1	THOMAS M. HEFFERON (admitted pro		
2	hac vice) THefferon@goodwinlaw.com		
3	LEVI W. SWANK (admitted <i>pro hac v</i>	vice)	
4	LSwank@goodwinlaw.com GOODWIN PROCTER LLP		
5	1900 N Street, NW		
6	Washington, DC 20036 Tel.: +1 202 346 4000		
	Fax: +1 202 346 4444		
7	LAURA A. STOLL (SBN 255023)		
8	LStoll@goodwinlaw.com GOODWIN PROCTER LLP		
9	601 S. Figueroa Street, 41st Floor		
10	Los Angeles, CA 90017 Tel.: +1 213 426 2500		
11	Fax: +1 213 623 1673		
12	Attorneys for Defendant		
13	SOLO FUNDS, INC.		
14	UNITED STATES DISTRICT COURT		
15	CENTRAL DISTRICT OF CALIFORNIA		
16	WESTERN DIVISION – LOS ANGELES		
17	CONSUMER FINANCIAL	Case No. 2:24-cv-04108-RGK-AJR	
18	PROTECTION BUREAU,		
19	Plaintiff,	MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT OF	
20	V.	DEFENDANT SOLO FUNDS, INC.'S MOTION TO DISMISS COMPLAINT	
21			
22	SOLO FUNDS, INC.,	Date: September 16, 2024 Time: 9:00 am	
23	Defendant.	Ctrm: 850 (8 th Fl.)	
$\begin{bmatrix} 24 \\ 24 \end{bmatrix}$		Judge: Hon. R. Gary Klausner Roybal Federal Building	
		255 East Temple Street Los Angeles, CA 90012	
25		Lus Aligeles, CA 70012	
26			
27			
28			
	DEFENDANT'S MEMORANDUM OF POINTS AND	AUTHORITIES Case No. 2:24-cv-04108-RGK-AJR	

1 TABLE OF CONTENTS 2 **Page** 3 INTRODUCTION 1 4 5 ARGUMENT......3 6 This Lawsuit Was Filed and Is Being Prosecuted Using Funds Obtained I. 7 The Complaint Fails to Plausibly Allege Deceptive Advertising II. 8 (Count I)......6 9 A. The Complaint fails to plausibly allege that the overall net impression 10 B. Even when viewed in isolation, SoLo's advertising statements were not deceptive because "no interest," "0% APR," and "0% interest" loans 11 could be obtained on the SoLo marketplace......7 12 1. Optional tips and donations are neither "interest" nor amounts 13 factored into an "APR."......7 14 2. Loans with no tips or donations were requested and funded on the SoLo marketplace.9 15 III. The Complaint Fails to Plausibly Allege That SoLo's Loan Disclosure 16 17 18 B. The Complaint fails to raise a plausible inference that any inaccuracies in SoLo's disclosures were likely to materially mislead a reasonable 19 20 21 A. Failing to disclose a potential legal defense to enforceability of a loan 22 23 B. The Bureau's conclusory allegations of violations of state law are 24 25 D. The Complaint fails to state an unfairness claim (Count V) for 26 27 V. The Complaint Fails to Allege a FCRA Claim (Counts VIII-IX)......19 28

1	TABLE OF AUTHORITIES	
2	Page(s)	
3		
4	Cases:	
5	Ashcroft v. Iqbal, 556 U.S. 662 (2009)	
6	Bell Atl. Corp. v. Twombly,	
7	550 U.S. 544 (2007)	
8	CFPB v. CashCall, Inc.,	
9	No. 15-7522, 2016 WL 4820635 (C.D. Cal. Aug. 31, 2016)	
10	CFPB v. Gordon,	
11	819 F.3d 1179 (9th Cir. 2016)6, 12	
12	No. 15 02106 2017 WI. 3048306 (N.D. Cal. Sant. 8, 2017)	
13		
14	Consumer Financial Protection Bureau v. Community Financial	
15	Services Association of America, Ltd., 601 U.S. 416 (2024)	
16	FTC v. NPB Advert., Inc.,	
17	218 F. Supp. 3d 1352 (M.D. Fla. 2016)	
18	Hammond v. Reeves,	
19	552 P.2d 1237 (N.M. Ct. App. 1976)17	
20	Moritz v. Daniel N. Gordon, P.C.,	
21	895 F. Supp. 2d 1097 (W.D. Wash. 2012)	
22	In re Opana ER Antitrust Litig.,	
23	162 F. Supp. 3d 704 (N.D. Ill. 2016)	
24	Matter of Rhone-Poulenc Rorer, Inc., 51 F 3d 1203 (7th Cir. 1005)	
25	51 F.3d 1293 (7th Cir. 1995)	
26	Salvate v. Auto. Restyling Concepts, Inc., No. 13-2898, 2014 WL 6901788 (D. Minn. Dec. 5, 2014)9	
27	2.0. 15 2070, 2011 11 2 0701700 (B. 171111111 Bee. 5, 2011)	
28		
	- iii -	

1		
$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	Sandofsky v. Google LLC, No. 21-10052, 2021 WL 2941128 (D. Mass. July 13, 2021), aff'd,	
$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	No. 21-1628, 2023 WL 9785578 (1st Cir. Sept. 6, 2023)20	
3	Scott v. IndyMac Bank, FSB,	
4	No. 03-6489, 2005 WL 730961 (N.D. III. Mar. 28, 2005)9	
5	State v. Leeth,	
6	67 So. 2d 46 (Ala. Ct. App. 1952)	
7	Tavernaro v. Pioneer Credit Recovery, Inc.,	
8	43 F.4th 1062 (10th Cir. 2022)6	
9	Tierney v. Advoc. Health & Hosps. Corp.,	
10	797 F.3d 449 (7th Cir. 2015)20, 21	
11	Veale v. Citibank, F.S.B., 85 F 3d 577 (11th Cir. 1006)	
12	85 F.3d 577 (11th Cir. 1996)	
13	<i>Wade v. Reg'l Credit Ass'n</i> , 87 F.3d 1098 (9th Cir. 1996)13	
14		
15	Woodward v. Collection Consultants of Cal., 381 F. Supp. 3d 1234 (C.D. Cal. 2019), aff'd, 801 F. App'x 521	
16	(9th Cir. 2020)	
17	Statutes:	
18	5 U.S.C. §706(2)11	
19	12 U.S.C. §289(a)(2)	
20		
21	12 U.S.C. §289(a)(3)4	
22	12 U.S.C. §53285	
23	12 U.S.C. §5345(c)5	
24	12 U.S.C. §5497(a)(1)	
25	12 U.S.C. §5497(a)(1)-(2)	
26 ₂₇	12 U.S.C. §5497(e)(1)(A)	
28	12 U.S.C. §5531(c)	
	- iv -	

20	- V - DEFENDANT'S MEMORANDUM OF POINTS AND AUTHORITIES Case No. 2:24-cv-04108-RGK-AJR		
28	2024)4		
27	https://www.nasdaq.com/glossary/e/earnings (accessed August 14,		
26	Earnings, Nasdaq, Glossary,		
24 25	Earnings, Merriam-Webster's Collegiate Dictionary (11th ed. 2007)4		
23	Other Authorities:		
22	12 C.F.R. §1026.22(a)(1)8		
21	12 C.F.R. §1026.18(c)		
20	12 C.F.R. §1026.4(a)		
19	Regulations:		
18	Ohio Rev. Code. §1321.02		
17	N.Y. Banking Law §340		
16	N.M. Stat. §58-15-3		
15			
13 14	N.J. Rev. Stat. §17:11C-2-17:11C-3		
12	N.H. Rev. Stat. §399-A:2		
11	N.C. Gen. Stat. §53-166		
10	Minn. Stat. §56.01(a)		
9	Mass. Gen. Laws ch. 140, §§96, 110		
8	Idaho Stat. §28-46-402		
7	Ala. Code §5-18-4		
6	205 Ill. Comp. Stat. §670/1		
4 5	15 U.S.C. §1681a(f)		
3	15 U.S.C. §1605(a)(1)		
2	15 U.S.C. §1605(a)		
1	15 U.S.C. §1602(g)		
- 1			

Earnings, Webster's Third New Int'l Dictionary (3d ed. 2002)4 Fed. Trade Comm'n Staff Rpt., 40 Years of Experience With the Fair Credit Reporting Act, 2011 WL 3020575 (July 2011)......21 - vi -

INTRODUCTION

Over one-third of consumers do not have cash or savings to cover a \$400 unexpected emergency expense. *See* Declaration of Levi W. Swank ("Swank Decl."), Ex. 1 at 31-32. Despite that obvious need, the legacy financial system offers no good solutions. Few mainstream companies offer small-dollar loans, so the only options for many are payday loans, title loans, or the like. For some consumers, such as those with low or inconsistent income, or with no or seriously impaired credit or assets, even these types of "options" are out of reach.

SoLo Funds, Inc. offers solutions to these market failures. Since 2018, SoLo has operated a peer-to-peer community marketplace where consumers can request short-term, small-dollar loans from other consumers in amounts ranging from \$20 to \$575. ECF No. 1 ("Compl.") ¶¶18, 20, 24. Over 1 million consumers have used the SoLo marketplace to meet their emergency financial needs – on terms workable for both sides. *Id.* ¶28.

Unlike other financing, the SoLo marketplace is available to consumers regardless of their credit score or unemployment status. Compl. ¶48-52. Consumers looking to borrow money select the terms of their loan request, including the repayment date, loan amount, and any tip or donation. *Id.* ¶33, 38. Lender tips, made to the consumer who funds the loan request, and donations, made to SoLo, are optional. *Id.* ¶33-35. Consumers looking to lend money peruse loan requests posted on the SoLo platform and, if acceptable, agree to be the lender. Each loan provides for "a single repayment date" (*i.e.*, no serial rollovers), and while the term of the loan may be "as short as a few days," late fees are assessed only if the loan is not repaid within thirty-five days. *Id.* ¶20.

This lawsuit's challenges to SoLo's innovative consumer loan marketplace are flatly inconsistent with these obvious benefits and the hundreds of thousands of satisfied (and grateful) consumers. That the Consumer Financial Protection Bureau rushed to file this enforcement action mere hours after the Supreme Court rendered

its decision in *Consumer Financial Protection Bureau v. Community Financial Services Association of America, Ltd.*, 601 U.S. 416 (2024) ("*CFSA*"), which rejected an argument that the Bureau's funding mechanism was improper, is telling. In its haste to file this lawsuit, however, the Bureau has failed to allege plausible claims for relief and pled nothing that undermines the obvious and important benefits of the SoLo platform.

<u>First</u>, the Court should dismiss this lawsuit with prejudice without assessing the sufficiency of the Bureau's allegations, because the Bureau filed and is litigating this lawsuit using funds obtained in violation of statutory limits on its funding imposed by its enabling statute, the Dodd-Frank Act. This failing was not addressed in the *CFSA* decision. As a result, the Bureau has no lawful authority to prosecute this enforcement action.

Second, Counts I and II should be dismissed because they are predicated on an implausible theory that SoLo violated the Consumer Financial Protection Act ("CFPA"), by inaccurately describing loans with *optional* tips or donations as "0% interest," "0% APR," or "no interest" and failing to disclose any tips or donations in loan documents as "finance charges" or the "cost of credit." Optional payments do not, as a matter of law, constitute "interest," "finance charges," the "cost of credit," or amounts factored into an "APR." If the Bureau wants to regulate optional tips and donations (or even to redefine terms like "finance charge"), its only potential option is to exercise its rulemaking authority. Instead of doing so, it asks this Court to fashion a new financing disclosure regime under the guise of enforcing the CFPA. The Court should reject that invitation.

<u>Third</u>, Counts IV-VI offer the theory that the loans violated sixteen *state* licensing and eight *state* usury laws, and so the Bureau gets to sue SoLo under the CFPA. To be clear, the CFPA does not deputize the Bureau as an enforcement agent for purported state-law violations. Nevertheless, in an improper attempt to grab that role anyway, the Bureau argues that loans made to borrowers in those states are void,

and SoLo engaged in unfair, deceptive, and abusive acts or practices when SoLo failed to disclose this alleged legal defense to enforceability of those loans. The theory has no legal support, and, even if it did, the Bureau has failed to plead facts demonstrating that even a single one of the referenced state laws applies here, let alone has been violated by SoLo. To the contrary, even a cursory review of the state licensing laws referenced in the Complaint, for example, reveals that the majority are facially inapplicable.

<u>Fourth</u>, Counts VIII and IX fail to plausibly allege unrelated claims that SoLo's preparation and disclosure of a borrower's repayment activity on the SoLo marketplace violates the Fair Credit Reporting Act ("FCRA"). That law applies only to a "consumer reporting agency," but SoLo is not one.¹

LEGAL STANDARD

"To survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to state a claim that is plausible on its face." *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (citation and quotation marks omitted). "[L]abels and conclusions," a "formulaic recitation of the elements of a cause of action," and "naked assertion[s]" devoid of "further factual enhancement" are insufficient. *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555, 557 (2007).

ARGUMENT

I. THIS LAWSUIT WAS FILED AND IS BEING PROSECUTED USING FUNDS OBTAINED IN VIOLATION OF THE BUREAU'S ENABLING STATUTE AND THE CONSTITUTION.

