnotes to Columns

Column 1: Total stock of U.S. holdings of SDRs measured at the end of period, converted into dollars at the end of period exchange rate. Source: IMF.

Column 2: Total stock of U.S. SDR allocations measured at the end of period, converted into dollars at the end of period exchange rate. Changes in the dollar value of cumulative SDR allocations reflect new SDR allocations as well as exchange rate changes.

Column 3: Total stock of U.S. SDR holdings minus allocations measured from end of period (Column 1 minus Column 2), converted into dollars at the end of period exchange rate.

Column 4: Net interest earned on SDR holdings. Derived by subtracting actual charges on SDR allocations from actual interest earned on SDR holdings.

Column 5: Net effect on U.S. borrowing costs of cumulative net SDR holdings, derived by multiplying the dollar equivalent of cumulative net SDR holdings by Treasury's average cost of funds rate. Interest is calculated on the basis of end-quarter holdings and compounded quarterly.

Column 6: Net interest income (Column 4 plus Column 5).

Column 7: The valuation change refers to the gain or loss over the period on the reserve position due to changes in the dollar value of the SDR. For example, if the SDR appreciates/dollar depreciates, then the impact on the dollar value of U.S. holdings of SDRs is positive, and a valuation gain is recorded. The change is calculated by subtracting the beginning of period dollar value of SDR reserves from the same SDR reserve figure converted to dollars using the end of period exchange rate. This isolates changes due to exchange rate movements from changes due to actual SDR transactions over the period.

Column 8: The total net interest and valuation changes (sum of Columns 6 and 7).