This enforcement action suffers from a fatal, threshold infirmity that requires dismissal with prejudice: it is being litigated with funds transferred to the Bureau in violation of statutory restrictions on the Bureau's funding and, therefore, in violation

¹ The Bureau's lack of statutorily-authorized funds with which to prosecute this lawsuit is a threshold issue that warrants dismissal of the Complaint in full. SoLo is not otherwise moving to dismiss Counts III and VII.

of the Appropriations Clause's mandate that "[n]o Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law." U.S. Const. art. I, §9, cl. 7. Under the Dodd-Frank Act, the Bureau funds its operations by making a demand of the Federal Reserve in "the amount determined by the [Bureau's] Director to be reasonably necessary to carry out" its operations, subject to a cap of twelve percent of the total operating expenses of the Federal Reserve. 12 U.S.C. §5497(a)(1)-(2). Those funds may come, however, only "from the combined *earnings* of the Federal Reserve System." *Id.* §5497(a)(1) (emphasis added).

The "earnings" of the Federal Reserve are its *net* earnings – *i.e.*, revenues in excess of liabilities. The Supreme Court recognized as much in *CFSA*. It held that the Appropriations Clause applies to the Bureau's funding, because the funds derive from the "*surplus funds* in the Federal Reserve System [that] would otherwise be deposited into the general fund of the Treasury." 601 U.S. at 425 (emphasis added); *see* 12 U.S.C. §289(a)(3) (directing transfer of surplus funds to the Treasury). The Federal Reserve's "surplus fund[s]" are its "*net* earnings." 12 U.S.C. §289(a)(2) (emphasis added).

The plain meaning of the term "earnings" (which the Dodd-Frank Act does not define) confirms this interpretation. "Earnings" means "net income" – i.e., income in excess of liabilities. See Earnings, Oxford Dictionary of Accounting (4th ed. 2010) (defining "earnings" as "[t]he net income or profit of a business"); Nasdaq, Glossary (defining "earnings" as "[n]et income for the company during a period")²; Webster's Third New Int'l Dictionary 714 (3d ed. 2002) (defining "earnings" as "[t]he balance of revenue for a specific period that remains after deducting related costs and expenses."); Merriam-Webster's Collegiate Dictionary 391 (11th ed. 2007) (defining "earnings" as "the balance of revenue after deduction of costs and expenses"). Thus, the Bureau's funding must come from the combined net income or profits of the Federal Reserve System.

² https://www.nasdaq.com/glossary/e/earnings (accessed August 14, 2024).

Since September 2022, the Federal Reserve has had no net earnings or profits. Swank Decl., Ex. 2. For the year ending December 31, 2023, the Federal Reserve reported a cumulative "deferred asset" amount of \$133.3 billion, which "represents the net accumulation of costs in excess of earnings." *Id.*, Ex. 3. The Federal Reserve continues to operate at a loss, reporting a deferred asset of \$175 billion as of last month. *Id.*, Ex. 4 at 48. Despite its lack of earnings, the Federal Reserve has continued to transfer funds to the Bureau. *Id.*, Ex. 5 at 4 (reporting transfer of \$315 million for first quarter of FY 2024). These transfers are, as the Bureau acknowledges, the "principal[]" means by which "[t]he CFPB is funded." *Id.* Thus, the Bureau filed and is prosecuting this lawsuit using funds transferred in violation of its enabling statute.

The requirement that the Bureau's funding come from the combined "earnings" of the Federal Reserve System stands in stark contrast to how Congress chose to fund the Financial Stability Oversight Council and the Office of Financial Research – both also created by the Dodd-Frank Act. For the first two years of its existence, the expenses of the Oversight Council were "treated as expenses of, and paid by, the Office of Financial Research," 12 U.S.C. §5328, which was funded by the Federal Reserve in "an amount sufficient to cover the expenses of the Office," *id.* §5345(c). Congress could have chosen to fund the Bureau from any source of revenue at the Federal Reserve's disposal. Instead, it limited the Bureau's funding to a specific source: the combined "earnings" of the Federal Reserve System.

This is not to say that the Bureau must cease operations until the Federal Reserve returns to profitability. If the "sums available to the Bureau" from the Federal Reserve are "not ... sufficient to carry out [its] authorities," the Bureau may seek appropriations directly from Congress. 12 U.S.C. §5497(e)(1)(A). But the Bureau may not flout its enabling statute and bypass Congress by using unlawfully requisitioned funds to prosecute this enforcement action. The Court should dismiss the Complaint with prejudice.

II. THE COMPLAINT FAILS TO PLAUSIBLY ALLEGE DECEPTIVE ADVERTISING (COUNT I).

Count I alleges that because marketplace "loans almost uniformly required a Lender tip fee, a SoLo donation fee, or both to be funded," SoLo violated the CFPA by deceptively advertising that consumers could obtain loans on the SoLo marketplace with "no interest," "0% APR," or "0% interest." Compl. ¶¶93-97.

An act or practice is deceptive if "(1) there is a representation, omission, or practice that (2) is likely to mislead consumers acting reasonably under the circumstances, and (3) the representation, omission, or practice is material." *CFPB v. Gordon*, 819 F.3d 1179, 1192-93 (9th Cir. 2016) (citation and quotation marks omitted). The Bureau has failed to state a deceptive acts or practices claim.

A. The Complaint fails to plausibly allege that the overall net impression of SoLo's advertising statements was misleading.

To determine whether an advertising statement is misleading, courts evaluate the statement in the context of the entire advertisement, transaction, or course of dealing, to determine whether the overall "net impression" is misleading to a reasonable consumer. *See Gordon*, 819 F.3d at 1193. A court must assume that "the reasonable consumer would read a communication in its entirety and make sense of a communication by assessing it as a whole and in its context." *Tavernaro v. Pioneer Credit Recovery, Inc.*, 43 F.4th 1062, 1072 (10th Cir. 2022).

The Bureau asserts that three phrases it plucked from SoLo's advertisements – "no interest," "0% interest," and "0% APR" – are deceptive. Compl. ¶¶4, 29-32, 93-96. But nowhere does the Bureau plead the facts required to plausibly allege deceptive advertising – for example, the full content of the advertisements, the form they took, other statements, representations, or clarifications that accompanied them, or the target audience. The Bureau instead bases its claim solely on these three phrases in isolation, even though "[a]n advertisement's 'overall impression,' not an isolated word or phrase, determines the representation conveyed." *FTC v. NPB*

Advert., Inc., 218 F. Supp. 3d 1352, 1358 (M.D. Fla. 2016) (citation omitted).

The full context and content of the advertisements in which these slogans appeared is critical here, given the unique nature of the SoLo marketplace. Unlike other financing, the borrower proposes the terms of their loan request and other consumers decide whether to fund them. Under these circumstances, the phrases "no interest," "0% interest," and "0% APR" are best understood to reflect the optionality inherent in a marketplace where the borrower can request loans with "no interest," "0% interest," and "0% APR" and lenders can choose to fund those loans. But because SoLo does not itself fund loans, its advertisements cannot reasonably be understood to make an unconditional promise that any specific loan request would be funded.

The Bureau also assumes – without any supporting factual allegations – that a reasonable consumer would have understood the phrases "no interest," "0% interest," and "0% APR" to preclude optional tips or donations. Referencing the terms "APR" or "interest" in these advertising slogans, however, does not plausibly create an impression that there would be no other financial terms associated with a marketplace loan (*e.g.*, late fees). Without more, the Bureau has failed to plausibly allege that the overall net impression of SoLo's advertising statements was deceptive.

- B. Even when viewed in isolation, SoLo's advertising statements were not deceptive because "no interest," "0% APR," and "0% interest" loans could be obtained on the SoLo marketplace.
 - 1. Optional tips and donations are neither "interest" nor amounts factored into an "APR."

The Bureau's deceptive advertising claim is predicated on its view that optional tips and donations are "interest" and/or are amounts factored into an "APR." They are neither. As a result, every loan requested and/or funded on the SoLo marketplace had the advertised characteristics, whether or not a tip or donation was paid.

Under the Bureau's Regulation Z, which implements the Truth in Lending Act ("TILA"), an "annual percentage rate is a measure of the cost of credit, expressed as a yearly rate," 12 C.F.R. §1026.22(a)(1), equivalent to the "finance charge," which is "the cost of consumer credit as a dollar amount," id. §1026.4(a). Regulation Z defines a "finance charge" to include "any charge payable directly or indirectly by the consumer and imposed directly or indirectly by the creditor as an incident to or a condition of the extension of credit." Id.; see also 15 U.S.C. §1605(a). "Interest" is one example of a type of finance charge. 15 U.S.C. §1605(a)(1). Thus, TILA and Regulation Z make clear that not all amounts paid by a consumer in connection with financing are a form of "interest" or required to be calculated as part of the "APR." Rather, the amount must be, among other characteristics, "imposed directly or indirectly by the creditor as an incident to or a condition of the extension of credit." 12 C.F.R. §1026.4(a).

Here, optional tips and donations are not charges "imposed ... by the creditor as an incident to or a condition of the extension of credit." 12 C.F.R. §1026.4(a). Instead, tips and donations are *optional* amounts *voluntarily* offered by the borrower as a token of appreciation for a funded loan request. Compl. ¶21 (alleging the "prospective borrower [] set[s] the Lender tip" and "can request a loan with a \$0 tip"). The loan request process itself makes clear that tips are optional, as the prospective borrower is shown "a screen with an unfilled box," and can enter "a \$0 tip." *Id.* ¶33. Likewise, "consumers could select" the amount of any donation, and could "elect to pay 'no donation" at all by disabling that feature. *Id.* ¶¶34-35, 38. Nor do these amounts compound or increase over time if unpaid, as "interest" typically would.

That tips and donations are optional payments is further confirmed by the promissory note that SoLo provided to borrowers on behalf of marketplace lenders. *See* Declaration of Travis Holoway ("Holoway Decl."), Ex. 9. The promissory note states that tips and donations are "purely voluntary" and not "a condition of the Loan." *Id.* If, as here, "the borrower can choose to avoid the [] fee," "then the fee is

not imposed as an incident to the extension of credit." *Veale v. Citibank, F.S.B.*, 85 F.3d 577, 579 (11th Cir. 1996). Although the Complaint alleges that SoLo "prompted," "encouraged," and "[r]ecommend[ed]" tips and donations, Compl. ¶¶4-5, 33, it does not plausibly allege that offering a tip or donation was *required* to obtain financing. *See, e.g., Scott v. IndyMac Bank, FSB*, No. 03-6489, 2005 WL 730961, at *2 (N.D. Ill. Mar. 28, 2005) (holding that a fee is not a finance charge "unless it was required" by the lender); *Salvate v. Auto. Restyling Concepts, Inc.*, No. 13-2898, 2014 WL 6901788, at *3 (D. Minn. Dec. 5, 2014) (holding that because a payment was "not required by [lender] as a condition of financing" it was "not incident to the extension of credit and therefore not a finance charge").

2. Loans with no tips or donations were requested and funded on the SoLo marketplace.

Even if optional tips and donations are "interest" or amounts factored into an "APR," the Complaint still fails to state a claim for deceptive advertising because consumers could request and obtain financing on the SoLo marketplace *without* paying a tip or donation. Compl. ¶¶4, 29, 94 (asserting that SoLo falsely stated in advertisements that "consumers could obtain financing" on these terms). The Complaint acknowledges that lenders have funded *thousands* of loans with no lender tip offered. *Compare id.* ¶28 (total marketplace originations), *with id.* ¶21 (percent of originations with tip). The Complaint also acknowledges that consumers could disable donations, *id.* ¶38, though the Complaint is conspicuously silent about the number or percentage of funded loans that included no donation. Thus, regardless of how optional tips and donations are denominated, consumers could, in fact, obtain a loan with "no interest," "0% APR," and "0% interest."

The Bureau attempts to bridge this plausibility gap by asserting that marketplace "loans *almost* uniformly required a Lender tip fee, a SoLo donation fee, or both to be funded." Compl. ¶95 (emphasis added). But the "almost" confirms that *some* loans were funded without a lender tip or donation – meaning SoLo's alleged

advertising was accurate. In any event, the sole alleged fact relied on by the Bureau to support this assertion is that "only 0.5% of loans funded on the SoLo Platform did not include a Lender tip." *Id.* ¶21. This statistic is perfectly consistent with the overwhelming majority of borrowers offering lender tips, but it says nothing about whether loans with no tip offered were funded on the marketplace. According to the Complaint, many loans were. Because the statistic alleged by the Bureau is "merely consistent with" its theory of deception, this allegation "stops short of the line between possibility and plausibility." *Iqbal*, 556 U.S. at 678.

III. THE COMPLAINT FAILS TO PLAUSIBLY ALLEGE THAT SOLO'S LOAN DISCLOSURE DOCUMENTS WERE DECEPTIVE (COUNT II).

In Count II, the Bureau alleges that the promissory note and Truth in Lending Disclosures document ("TILA disclosure") that SoLo provided to borrowers during the loan application process on behalf of marketplace lenders were deceptive because they falsely stated that "[t]he loan amount due at the repayment date is the principal amount only," "[t]he cost of credit is 0%," "[t]he finance charge is \$0," and "[n]o amounts were to be paid to others on the consumer's behalf." Compl. ¶99. These statements supposedly were false because "the vast majority of SoLo Platform loans include Lender tip fees or SoLo donation fees or both." *Id.* ¶100. Count II fails to state a claim because SoLo's disclosures were not false, and the Bureau has not plausibly pled they were likely to mislead a reasonable consumer.

A. SoLo's disclosure documents were not false.

As an initial matter, the disclosures SoLo provided on behalf of marketplace lenders were not false. As to the promissory note, it contains none of the four statements the Bureau alleges are false. Rather than specify, as the Bureau asserts, that the amount due on the repayment date is the principal amount only, the promissory note explicitly references tips and donations and states that "the principal sum borrowed together with all other charges, costs and expenses, is due and payable" on the repayment date. Holoway Decl., Ex. 9. Nor does the promissory

note say anything about the "cost of credit," "finance charge," or "amounts ... paid to others on the consumer's behalf." Compl. ¶99.

As to the TILA disclosure, TILA and Regulation Z dictate the form, manner, and content of the "cost of credit," "finance charge," "amounts paid to others on the consumer's behalf," and the "total of payments" disclosures.³ TILA does not apply here, however, because consumers who fund loans on the SoLo marketplace do not, on the whole, "regularly extend[] ... consumer credit." 15 U.S.C. §1602(g). The Bureau has not alleged otherwise.

Nonetheless, and although it was not required to, SoLo voluntarily provided a TILA disclosure on behalf of lenders to give borrowers additional information concerning the terms of their loans. But no statute or regulation specifies how optional tip or donation amounts should be disclosed to borrowers. As explained above (at 7-9), tips and donations are not the "cost of credit" or a "finance charge," because they are not amounts "imposed ... by the creditor as an incident to or a condition of the extension of credit." 12 C.F.R. §1026.4(a). Nor are tips and donations "amounts ... paid to others on the consumer's behalf," as they are not "amount[s] financed" by the consumer. *Id.* §1026.18(c). Finally, the "total of payments" box need only reflect the principal amount of the loan plus the finance or interest charges (*i.e.*, the cost of credit), and tips and donations are neither finance nor interest charges.

The Bureau should not be permitted to use this enforcement action to impose new disclosure requirements. The only possible recourse for the Bureau to attempt to do so is by amending Regulation Z through rulemaking, subject to the procedural protections of the Administrative Procedure Act, 5 U.S.C. §706(2). Rather than propose such a rule, the Bureau asks this Court to impose a new disclosure regime

³ The statement "[t]he loan amount due at the repayment date is the principal amount only" does not appear in either disclosure. SoLo assumes the Bureau is referencing the "total of payments" box on the Truth in Lending Disclosures.

B. The Complaint fails to raise a plausible inference that any inaccuracies in SoLo's disclosures were likely to materially mislead a reasonable consumer.

Even if the promissory note and TILA disclosure were inaccurate, any inaccuracies, when viewed in the context of the transaction and parties' course of dealing as a whole, were not "likely to mislead consumers acting reasonably under the circumstances." *Gordon*, 819 F.3d at 1192 (citation omitted).

The crux of the Bureau's theory of deception is that SoLo's promissory notes and TILA disclosures inaccurately conveyed that "the consumer must repay only the original loan amount" and not any optional tips or donations the consumer had also agreed to pay. Compl. ¶44, 46. In the context of the entire loan transaction, however, no reasonable borrower could have been misled as to their agreement to pay any optional tips or donations offered. The borrower – not SoLo or the lender – chose the primary terms of their loan request during the loan request process, including any tip or donation. *Id.* ¶33-34. It is during this same process that SoLo provided each borrower with their promissory note and TILA disclosure. *Id.* ¶42. It is highly implausible that any borrower – having just decided to offer a tip or donation and in what amount – would interpret the contemporaneously provided disclosures to mean that SoLo would not debit those amounts on their loan's repayment date. *See CFPB v. Nationwide Biweekly Admin., Inc.*, No. 15-02106, 2017 WL 3948396, at *3 (N.D. Cal. Sept. 8, 2017) (deception under the CFPA "requires something that misleads more than only the most gullible or inattentive").

The promissory note SoLo provided to prospective borrowers during the loan request process reinforces that no reasonable consumer could have been misled. The note explicitly references the existence of "Lender Tips" and the "Platform Donation," both of which it describes as "purely voluntary" payments that the

borrower "chooses to make." Holoway Decl., Ex. 9. The promissory note also makes clear that the borrower has agreed to pay "the principal sum borrowed together with all other charges, costs, and expenses." *Id.* Thus, based on the totality of the circumstances, no reasonable borrower could have been misled as to their agreement to pay any optional tip or donation amounts on their loan's repayment date.

IV. THE BUREAU HAS FAILED TO PLAUSIBLY PLEAD A CFPA CLAIM PREDICATED ON PURPORTED VIOLATIONS OF STATE LAW (COUNTS IV-VI).

The heart of the Complaint is the allegations underlying Counts IV-VI that certain marketplace loans violated state law and are void, and that the Bureau can enforce those laws under the guise of the CFPA's prohibition on deceptive, unfair, and abusive acts or practices against SoLo for collecting on loans that consumers allegedly were not obligated to repay. Compl. ¶¶107-23. Specifically, the Bureau contends that consumers were not obligated to repay loans where "the loans were not made by a licensed person or entity" (in sixteen states) and/or "the loans were in excess of state usury limitations" (in eight states). *Id.* ¶8. These allegations fail to state a CFPA claim.

A. Failing to disclose a potential legal defense to enforceability of a loan is not a violation of the CFPA.

"Congress did not intend to turn every violation of state law into a violation of the CFPA." *CFPB v. CashCall, Inc.*, No. 15-7522, 2016 WL 4820635, at *12 (C.D. Cal. Aug. 31, 2016). Instead, "[t]he proper question is whether the CFPB has alleged, and proven, that Defendants have engaged in conduct that falls within the broad range of conduct prohibited by the CFPA," *id.*, "independent of any state-law violation," *Moritz v. Daniel N. Gordon, P.C.*, 895 F. Supp. 2d 1097, 1108 (W.D. Wash. 2012); *see also Wade v. Reg'l Credit Ass'n*, 87 F.3d 1098 (9th Cir. 1996).

The Complaint alleges no representation made by SoLo – either in advertising, loan documents, or collection notices – that either it or marketplace lenders are licensed under state law, or that marketplace loans comply with state usury statutes.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

Instead, the Bureau asserts that "[c]onsumers ... likely were unaware that SoLo lacked the legal authority to collect [on] the loans," Compl. ¶121, and SoLo "fail[ed] to inform them that neither SoLo nor the lender have a legal right to loan repayments," id. ¶111. Reduced to its essence, therefore, the Bureau's theory in Counts IV-VI is that SoLo violated the CFPA by failing to affirmatively disclose to consumers a potential state-law defense to the enforceability of their loans. But this attempt to bootstrap a federal claim to alleged violations of state law would convert every instance where a consumer may have a theoretical legal defense into a "deceptive," "unfair," and "abusive" failure to disclose that defense to consumers. The argument has essentially no cabining principle – such as, how good a defense must be before it must be disclosed, and how much the company can explain about why the defense is wrong – and would sow much more confusion than clarity. Courts have rejected this argument in other contexts, and this Court should do the same here. See, e.g., Woodward v. Collection Consultants of Cal., 381 F. Supp. 3d 1234, 1236-38 (C.D. Cal. 2019) (rejecting FDCPA claim arising from attempt to collect on timebarred debt), aff'd, 801 F. App'x 521 (9th Cir. 2020).

To be sure, Count IV does assert certain other predicate acts, but none gives rise to a plausible claim. The Bureau says that SoLo misrepresented consumers' obligation to repay by "debiting money from consumers' bank accounts." Compl. ¶109. But initiating a debit transaction from a consumer's account is not a representation, let alone a misrepresentation. The Bureau also asserts that SoLo "represented expressly in loan documents ... that consumers had an obligation to repay loan amounts" and also alludes to unspecified "collection emails and texts," *id.* ¶¶108, 109, but the Complaint fails to identify the content of these alleged representations. Such allegations are required to state a plausible claim because, absent more, merely communicating with a borrower about an unenforceable outstanding debit is not a false, deceptive, or misleading representation. *See Woodward*, 381 F. Supp. 3d at 1239.

B. The Bureau's conclusory allegations of violations of state law are insufficient to state a claim.

Even if the Bureau were permitted to proceed on its effort to federalize state law through the CFPA, it has not plausibly alleged the violation of any state law.

As an initial matter, it is not clear from the Complaint *who* the Bureau believes has violated the dozens of referenced state laws or is required to be licensed, and in which States. The Complaint appears to assert that the consumers who funded loans on the SoLo marketplace were required to obtain a license. E.g., Compl. ¶8, 59, 75 (noting that SoLo brokered loans that were "made by unlicensed parties"). Elsewhere, however, it appears to assert that SoLo is required to obtain a license, even though it was not the lender. E.g., id. ¶59, 82(p).

In any event, to the extent the Bureau contends that SoLo was required to obtain a license because it "solicited," "brokered," "arranged," "facilitated," or "procured" loans, this word-salad falls far short of raising a plausible claim for relief. It is entirely unclear from the Complaint what facts, if any, the Bureau believes indicate that SoLo "solicited," "brokered," "arranged," "facilitated," and "procured" loans. Merely reciting these terms is insufficient to state a plausible claim; they are not well-pled facts, but rather legal terms and elements of the state law on which the Bureau's CFPA claim relies.

If that were not enough, the Bureau also assumes that these terms have the same meaning under the laws of all sixteen states – a preposterous notion. So the Bureau has not only failed to plead the facts that, if proven, would establish that SoLo has "brokered" loans as a general matter, but it has also failed to plead the specific facts that would establish that SoLo has "brokered" loans for purposes of each of the sixteen states' laws referenced in the Complaint. Instead, the Complaint throws the laws of these sixteen states into a blender, "fail[ing] to account for any consequential differences that may exist among the undifferentiated state-laws[s]." *In re Opana ER Antitrust Litig.*, 162 F. Supp. 3d 704, 726 (N.D. Ill. 2016). The Bureau has thus

"not truly pleaded claims under those laws sufficient to show [its] entitlement to recovery." *Id.* (emphasis omitted); *see also Matter of Rhone-Poulenc Rorer, Inc.*, 51 F.3d 1293, 1302 (7th Cir. 1995) (rejecting argument that defendant's liability could be determined "under a law that is merely an amalgam, an averaging, of the [] laws of 51 jurisdictions").

The Complaint approaches the eight state usury statutes in much the same way. Rather than plausibly plead that optional tips and donations constitute "interest" under each of the referenced States' laws, the Complaint seeks to allege a violation of all eight state laws by applying an apparent definition of "interest" that is supposedly "typical[]" of state law, though not alleged to be true as to any one (let alone all) of the state laws identified in the Complaint. Compl. ¶76. Even under this general formulation, unmoored from any specific state law, no rationale is proffered for denominating optional tips and donations as "compensation" paid to a lender under state law. (Donations are not even paid to the lender, let alone compensation to them.) The Complaint's threadbare generalizations of dozens of separate state licensing and usury laws fall far short of pleading a plausible claim.

C. Many of the state licensing laws are inapplicable on their face.

Although more is not necessary, even a cursory examination of a subset of the referenced state laws shows they do not apply to marketplace loans, rendering the Bureau's assertions of state law violations wholly implausible.

Six of the state licensing laws the Bureau references apply only to persons engaged in the business of making loans or lending.⁴ For example, Alabama voids certain loans "that are made by a person in the business of lending." Compl. ¶82a; see Ala. Code §5-18-4. The Complaint alleges that marketplace loans are made by "individual consumers" (i.e., persons not in the business of lending) who "fund loan requests [and] become lenders." Compl. ¶24. Under Alabama law, individual

⁴ Ala. Code §5-18-4; 205 Ill. Comp. Stat. §670/1; Minn. Stat. §56.01(a); N.J. Rev. Stat. §17:11C-2-17:11C-3; N.M. Stat. §58-15-3; N.Y. Banking Law §340.

consumers "loaning their own money" are "clear[ly] and explicit[ly]" "exempt from license" requirements. *State v. Leeth*, 67 So. 2d 46, 47 (Ala. Ct. App. 1952).

Similarly, New Mexico requires licensure only for persons who "engage in the business of lending," N.M. Stat. §58-15-3, but the "[o]ccasional isolated acts of loaning money to accommodate one's customers and friends do not constitute 'engaging in the business' of loaning money." *Hammond v. Reeves*, 552 P.2d 1237, 1239 (N.M. Ct. App. 1976) (citation omitted) (holding that lender that "made a relatively small number of loans" and had "another business from which he presumably obtained the majority of his income" had not engaged in the business of making loans).

Likewise, New York requires licensure only for persons "engage[d] in the business of making loans," which requires the person to both "solicit[] loans" and "in connection with such solicitation, make[] loans to individuals." N.Y. Banking Law §340. SoLo does not "make[] loans" and marketplace lenders do not "solicit[] loans," so New York law does not require that either be licensed. Even if it were otherwise, Section 340 explicitly excludes "isolated, incidental or occasional transactions which otherwise meet the requirements of this section," such as the marketplace originations here.

Five additional states – Ohio, North Carolina, New Hampshire, Idaho, and Massachusetts – explicitly define the business of making loans or lending more broadly, to encompass related activities such as procuring, assisting, brokering, or soliciting a loan.⁵ The Bureau asserts (without factual enhancement) that SoLo has engaged in each of these activities. But where, as here, the person making the loan (the consumer) is not subject to the licensure requirement, it would make little sense for state legislatures to have intended to void, as to the lender, an otherwise enforceable loan merely because an unlicensed person allegedly assisted the lender

⁵ Ohio Rev. Code. §1321.02; N.C. Gen. Stat. §53-166; N.H. Rev. Stat. §399-A:2; Idaho Stat. §28-46-402; Mass. Gen. Laws ch. 140, §§96, 110.

in procuring it. In the absence of any clear legislative intent or caselaw to the contrary, adopting such a radical position should be left to state licensing authorities and state courts interpreting their own laws.

D. The Complaint fails to state an unfairness claim (Count V) for additional reasons.

Even if there were state law violations, and even if the Bureau's self-appointment as a roving ombudsman to enforce state law was permissible, Count V should also be dismissed because it alleges no facts to support the required elements of its claim that SoLo engaged in "unfair" conduct. An act or practice is unfair only if the Bureau can show (a) a "substantial injury" to consumers; and (b) that the asserted consumer injury "is not outweighed by countervailing benefits to consumers or to competition." 12 U.S.C. §5531(c). The Complaint fails to allege either element, so Count V should be dismissed.

To satisfy the duty to plead a substantial injury, the Bureau says consumers repaid loans where state law might have relieved them of that obligation. *See* Compl. ¶115. That is far from enough. The Bureau does not offer any facts that would permit a trier of fact to find that a consumer who repays a small-dollar loan that they took out from another consumer days or weeks before, and used the funds for immediate personal needs, was harmed *substantially* by paying the small loan back (along with any modest, optional fees that they also agreed to) to that other consumer.

The Bureau's sole allegation as to the weight of benefits is also conclusory. *See* Compl. ¶117. Although not SoLo's burden to plead or prove, substantial countervailing benefits to both consumers and competition are apparent on the face of the Complaint. The Bureau has "recogniz[ed] the need for emergency credit," such as that available through the SoLo marketplace. Swank Decl., Ex. 6. But, as the Bureau has also recognized, consumers with low income or no credit or seriously impaired credit have few options to obtain emergency financing. Some consumers may obtain a payday loan, but the Bureau has accused payday lenders of preying on

consumers, particularly through pattens of loan rollovers and upcharges that create "a long[]-term debt trap." *Id.*, Ex. 7. Other consumers, for whom even a payday loan is unattainable, turn to loan sharks or internet message boards, such as Reddit, to seek needed funds. The Bureau has thus urged the industry "to develop a more vibrant, competitive market for small consumer loans." *Id.*, Ex. 8.

SoLo provides a more equitable, transparent, and empowering option to meet short-term emergency credit needs – even for consumers without credit scores or traditional credit histories or with no or seriously impaired credit who may have no other financing options. *See* Compl. ¶25 (discussing components of SoLo Score). Consumers also benefit by being able to request loans on terms that meet their financial needs, without hidden fees and debt traps. *Id.* ¶¶20, 33, 38. And if consumers cannot repay their loans, SoLo does not report derogatory information to credit bureaus. *Id.* ¶70.

The Bureau also ignores the clear and direct countervailing benefit that SoLo's collection activities provide to the consumers who fund loans on the marketplace and are owed repayment. *See* Compl. ¶¶24, 41. In the absence of SoLo's collection activities, these consumers would be out-of-pocket the principal amount of the loan they funded and the amount of any optional tip amount offered by the borrower.

Finally, the Complaint conveniently ignores the burden on the lenders that the Bureau seeks to create. Counts IV-VI essentially seek to invalidate thousands of loans that have been repaid to those consumers, putting them in jeopardy. For all of these reasons, the Complaint fails to present a plausible claim that the asserted consumer injury "is not outweighed by countervailing benefits to consumers or to competition." 12 U.S.C. §5531(c).

V. THE COMPLAINT FAILS TO ALLEGE A FCRA CLAIM (COUNTS VIII-IX).

Counts VIII-IX allege that SoLo violated the FCRA by failing to follow reasonable procedures to ensure maximum possible accuracy in its "consumer reports." Compl. ¶¶130-38. (Count IX is a CFPA claim that is derivative of the

FCRA claim.) Although the Bureau acknowledges that SoLo has not furnished any consumer information to credit reporting agencies, *id.* ¶10, it contends that SoLo is itself a "consumer reporting agency" because it makes available on the marketplace interface a borrower's "SoLo score" and number of loans repaid, both of which allegedly constitute "consumer reports." *Id.* ¶131. But SoLo is not a "consumer reporting agency," and so FCRA is inapplicable.

FCRA defines "consumer reporting agency" as "any person which, for monetary fees, dues, or on a cooperative nonprofit basis, regularly engages in whole or in part in the practice of assembling or evaluating consumer credit information or other information on consumers for the purpose of furnishing consumer reports to third parties." 15 U.S.C. §1681a(f) (emphasis added). The Complaint alleges that SoLo assembles and provides this information "for monetary fees in the form of SoLo donation fees." Compl. ¶17. But it is not enough that "[a]n entity ... make[s] money" and reports consumer information; rather, the entity "must make money in exchange for providing consumer reports in order to be considered a 'consumer reporting agency." Sandofsky v. Google LLC, No. 21-10052, 2021 WL 2941128, at *4 (D. Mass. July 13, 2021) (emphasis added) (citation omitted), aff'd, No. 21-1628, 2023 WL 9785578 (1st Cir. Sept. 6, 2023); see also Tierney v. Advoc. Health & Hosps. Corp., 797 F.3d 449, 452 (7th Cir. 2015).

Here, there is no plausible basis to infer that SoLo receives donations for assembling a borrower's SoLo Score. SoLo receives donations, if at all, only after a loan has been funded – not after it makes available a borrower's SoLo Score to prospective marketplace lenders – and it makes a borrower's SoLo Score available to prospective lenders even if no donation is made. Further illustrating the lack of a direct exchange, SoLo provides the borrower's SoLo Score and number of loans repaid to prospective lenders, whereas donations are made, if at all, by borrowers. *See* Compl. ¶¶25, 34, 100(a).

The Bureau alternatively asserts that SoLo prepares consumer reports on a 20

"cooperative nonprofit basis." But the Complaint does not allege that SoLo is a "cooperative" or a "nonprofit," let alone both. See Compl. ¶2. Nor does it allege that consumer information is being shared on a "cooperative [] basis." Meeting this element requires more than the mere sharing of information with a third-party; otherwise the statute's requirement that the sharing be "for monetary fees, dues, or on a cooperative nonprofit basis" would be superfluous. Sharing information on a cooperative basis requires the *mutual* sharing of information. See Fed. Trade Comm'n Staff Rpt., 40 Years of Experience With the Fair Credit Reporting Act, 2011 WL 3020575, at *21-22 (July 2011) (noting that a loan exchange may be a cooperative nonprofit where each member owns and operates the cooperative and each "provide[s]" and "receive[s]" information); *Tierney*, 797 F.3d at 453 (allegation that information was shared with third party insufficient because no allegation of "cooperative sharing of information"). Here, the Complaint exclusively alleges that information is being shared one way – that "SoLo [] provides this SoLo Score to prospective lenders." Compl. ¶9. It alleges no mutual exchange of information and thus fails to plausibly allege that SoLo provides consumer information on a "cooperative nonprofit basis."

CONCLUSION

The Court should dismiss this case with prejudice.

2021

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

22

23

24

25

2627

LOCAL RULE 11-6.1 CERTIFICATION The undersigned counsel of record for Defendant SOLO FUNDS, INC. certifies that this memorandum of points and authorities contains 6,997 words, which complies with the page and word limits set forth in the Court's order of August 8, 2024 (ECF No. 22). /s/ Laura A. Stoll Dated: August 15, 2024 LAURA A. STOLL

Case No. 2:24-cv-04108-RGK-AJR

DEFENDANT'S MEMORANDUM OF POINTS AND AUTHORITIES

CERTIFICATE OF SERVICE I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States District Court for the Central District of California by using the CM/ECF system on August 15, 2024. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the CM/ECF system. I certify under penalty of perjury that the foregoing is true and correct. Executed on August 15, 2024. Dated: August 15, 2024 /s/ Laura A. Stoll LAURA A. STOLL

1	THOMAS M. HEFFERON (admitted p	pro
2	hac vice) THefferon@goodwinlaw.com	
3	LEVI W. SWANK (admitted pro hac)	vice)
4	LSwank@goodwinlaw.com GOODWIN PROCTER LLP	
5	1900 N Street, NW Washington, DC 20036	
6	Tel.: +1 202 346 4000	
7	Fax: +1 202 346 4444	
8	LAURA A. STOLL (SBN 255023) LStoll@goodwinlaw.com	
9	GOODWIN PROCTER LLP	
10	601 S. Figueroa Street, 41st Floor Los Angeles, CA 90017	
11	Tel.: +1 213 426 2500 Fax: +1 213 623 1673	
12	Attorneys for Defendant	
13	SOLO FUNDS, INC.	
14	UNITED STATES DISTRICT COURT	
15	CENTRAL DISTRICT OF CALIFORNIA	
16	WESTERN DIVISION – LOS ANGELES	
17	CONSUMER FINANCIAL	Case No. 2:24-cv-04108-RGK-AJR
18	PROTECTION BUREAU,	DECLARATION OF LEVI W. SWANK
19	Plaintiff,	IN SUPPORT OF DEFENDANT'S
20	V.	MOTION TO DISMISS COMPLAINT
21	SOLO FUNDS, INC.,	Date: Monday, September 16, 2024 Time: 9:00 am
22	Defendant.	Ctrm: 850 (8 th Fl.)
23	Defendant.	Judge: Hon. R. Gary Klausner Roybal Federal Building
24		255 East Temple Street Los Angeles, CA 90012
25		200711150100, 01170012
26		J
27		
28		
	DECLARATION OF LEVI W. SWANK	Case No. 2:24-cv-04108-RGK-AJR
		_ ast 1.5

- 1. I am an attorney at the law firm of Goodwin Procter LLP, which is counsel for Defendant SoLo Funds, Inc. ("SoLo") in the above-captioned matter. I am a member of the bars of the Commonwealth of Virginia and the District of Columbia, and am admitted to practice in this Court *pro hac vice*. I have personal knowledge of the facts set forth in this declaration and, if called as a witness, could and would competently testify to the matters set forth herein.
- 2. I submit this Declaration in support of Defendant's Motion to Dismiss the Complaint filed concurrently herewith.
- 3. Attached hereto as **Exhibit 1** is a true and correct copy of a report from the Board of Governors of the Federal Reserve System titled "Economic Well-Being of U.S. Households in 2023," dated May 2024, and available at https://www.federalreserve.gov/consumerscommunities/shed.htm (accessed August 14, 2024).
- 4. Attached hereto as **Exhibit 2** is a true and correct copy of an announcement from the Board of Governors of the Federal Reserve System titled "Federal Reserve Board announces Reserve Bank income and expense data and transfers to the Treasury for 2022," dated January 13, 2023, and available at https://www.federalreserve.gov/newsevents/pressreleases/other20230113a.htm (accessed August 14, 2024).
- 5. Attached hereto as **Exhibit 3** is a true and correct copy of a report from the Board of Governors of the Federal Reserve System titled "Federal Reserve Banks Combined Financial Statements, As of an for the Years Ended December 31, 2023 and 2022 and Independent Auditors' Report, available at https://www.federalreserve.gov/aboutthefed/files/combinedfinstmt2023.pdf (accessed August 14, 2024).
- 6. Attached as **Exhibit 4** is a true and correct copy of a report from the Board of Governors of the Federal Reserve System titled "Monetary Policy Report,"

- dated July 5, 2024, and available at https://www.federalreserve.gov/monetarypolicy/files/20240705_mprfullreport.pdf (accessed August 14, 2024).
- 7. Attached as **Exhibit 5** is a true and correct copy of a report from the Consumer Financial Protection Bureau titled "CFO update through the first quarter of fiscal year 2024," issued on March 1, 2024 and revised on July 31, 2024, and available at https://files.consumerfinance.gov/f/documents/cfpb_cfo-update_report_fy-2024_q1.pdf (accessed August 14, 2024).
- 8. Attached as **Exhibit 6** is a true and correct copy of a statement from the Consumer Financial Protection Bureau titled "CFPB Examines Payday Lending," dated January 19, 2012, and available at https://www.consumerfinance.gov/about-us/newsroom/consumer-financial-protection-bureau-examines-payday-lending/ (accessed August 14, 2024).
- 9. Attached as **Exhibit 7** is a true and correct copy of an announcement from the Consumer Financial Protection Bureau titled "CFPB Finalizes Rule To Stop Payday Debt Traps," dated October 5, 2017, and available at https://www.consumerfinance.gov/about-us/newsroom/cfpb-finalizes-rule-stop-payday-debt-traps/ (accessed August 14, 2024).
- 10. Attached as **Exhibit 8** is a true and correct copy of an announcement from the Consumer Financial Protection Bureau titled "Remarks by Richard Cordray at the Payday Loan Field Hearing in Birmingham, AL," dated January 19, 2012, and available at https://www.consumerfinance.gov/about-us/newsroom/remarks-by-richard-cordray-at-the-payday-loan-field-hearing-in-birmingham-al/ (accessed August 14, 2024).

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on this 15th day of August, 2024, in Victoria, British Columbia. -3-DECLARATION OF LEVI W. SWANK Case No. 2:24-cv-04108-RGK-AJR

CERTIFICATE OF SERVICE I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States District Court for the Central District of California by using the CM/ECF system on August 15, 2024. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the CM/ECF system. I certify under penalty of perjury that the foregoing is true and correct. Executed on August 15, 2024. /s/ Laura A. Stoll LAURA A. STOLL

Exhibit 1



Economic Well-Being of U.S. Households in 2023

May 2024





The Federal Reserve System is the central bank of the United States. It performs five key functions to promote the effective operation of the U.S. economy and, more generally, the public interest.

The Federal Reserve

- **conducts the nation's monetary policy** to promote maximum employment and stable prices in the U.S. economy;
- promotes the stability of the financial system and seeks to minimize and contain systemic risks through active monitoring and engagement in the U.S. and abroad;
- promotes the safety and soundness of individual financial institutions and monitors their impact on the financial system as a whole;
- fosters payment and settlement system safety and efficiency through services to the banking industry and U.S. government that facilitate U.S.-dollar transactions and payments; and
- promotes consumer protection and community development through consumer-focused supervision and examination, research and analysis of emerging consumer issues and trends, community economic development activities, and administration of consumer laws and regulations.

To learn more about us, visit www.federalreserve.gov/aboutthefed.htm.

Contents

Executive Summary	1
Overall Financial Well-Being	2
Income	2
Employment	2
Expenses	2
Banking and Credit	3
Housing	3
Higher Education and Student Loans	3
Retirement and Investments	4
Occupation of all Well Defend	
Overall Financial Well-Being	
Current Financial Situation	
Changes in Financial Situation over Time	
Main Financial Challenges	
Local and National Economic Conditions	11
Income	13
Level and Source of Income	
Changes in Income and Spending	
Income Variability	
income variability	
Employment	19
Working from Home	19
Job Searching and Advancement	20
Work Arrangements and Autonomy at Work	21
Reasons for Not Working	22
Care Work	
Employment Outcomes of Those with a Prior Arrest or Conviction	25
Francisco	
Expenses	
Bills and Regular Expenses	
Food Sufficiency	
Health-Care Expenses	
Unexpected Expenses and Emergency Savings	31
Banking and Credit	35
Bank Account Ownership	
Nonbank Check Cashing and Money Orders	
Cryptocurrency	
Credit Outcomes and Perceptions	30
Credit Cards	
Buy Now, Pay Later	
Nonbank Small Dollar Credit	
NUTIDATIN SITIALI DULIAI CIEUR	42
Housing	45
Harris and	45

47
48
49
. •
53
53
54
56
57
59
63
63
65
68
71
71
72
72
. – 72
73
74
, –

Executive Summary

Results from the 2023 Survey of Household Economics and Decisionmaking (SHED) indicate that people's overall financial well-being was nearly unchanged from the previous year but below the high reached in 2021.¹ Despite the moderating pace of inflation, many adults continued to indicate that higher prices were a challenge in managing their finances.

The survey, which was fielded in October 2023, showed similar patterns for other measures of financial resiliency as well. Both the share of adults who spent less than their income in the month before the survey and the share who would pay for an unexpected \$400 expenses with cash or the equivalent were nearly unchanged from 2022, yet both were down from 2021. Among adults who were not retired, the share who felt that their retirement savings plan was on track rose slightly from 2022, possibly reflecting stock market gains, but remained below the share who felt their retirement savings was on track in 2021.

The rates at which workers started new jobs and received pay raises were consistent with those seen in 2022. Reflecting the continued strength in the labor market, these measures remained above the levels seen in 2021. Relatedly, the share of prime-age adults (ages 25 to 54) not working because of difficulty finding work remained low.

Some groups continued to experience financial stress at higher rates than others. Lower-income adults were more likely to experience material hardships including not paying all bills, not always having enough to eat, and skipping medical care because of cost. Additionally, the gap in financial well-being between parents of children under age 18 and other adults widened, as parents saw a continued decline in well-being in 2023.

Some topics in this year's report were new to the survey in 2023, such as food sufficiency, caregiving, employment outcomes of those with a previous arrest or conviction, and homeowners insurance. The survey also continues to track other key topics related to financial outcomes, such as housing, value of education, and retirement. Key findings across each of the topics covered in the report include the following:

The Federal Reserve has fielded the SHED annually in the fourth quarter of each year since 2013. The latest survey was fielded from October 20 until November 5, 2023. Since 99 percent of respondents completed the survey in October, this report describes the field period as October 2023. The anonymized data, as well as appendixes containing the SHED questionnaire and responses to questions in the order asked, are also available at https://www.federalreserve.gov/consumerscommunities/shed.htm.

Overall Financial Well-Being

- The 72 percent of adults doing at least okay financially was similar to the 73 percent in 2022 yet remained well below the recent high of 78 percent in 2021.
- Financial well-being was generally unchanged from 2022 for most population segments. One notable exception was parents living with their children under age 18, where the share doing at least okay financially fell 5 percentage points from 2022.
- Inflation continued to be the top financial concern, despite the inflation rate falling over the prior year.

Income

- Many people experienced a change in their family's monthly income and spending from a year earlier. Thirty-four percent of adults said their family's monthly income increased in 2023 compared with the prior year, while a higher 38 percent said their monthly spending increased.
- Forty-eight percent of adults reported spending less than their income in the month before the survey. The share of adults who saved money in the month before the survey was similar to the share in 2022 but down from highs in 2020 and 2021, and below pre-pandemic levels.

Employment

- The rates at which workers started new jobs, applied for new jobs, and received pay raises were similar to 2022. For example, the share of adults who received a raise and the share who asked for a raise were unchanged at 33 percent and 13 percent, respectively. Yet, reflecting the continued strength of the labor market, rates of starting new jobs and pay raises remained above 2021 levels.
- About 4 in 10 single working parents of a younger child (under age 13) used paid childcare, as did a similar share of parents living with a spouse/partner where both parents worked.
- Childcare costs can be significant for parents. The median monthly amount that parents using paid care paid for childcare was \$800. For those who paid for 20 or more hours of childcare each week, the median cost was \$1,100.

Expenses

- Sixty-three percent of adults said they would cover a hypothetical \$400 emergency expense exclusively using cash or its equivalent, unchanged from 2022 but down from a high of 68 percent in 2021.
- Sixty-five percent of adults said that changes in the prices they paid compared with the prior
 year had made their financial situation worse, including 19 percent who said price changes had
 made their financial situation much worse. In contrast, 4 percent of adults said that price

changes compared with last year had made their financial situation better, while 31 percent said price changes had little to no effect on their financial situation.

Banking and Credit

- While 94 percent of adults had a bank account, notable differences remain by income, age, race, ethnicity, and disability status. For example, nearly all adults with incomes of at least \$100,000 had a bank account, compared with 77 percent among adults with incomes less than \$25,000.
- The share of adults who applied for credit has been nearly unchanged in recent years. Yet, among adults who applied for credit, the share who were denied credit or approved for less credit than they requested was up 2 percentage points from 2022 and up 5 percentage points from 2021.
- Fourteen percent of adults used Buy Now, Pay Later (BNPL) in the prior 12 months, up 2 percentage points from 2022. The top two reasons for using BNPL were wanting to spread out payments (87 percent) and for convenience (82 percent). Additionally, over half of BNPL users said it was the only way they could afford their purchase.

Housing

- Challenges paying rent increased in 2023. The median monthly rent payment was \$1,100 in 2023, up 10 percent from 2022. In addition, 19 percent of renters reported being behind on their rent at some point in the past year, up 2 percentage points from 2022.
- Nineteen percent of adults said they were affected financially by a natural disaster in the prior year, including 7 percent who were moderately or severely affected.
- At least 4 percent of homeowners did not have homeowners insurance. This share was much higher among certain populations. For example, more than 2 in 10 homeowners living in the South with an income less than \$50,000 did not have homeowners insurance.

Higher Education and Student Loans

- Education was largely seen as a path to higher income and greater financial well-being. Most
 adults who completed a bachelor's degree or higher said it was worth the cost, but few who
 started an educational degree program after high school and did not complete at least an associate degree thought the same.
- Following the restart of federal student loan payments in the fall of 2023, the share of student loan borrowers who were required to make payments returned back to pre-pandemic levels.

Economic Well-Being of U.S. Households in 2023

Retirement and Investments

- Progress toward retirement savings goals improved slightly in 2023. Thirty-four percent of nonretirees thought their retirement savings plan was on track, up from 31 percent in 2022, but down from 40 percent in 2021.
- Eighty percent of retirees said they were doing at least okay financially—a higher share than for U.S. adults overall.
- Forty-five percent of adults said they were mostly or very comfortable choosing and managing their investments, while 55 percent of adults said they were not comfortable or only slightly comfortable.

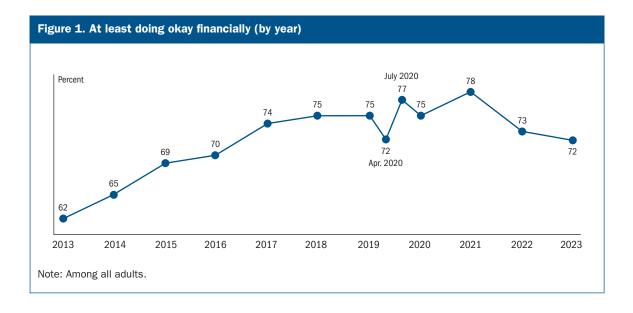
Overall Financial Well-Being

The share of adults doing at least okay financially was similar to 2022 yet remained well below the recent high in 2021.² Financial well-being was also generally unchanged from 2022 for most population segments. One notable exception was parents, who saw further large declines in the share doing at least okay. Inflation continued to be a top financial concern, despite the inflation rate falling over the prior year.

Current Financial Situation

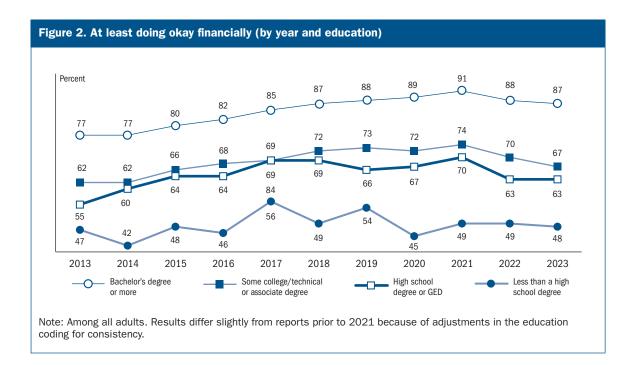
Near the end of 2023, 72 percent of adults were at least doing okay financially, meaning they reported either "doing okay" financially (39 percent) or "living comfortably" (33 percent). The rest reported either "just getting by" (19 percent) or "finding it difficult to get by" (9 percent).

The 72 percent of adults doing at least okay financially was essentially unchanged from 2022 yet was down 6 percentage points from the recent high of 78 percent in 2021 (figure 1).



As with previous surveys, adults with at least a bachelor's degree continued to report higher financial well-being than did adults with lower levels of education. Eighty-seven percent of adults with at

Unless otherwise specified, results in this report are from the Federal Reserve's Survey of Household Economics and Decisionmaking. The survey was fielded in October 2023, and results reflect financial situations at that time. Results typically capture financial experiences at the time of the survey or in the 12-month period before the survey rather than the precise calendar year. Results discussing the period shortly after the onset of the pandemic are based on the two supplemental surveys that were fielded during the pandemic in April 2020 and July 2020.



least a bachelor's degree reported doing at least okay financially, compared with 48 percent of those with less than a high school degree (figure 2).

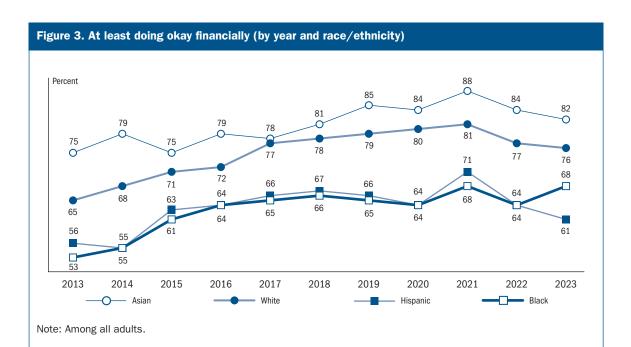
The gap in well-being by education has narrowed slightly in recent years. The share of adults with at least a bachelor's degree that reported doing at least okay financially declined 4 percentage points since 2021, while this same share among those with less than a high school degree has remained relatively flat.³ That said, taking a longer view reveals a widened gap in financial well-being by education. Since 2013, the share doing at least okay among adults with at least a bachelor's degree increased 10 percentage points, whereas those with less than a high school degree saw essentially no lasting gains (figure 2).

Differences in financial well-being across racial and ethnic groups persisted in 2023. Eighty-two percent of Asian adults were doing at least okay financially, followed by 76 percent of White adults, 68 percent of Black adults, and 61 percent of Hispanic adults (figure 3).⁴

Similar to the overall population, financial well-being among Asian, Hispanic, and White adults ticked down slightly from the prior year and was below the peak in 2021. In contrast, Black adults saw an increase in well-being, with the share doing at least okay climbing 4 percentage points to

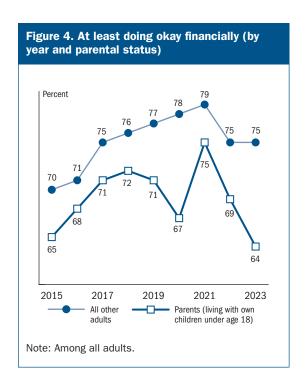
³ The recent declines in financial well-being among those with at least a bachelor's degree occurred for both those with student loans and those without. That said, those with student loans saw larger declines.

⁴ The reported categorizations reflect the largest statistical groupings but are neither exhaustive nor the only distinctions important to understand. Sample sizes for other racial and ethnic groups and subpopulations are not large enough to produce reliable estimates. Additionally, results for Asian adults are sometimes excluded when the sample size is insufficient to provide a reliable estimate.



68 percent, reaching the same level as in 2021. This increase was concentrated among Black adults with some college or a technical or associate degree.

Parents living with their children under age 18 ("parents") are one group that has seen sizeable swings in well-being in recent years, falling sharply after the onset of the pandemic, rebounding in 2021, and falling sharply again since then. The share of parents doing at least okay financially fell to 64 percent in 2023, down 5 percentage points from the prior year and down 11 percentage points from 2021 (figure 4).⁵



⁵ Other measures in the survey have also shown evidence of decline in the financial circumstances of parents since 2021, but much of this decline occurred over the period from 2021 to 2022. For example, the share of parents who would cover a \$400 emergency expense exclusively using cash, savings, or a credit card paid off at the next statement reached a high of 64 percent in 2021, then fell to 57 percent in 2022 and 56 percent in 2023.

demographic characteri	_	ncially (i	ру
Percent			

Characteristic	2023	1-year change (since 2022)	Change since pre- pandemic (2019)
Age			
18-29	66	-3	-2
30-44	66	-4	-6
45-59	72	1	-3
60+	82	1	-2
Disability status			
Disability	55	-1	n/a
No disability	76	-2	n/a
LGBTQ+ status			
Identifies as LGBTQ+	67	2	2
Does not identify as LGBTQ+	73	-1	-3
Metropolitan status			
Metro area	73	-1	-3
Non-metro area	68	1	-4
Neighborhood income			
Low or moderate income	60	-2	-3
Middle or upper income	77	0	-3
Overall	72	-1	-3

Note: Among all adults. Low- or moderate-income neighborhoods are defined here using the definition from the Community Reinvestment Act. Disability status was first identifiable in the 2021 survey. Here and in subsequent tables and figures, percentages may not sum to 100 because of rounding. n/a Not applicable.

Financial well-being continued to differ by a range of other dimensions, including disability status, LGBTQ+ status, metropolitan status, and neighborhood income (table 1).⁶ For instance, 55 percent of adults with a disability were doing at least okay financially, markedly lower than that seen among adults without a disability.⁷

Adults identifying as LGBTQ+, and particularly those identifying as transgender or nonbinary, reported lower financial well-being than those not identifying as LGBTQ+. Two-thirds of adults identifying as LGBTQ+ were doing at least okay financially, compared with 73 percent of those not identifying as LGBTQ+.⁸ Moreover, 62 percent of transgender or nonbinary adults were doing at least okay financially.⁹

Financial well-being also varied according to where people lived. People living in non-metro areas had lower levels of financial well-being

⁶ Neighborhood income is defined using the Community Reinvestment Act definition. Under this definition, low- and moderate-income refers to communities that have a median family income of less than 80 percent of the area median income. For details on the definition, see Board of Governors of the Federal Reserve System, "Community Reinvestment Act (CRA) Resources," https://www.federalreserve.gov/consumerscommunities/cra_resources.htm.

Disability status is defined based on a five-question functional limitation sequence that asks about hearing, vision, ambulatory, self-care, and independent living difficulties. This approach for determining disability status is similar to the six-question sequence used for the American Community Survey (see U.S. Census Bureau, "How Disability Data Are Collected from the American Community Survey," https://www.census.gov/topics/health/disability/guidance/data-collection-acs.html).

Survey respondents could report their sexual orientation and gender identity on a demographic profile survey previously conducted by the survey vendor. Respondents are classified as LGBTQ+ based on responses to these questions.

Other research has also shown that LGBTQ+ adults were more likely to face economic insecurity. For example, see Thom File and Joey Marshall, "Household Pulse Survey Shows LGBT Adults More Likely to Report Living in Households with Food and Economic Insecurity than Non-LGBT Respondents," America Counts: Stories Behind the Numbers (Suitland, MD: U.S. Census Bureau, August 11, 2021), https://www.census.gov/library/stories/2021/08/lgbt-community-harder-hit-by-economic-impact-of-pandemic.html. Also, see Ana Hernández Kent and Sophia Scott, "LGBTQ+ Adults Report Struggles with Food, Housing Costs and Mental Well-Being," On the Economy Blog, Federal Reserve Bank of St. Louis, December 20, 2022, https://www.stlouisfed.org/on-the-economy/2022/dec/lgbtq-adults-report-struggles-food-housing-mental-well-being.

than those living in metro areas.¹⁰ Additionally, those living in low- or moderate-income communities were faring worse than those in middle- or upper-income communities.

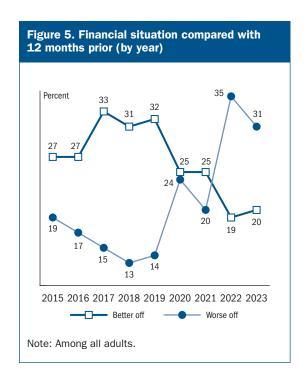
Changes in Financial Situation over Time

The survey also measures overall financial well-being by asking respondents whether they are better or worse off financially than they were 12 months earlier. Measuring well-being in this way helps track changes in perceived well-being over time, as some individuals may have felt worse off financially than they were a year earlier, for instance, even if they felt they were still doing okay overall (or that their financial well-being was improving even if they were still struggling overall).

Thirty-one percent of adults said they were worse off financially than a year earlier, down from 35 percent in 2022 yet still well above the levels seen in prior years (figure 5). The share doing about the same as a year earlier rose 2 percentage points to 48 percent, while the share who said they were better off rose 1 percentage point to 20 percent.

Adults with lower levels of education continued to be the most likely to say they were doing worse off than a year prior. In 2023, 37 percent of adults with less than a high school degree reported doing worse off financially, compared with 27 percent of those with at least a bachelor's degree.

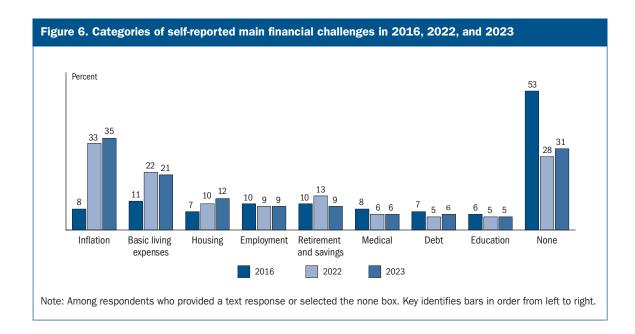
To get a longer-term perspective, individuals were also asked to compare their current financial circumstances to how they view their parents' financial situation at the same age. Looking across generations shows evidence of perceived economic progress over time, despite financial setbacks during the pandemic. A majority of adults (53 percent) thought they were better off financially than their parents had been. This share is similar to 2022 yet down from the 57 percent who thought so in 2019, before the onset of the



pandemic. In 2023, one-fourth thought they were worse off than their parents were at the same age.

People holding at least a bachelor's degree were more likely to report that they were doing better off financially than their parents had been at the same age. This was particularly true among first-

¹⁰ According to the U.S. Census Bureau, "The general concept of a metropolitan statistical area is that of a core area containing a substantial population nucleus, together with adjacent communities having a high degree of economic and social integration with that core." See U.S. Census Bureau website at https://www.census.gov/programs-surveys/metro-micro/about.html.



generation college graduates—those who completed a bachelor's degree and whose parents did not—among whom nearly two-thirds thought they were better off financially than their parents had been.

Looking across different generations shows that older cohorts were the most likely to report being better off financially than their parents had been at the same age. Nearly 60 percent of adults age 60 and older thought they were better off financially than their parents had been, compared with about half of adults under age 60.

Main Financial Challenges

The survey further explored financial well-being by posing an open-ended question asking people about their main financial challenges or concerns. ¹¹ The responses were classified into broad categories based on keywords or phrases. ¹² Inflation was the most common challenge, with more than one-third classified into that category, followed by basic living expenses and housing (figure 6). Thirty-one percent said they did not have any financial challenges or concerns.

¹¹ The question text is as follows: "In a couple of words, please describe the main financial challenges or concerns facing you or your family. If none please click the "None" box." Three percent of respondents did not provide a text response and did not check the "None" box. These respondents were excluded from the analysis.

Text entries were categorized based on words or word stems included in the response. "Inflation" includes responses with inflat, cost, pay more, paying more, increas, expensive, price, pricing, higher, rising, skyrocket, sky rocket, going up, gone up. Those with bill, util, electric, heat, everything, necessities, basic needs, essential, can't afford, not enough, get by, getting by, surviv, struggl, no money, challenge, living expense, or food were categorized as "basic living expenses;" those with retire, 401k, stock, market, portfolio, pension, old age, Medicare, SSI, IRA, 401(k), Social Security, save, saving, or fund were categorized as "retirement and savings;" those with hous, rent, home, or mortgage were categorized as "housing;" those that mentioned work, job, wage, employ, raise, paycheck, pay check, salary, laid off, part time, hours, full time, overtime, skills, or unemp were categorized as "employment;" those with medical, medicine, health, Medicare, dental, dentist, cancer, sick, ill, doctor, hospital, or prescription were categorized as "medical;" those with credit, loan, debt, or owe were categorized as "debt;" those that mentioned college, school, education, tuition, degree, university, or student were categorized as "deucation." Responses may be included in multiple categories or no categories, as the categories are neither exhaustive nor mutually exclusive.

The share of people citing inflation as their main financial challenge was similar to 2022.¹³ The prevalence of other types of financial concerns, such as basic living expenses, housing, and employment, were also similar to 2022. Retirement was somewhat less of a concern in 2023, consistent with the increase in the share of people who thought their retirement savings were on track (see the "Retirement and Investments" section of this report).

When describing challenges related to inflation, many people mentioned the cost of food and groceries. For example, one respondent stated that "[the] increase in cost of food has significantly impacted [my] budget." Another said, "...rising food prices hurt daily." Those with incomes under \$100,000 were more likely to specifically mention the cost of food and groceries as a concern.

People also expressed concerns about housing affordability. For example, one respondent said, "rent costs keep rising and it is hard to save enough for a down payment to buy a house." Indeed, when renters were later asked why they rent instead of own, the most cited reason was the inability to afford a down payment (see the "Housing" section of this report).

Concerns about housing were more prevalent among renters, younger adults, and those living in the West.¹⁴ For example, about 20 percent of renters mentioned housing-related challenges, nearly double the share in the overall population.

Local and National Economic Conditions

Along with questions about their own financial circumstances, people were asked to rate their local economy and the national economy as "excellent," "good," "only fair," or "poor." Forty-two percent of adults rated their local economy as "good" or "excellent" in 2023, up from 38 percent in 2022, yet well below the 63 percent of adults who rated their local economy as "good" or "excellent" in 2019, before the pandemic.

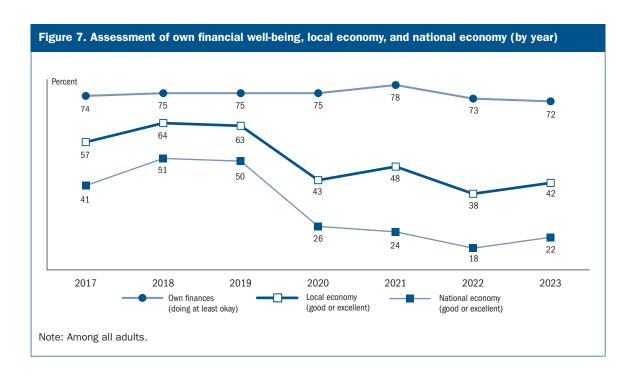
Looking across census regions and metropolitan status shows that the improvement in people's perception of their local economy was widespread. The one exception was those living in a non-metro area, who rated their local economy similarly to 2022. Moreover, those living in a non-metro area continued to rate their local economy much less favorably than those living in a metro area, with just fewer than 3 in 10 rating their local economy as good or excellent (table 2).

¹³ The inflation rate fell from 7.8 percent in October 2022 (when the 2022 SHED was conducted) to 3.2 percent in October 2023 (when the 2023 SHED was conducted). These inflation rates are based on the non-seasonally adjusted Consumer Price Index for All Urban Consumers (CPI-U) as of the 2022 and 2023 surveys.

¹⁴ References to geographic regions in this report are based on the four census regions. For details on the states in each region, see the U.S. Census Bureau's website at https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf.

Table 2. Self-assessm good or excellent (by metropolitan status) Percent			ily as
Characteristic	2023	1-year change (since 2022)	Change since pre- pandem (2019)
Census region			
Northeast	42	4	-21
Midwest	43	3	-22
South	43	3	-21
West	41	6	-20
Metropolitan status			
Metro	44	5	-20
Non-metro	29	-1	-24
Overall	42	4	-21

People's perception of the national economy also showed modest improvement. The share rating the national economy as "good" or "excellent" rose to 22 percent in 2023, up from a series low of 18 percent in the prior year. That said, perceptions of the national economy remained far more pessimistic than before the pandemic in 2019, when one-half of adults rated the national economy as "good" or "excellent." Additionally, the gap between people's perceptions of their own financial well-being and their perception of the national economy has nearly doubled since 2019 (figure 7).



Income

A sizeable share of adults said their family's monthly income increased in 2023 compared with a

year earlier. However, the share of adults who said their spending increased from the prior year was even greater. The share of adults who said they spent less than their income in the month before the survey remained lower than the level it had been before the pandemic, suggesting that fewer adults have margin in their family budgets.

Level and Source of Income

In this report, income is defined as the cash income from all sources that respondents and their spouse or partner received during the previous year ("family income"). Nineteen percent of adults had a family income below \$25,000, and 37 percent had a family income of \$100,000 or more (figure 8).¹⁵

Although labor earnings were the most common source of income, many people had other sources of income. Two-thirds of adults and their spouse or partner received wages, salaries, or self-employment income (collectively referred to here as "labor income") (table 3). Fifty-five percent of all adults received non-labor income in 2023. (See table 3 for the full list of non-labor income

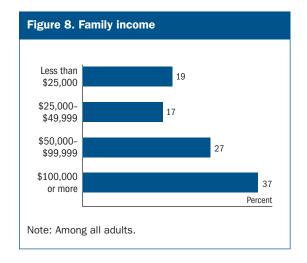


Table 3. Sources of income	
Characteristic	Percent
Labor income	
Wages, salaries, or self-employment	67
Non-labor income	
Interest, dividends, or rental income	34
Social Security (including Old-Age and DI)	26
Pension	18
SSI, TANF, or cash assistance from welfare	
program	5
Unemployment income	2
Any non-labor income	55
Note: Among all adults. Respondents could select	multiple

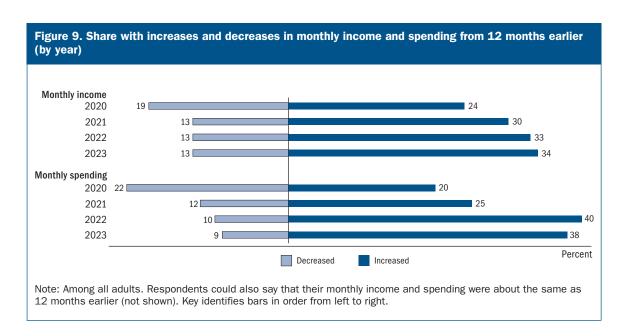
Note: Among all adults. Respondents could select multiple answers. Sources of income include the income of a spouse or partner. DI is Disability Insurance; SSI is Supplemental Security Income; and TANF is Temporary Assistance for Needy Families.

¹⁵ In the 2023 SHED, income is reported in dollar ranges rather than exact amounts. The income distribution in the 2023 SHED is largely similar to that from the 2023 March Current Population Survey. However, the SHED has a lower share with incomes less than \$50,000 and a higher share with incomes of \$50,000 or more. These deviations in the estimates may result from differences between the surveys in how income questions are asked.

sources considered).¹⁶ Some adults received both types of income: 50 percent of those with labor income also had some form of non-labor income. Additionally, as discussed in the "Retirement and Investments" section of the report, receipt of non-labor income was more common among retirees. While people received most forms of income at similar rates as in 2022, the share of adults who reported interest, dividends, or rental income was higher in 2023, up 3 percentage points from 31 percent in 2022.

Changes in Income and Spending

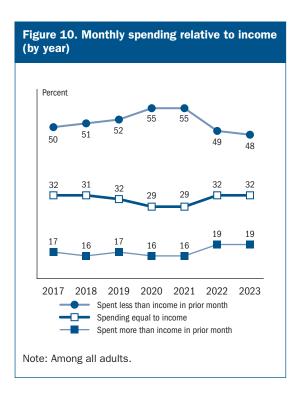
Many people experienced a change in their family's monthly income and spending from a year earlier. Thirty-four percent of adults said their family's monthly income increased in 2023, while a higher 38 percent increased their monthly spending (figure 9). The shares of adults who said that their monthly income increased was slightly higher than in 2022, while the share reporting their spending increased was lower than in 2022.¹⁷ Consistent with that seen in most recent years, increases in income and spending were more common than decreases in income and spending in 2023.

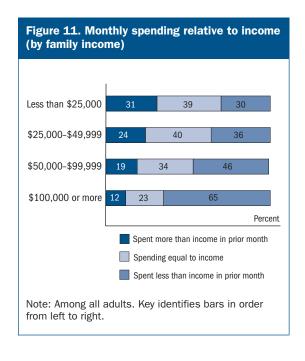


The relationship between spending and income can suggest how closely people may need to watch their budgets and whether they have margin to save. In October 2023, 48 percent of adults

¹⁶ Non-labor income does not include tax credits such as the Earned Income Tax Credit or in-kind benefits. It also does not include the small number of respondents who reported receiving income but did not specify the source.

¹⁷ The large share of adults who experienced increases in their income from year to year is consistent with findings based on Internal Revenue Service tax records data from Jeff Larrimore, Jacob Mortenson, and David Splinter, "Earnings Business Cycles: The Covid Recession, Recovery, and Policy Response," *Journal of Public Economics* 225 (September 2023): 104983, who also note that this is not unique to recent years.





reported spending less than their income in the past month, similar to the share in 2022 but down from highs reached in 2020 and 2021. The share of adults spending less than their income was also below the pre-pandemic levels in 2018 and 2019 (figure 10). Similar to 2022, 19 percent of adults said their spending exceeded their income, while the remainder (32 percent) said their spending and income were about the same.

Reflecting that they have fewer financial resources, lower-income adults were less likely to say they spent less than their income in the past month, compared with those with higher incomes. Thirty percent of adults with family income less than \$25,000 said their spending was less than their income, compared with 65 percent of adults with income of \$100,000 or more (figure 11).

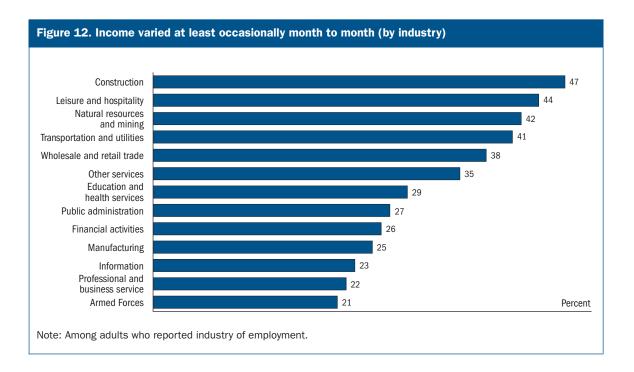
Income Variability

The total level of yearly income may mask changes in income from month to month, and mismatches between the timing of income and expenses can lead to financial challenges. ¹⁸ In 2023, most adults had income that was roughly the same each month, but 28 percent had income that varied at least occasionally from month to month, similar to previous years.

¹⁸ For additional information on monthly income variability, see Jonathan Morduch and Julie Siwicki, "In and Out of Poverty: Episodic Poverty and Income Volatility in the U.S. Financial Diaries," Social Service Review 91, no. 3 (2017): 390–421.

Income variability was related to the type of income people received. Adults who received only wages or other labor income were more likely to report their income varied from month to month (33 percent), compared with those with only non-labor income (12 percent).

Income variability continued to differ greatly by industry in 2023. 19 For example, 47 percent of those working in the construction industry had varying monthly income, compared to 21 percent of those in the Armed Forces (figure 12).



Monthly variations in income may cause financial hardship for some families. In 2023, 10 percent of adults reported they struggled to pay their bills in the prior 12 months because their income varied, similar to 2022.

The likelihood of experiencing income variability and related hardship differed by education, race, and ethnicity. Adults with less education were more likely to experience hardship from varying income. Eighteen percent of adults with less than a high school degree said they had difficulty paying bills in the past year because their income varied, compared with 4 percent of adults with a

¹⁹ This variability can come from any aspect of household income, however, and is not necessarily related to the person's income from the industry they work in.

Income 17

bachelor's degree or more (table 4). Black and Hispanic adults also were more likely to experience income variability and related hardship, compared with White and Asian adults.

(by education and race/ Percent			
Characteristic	Varying income, causes hardship	Varying income, no hard- ship	Varying income
Education			
Less than a high school degree	18	16	33
High school degree or GED	11	18	29
Some college/technical or associate degree	14	20	33
Bachelor's degree or more	4	18	22
Race/ethnicity			
White	8	18	26
Black	11	19	30
Hispanic	16	19	35
Asian	5	17	22
Overall	10	18	28

Employment

The rates at which workers applied for new jobs, started new jobs, and received pay raises were similar to 2022. Reflecting the continued strength of the labor market, these measures remained above levels from 2021. Employees also continued to work from home at higher rates than before the COVID-19 pandemic.

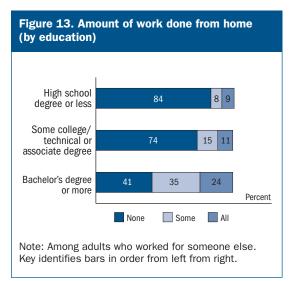
For many families with children, childcare represented an additional factor to consider when making employment decisions, especially for women. Mothers frequently said that they were not working for childcare reasons, and many working parents indicated that they were paying for childcare.

Working from Home

Remote work continued to be common in 2023. In the week before the survey, nearly 4 in 10 adults who worked for someone else ("employees") worked from home at least some of the time—nearly unchanged from 2021 and 2022. In 2023, 16 percent of employees worked entirely from home and 23 percent did so some of the time.²⁰ This reflects a shift away from full-time remote work towards hybrid schedules, as the share working entirely from home was down from 22 percent in 2021, and 19 percent in 2022, but well above the 7 percent who worked mostly from home in 2019, before the pandemic.²¹

Employees who completed more education continued to be more likely to work from home. Twenty-four percent of employees with at least a bachelor's degree worked entirely from home compared with 9 percent of those with a high school degree or less (figure 13).

The survey also asked employees who worked from home about the likelihood of actively looking for another job or leaving their job if their employer required them to work in person each day. To provide context on these

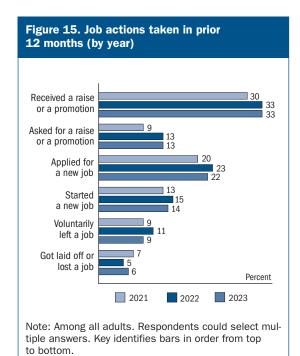


Rates of working from home are higher among those who are self-employed. Among those who were self-employed, 32 percent worked from home all of the time as did 19 percent of those with other work arrangements.

²¹ The question asked in 2019 was different from later years. The 2019 survey asked where people worked in their main jobs most of the time.

Figure 14. Very likely to actively look for another job or leave their job if employer changes pay or requires in person work (by pay cuts and exclusive in person work) Percent 49 27 15 Freeze Lower pay Report Lower pay Lower pay by 1% in person by 5% by 10% pay

Note: Among adults who worked for someone else and worked from home at least some of the time.



results, respondents were also asked if they would actively look for work if their employer froze their pay or cut their pay by different amounts.

Slightly more than 3 in 10 employees (31 percent) who worked from home at least some of the time said they would be very likely to actively look for another job if their employer required them to work in person each workday (figure 14). This share was a much higher 47 percent among employees who worked entirely from home.

Employees viewed a hypothetical in-person work requirement similarly to a hypothetical small decrease in pay (figure 14). Among employees currently working from home at least some of the time, slightly more were very likely to actively look for another job or leave their job if their employer required in-person work (31 percent) than if their employer imposed a 1 percent pay cut (27 percent).

Job Searching and Advancement

Indicators of opportunities for new positions—applying for a new job, starting a new job, and voluntarily leaving a job—all ticked down from 2022 (figure 15). That said, these measures mostly remained above 2021 levels, reflecting continued strength of the labor market. Additionally, the share of adults who received a raise and who asked for a raise were unchanged at 33 percent and 13 percent, respectively.²²

²² Restricting the sample to just those who are working, the likelihood of asking for or receiving a raise is higher. Among those who were working in the month of the survey, 21 percent asked for a raise and 55 percent received one.

Adults with more education were more likely to have applied for a new job, asked for a raise, or received a raise than those with less education. They also were more likely to have started a new job or voluntarily left a job in the prior year. For example, 43 percent of adults with at least a bachelor's degree received a raise or promotion in the prior year, and 15 percent asked for one. Among adults with a high school degree, 24 percent received a raise or promotion, and 10 percent asked for one in the prior year.

Among individuals who asked for a raise, most received one. Of those who asked for a raise in 2023, 66 percent said that they received a raise, down 4 percentage points from 2022, but matching the share from before the COVID-19 pandemic in fall 2019.

Slightly less than half of those who searched for a job found new work. Among people who applied for a new job, 49 percent reported starting a new job in 2023, down 3 percentage points from 2022, but up 4 percentage points from 2019.

Work Arrangements and Autonomy at Work

Job schedules and autonomy are important dimensions of job quality that can affect job satisfaction and attachment to the labor force. Although many people have regular work schedules, this is not the case for all workers. More than one-fourth (27 percent) of employees had irregular work schedules in 2023. Sixteen percent had a work schedule that varied based on their employer's needs, and 11 percent had a variable schedule at their own request.

To better understand workplace autonomy, employees were asked about how much choice they had to decide what tasks to work on and how to do those tasks. Fifty-six percent of employees said they often or always choose how to complete tasks, and 34 percent said they often or always choose which tasks to work on. Employees with at least a bachelor's degree were more likely to have higher levels of autonomy at work than those with less education (table 5).

Table 5. Share of workers who often or always choose what tasks to work on and how to complete tasks (by education) Percent			
Education	What tasks to work on	How to com- plete tasks	
Less than a high school degree	29	42	
High school degree or GED	28	47	
Some college/technical or associate degree	31	51	
Bachelor's degree or more	39	64	
Note: Among adults who worked for someone else.			

Reasons for Not Working

Twenty-five percent of prime-age adults (ages 25 to 54) in the survey were not working for pay in the month before the survey, matching the share who were not working for pay in 2022.²³ Health limitations or disability, family and personal obligations besides childcare, as well an inability to find work were the most commonly cited reasons for not working for pay (table 6).

Table 6. Reasons for not working among prime-age adults (by gender) Percent			
Reason	Male	Female	Overall
Health limitations or disability	8	8	8
Family and personal obligations besides caregiving	4	9	6
Could not find work	7	6	7
Childcare	1	7	4
Caregiving for an elderly, disabled, or sick adult	3	4	3
Would lose access to government benefits	3	3	3
School or training	1	2	2
Retired	2	1	2

Notable differences in prime-age employment rates continued to exist by gender. Twenty-nine percent of prime-age women were not working for pay, compared with 21 percent of prime-age men.

The employment gender gap likely reflects greater family and childcare responsibilities held by women. Nearly 4 in 10 prime-age mothers who were not working for pay said that childcare responsibilities contributed to that choice. Additionally, among prime-age parents living with their children under age 18, slightly more than one-third of women were not working for pay, compared with 16 percent of men. In contrast, the share of prime-age men and women without children at home who were not working for pay was the same at 24 percent.

Care Work

multiple answers.

Managing care for loved ones—be they children, a parent, other relative, or friend—often involves tradeoffs between time and cost that can affect people's employment decisions. Reflecting these tradeoffs, while most parents of younger children did not use paid childcare, those who did were more likely to be higher income or working for pay. Similarly, prime-age adults who provided unpaid care for an adult relative or friend needing assistance because of aging, disability, or illness were less likely to be working for pay than those without caretaking responsibilities.

At the time of the survey, nearly 3 in 10 parents living with their children under age 13 ("parents of younger children") used paid childcare. Perhaps reflecting the greater need for childcare among

²³ Despite differences in question wording that can affect the estimates of employment levels, this pattern over time is consistent with that observed by the Bureau of Labor Statistics, which reported 19 percent of prime-age adults not working in October 2023, similar to the 20 percent not working in October 2022. See U.S. Bureau of Labor Statistics, "(Seas) Employment-Population Ratio—25–54 yrs.," https://data.bls.gov/timeseries/LNS12300060.

parents with non-school-age children, nearly 4 in 10 parents living with their children under the age of 6 used paid childcare.

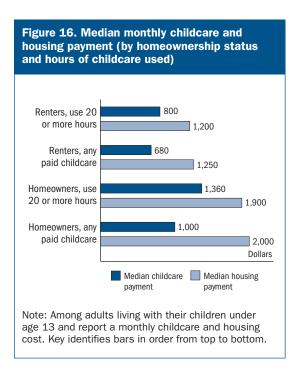
Families with single working parents or with two working parents were more likely to use paid childcare. Among parents of younger children, about 4 in 10 who were single and working used paid childcare, as did a similar share of working parents living with a spouse or partner who also worked. This compares with 15 percent who used paid childcare among parents of younger children where one member of the couple did not work (table 7).

Use of paid childcare also varied by family income, with higher-income parents more likely to use paid childcare, and to use it more intensively. For example, among parents with younger children, those with higher income were about twice as likely as those with lower or middle income to use 20 or more hours of paid childcare per week (table 7).

Childcare costs made up a substantial share of the family budget for parents using paid childcare. The median monthly amount that parents paid for childcare was \$800, and \$1,100 for those who paid for 20 or more hours of childcare each week. For perspective, parents who used paid childcare typically spent about 50 to 70 percent as much per month on childcare costs as they did on their housing payment, most people's single largest monthly expense (figure 16).

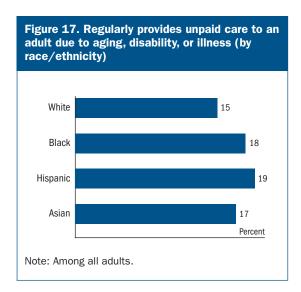
Even among parents who use paid childcare, children require care when they are home.

status) Percent			
Characteristic	1-19 hours	20 or more hours	Any pa
Family income			
Less than \$50,000	12	12	24
\$50,000-\$99,999	10	14	24
\$100,000 or more	13	24	37
Family type and employment st	atus		
Single parents, working	18	23	41
Two parents, both working	13	26	39
Two parents, only one working	8	7	15

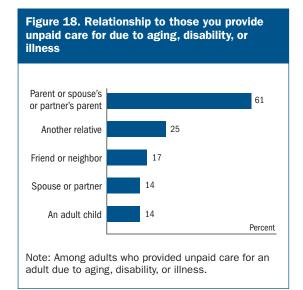


This care frequently falls to mothers. Among adults living with their spouse/partner and their younger children, nearly 6 in 10 mothers said they are usually the primary caretaker when their

children are home, compared with 13 percent of fathers. Even when considering the responses of parents who worked, nearly half of mothers said they are usually the primary caregiver, compared with 10 percent of fathers.



Another type of unpaid care work people may provide is for their aging parents, spouse or partner, or adult children who require assistance. Sixteen percent of adults regularly provided unpaid care for an adult relative or friend needing assistance due to aging, disability, or illness. Black and Hispanic adults were more likely than White adults to provide unpaid care for an adult relative or friend who needs assistance (figure 17). Similar shares of men (16 percent) and women (17 percent) provided unpaid care to other adults, contrary to the shares of men and women providing the majority of childcare in their homes.



Sixty-one percent of those providing unpaid care did so for their parent or their spouse's or partner's parent (figure 18). Fourteen percent of adults (22 percent of those living with a spouse or partner) provided unpaid care do so to assist their own spouse or partner.

Individuals who provided care to another adult were also asked how often they did so. Thirty-five percent provided care daily, and just above 6 in 10 provided care at least weekly.

Like childcare, providing regular care for other adults can affect one's ability to do other work for pay. Among prime-age adults (ages 25 to

54), 32 percent who were caring for another adult did not have a paid job, compared with 24 percent of those who did not have these caretaking responsibilities.²⁴ Among those of prime working

²⁴ Among those working, adults with caretaking responsibilities for other adults were also more likely to work parttime rather than fulltime. Eighteen percent of prime-age workers who also had unpaid caretaking responsibilities for other adults worked part time, compared with 13 percent of prime-age workers without these responsibilities.

age with daily caretaking responsibilities for other adults, even fewer had paid employment—47 percent did not work for pay.

Employment Outcomes of Those with a Prior Arrest or Conviction

A prior arrest or conviction can be a major barrier to employment.²⁵ To understand the labor market outcomes of individuals who have previously been arrested along with other economic well-being characteristics, the 2023 survey incorporated new questions asking respondents about their past arrest and conviction records.

Among prime-age adults (ages 25 to 54), Black and Hispanic populations have higher shares of individuals with either an arrest or a conviction compared with other racial and ethnic groups. Specifically, 20 percent of Black prime-age adults and 19 percent of Hispanic prime-age adults had either an arrest or a conviction record, exceeding that seen among either White or Asian prime-age adults (table 8). Prime-age adults with an arrest or a conviction record were also more likely to come from families with less education and have lower incomes themselves.

Employers' hiring decisions can rely on criminal background checks. However, employers' access to applicants' past criminal records depends on various state regulations. Among prime-age adults, the share of individuals working for someone else is higher for those who were never arrested or convicted than for those who have been (table 9). Some adults with a prior arrest or conviction appear to turn to self-employment or other work

Table 8. Prior arrests and convictions among prime-age adults (by demographic characteristics) Percent Arrested Arrested or Characteristic Convicted convicted only **Family income** 24 Less than \$50,000 10 14 \$50,000-\$99,999 9 15 \$100,000 or more 5 11 Race/ethnicity White 7 8 15 Black 20 Hispanic 10 9 19 Asian 2 4 6 **Education** High school or less 11 15 26 Some college, technical or 9 20 associate degree 11 7 3 Bachelor's degree or more Highest education of any parent/guardian Less than a bachelor's degree 19 Bachelor's degree or more 5 11 **Overall** 7 9 16 Note: Among adults age 25 to 54.

arrangements, which is higher for these groups. 26 Nevertheless, the share of prime-age adults

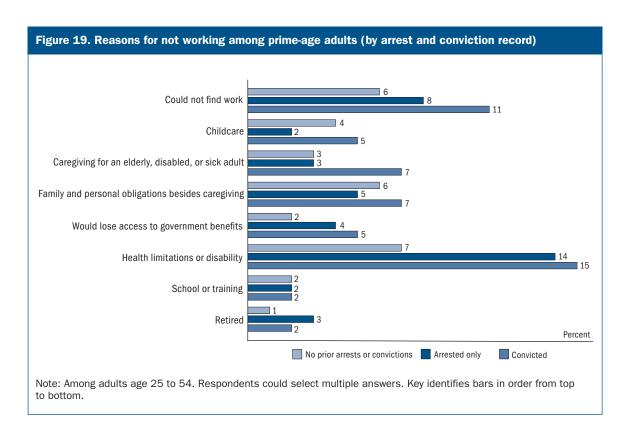
Amanda Agan and Sonja Starr, "The Effect of Criminal Records on Access to Employment," American Economic Review 107, no. 5 (May 2017): 560–64; Christopher Uggen, Mike Vuolo, Sarah Lageson, Ebony Ruhland, and Hilary K. Whitham, "The Edge of Stigma: An Experimental Audit of the Effects of Low-Level Criminal Records on Employment," Criminology 52, no. 4 (2014): 627–54.

²⁶ It may also be the case that those with a prior arrest or conviction are also more inclined to be self-employed, independent of their criminal record.

Table 9. Employment outcomes among prime-age adults (by arrest and conviction record) Percent No prior Arrested Convicted **Employment** arrests or only convictions 68 59 59 Working for someone else Self-employed or other work 8 arrangement 12 14 Not working 24 29 27 Note: Among adults age 25 to 54.

with a prior arrest or conviction who were not working at all was 3 to 5 percentage points above that for other adults.

Prime-age adults with a conviction were also nearly twice as likely to say that an inability to find work was a contributing factor for not working. Eleven percent of prime-age adults with a conviction indicated that they were not working because they could not find work, compared with 6 percent of those with no arrest record (figure 19).²⁷



²⁷ These differences also hold after controlling for age, educational attainment, race, ethnicity, and state of residence.

Expenses

The share of adults who would cover a relatively small emergency expense using cash or its equivalent was unchanged from 2022 but down from 2021. Most adults said that changes in prices they paid compared with the prior year had made their finances worse, and a majority adjusted their spending in response to higher prices. Low-income adults were more likely to experience difficulties covering expenses. These difficulties included not paying all bills in full, sometimes or often not having enough to eat, and skipping medical care because of cost.

Bills and Regular Expenses

To understand how people were handling their regular household expenses, the survey asked about paying bills. Seventeen percent of adults said they did not pay all their bills in full in the month prior to the survey.²⁸

Lower-income adults were less likely to have paid all their bills in full. In the month prior to the survey, 36 percent of adults with a family income less than \$25,000 did not pay all their bills in full, compared with 6 percent of adults with a family income of \$100,000 or more (table 10). In addition, Black and Hispanic adults were less likely than White or Asian adults to have paid all their bills in full in the prior month.

Table 10. Did not pay all bills in full in prior
month (by family income and race/ethnicity)

Characteristic	Percent
Family income	
Less than \$25,000	36
\$25,000-\$49,999	24
\$50,000-\$99,999	13
\$100,000 or more	6
Race/ethnicity	
White	11
Black	31
Hispanic	27
Asian	12
Overall	17

Note: Among all adults. For credit cards, "did not pay in full" is defined as paying less than the minimum payment.

²⁸ The question on bill payment was revised for the 2023 survey and the results are not directly comparable to prior years. In this report, adults who did not pay all their bills in full are those who (1) did not pay a credit card bill or made less than the minimum payment *last month* or (2) did not pay another type of bill in full *last month*. In earlier surveys, respondents were asked about their expected ability to pay all their bills in full *this month*, and the question did not specify what paying in full meant for credit card bills. Shifting to a retrospective question can affect results since expected ability to make a payment does not perfectly predict actually making the payments (Jeff Larrimore and Erin Troland, "Improving Housing Payment Projections during the COVID-19 Pandemic," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, October 20, 2020), https://doi.org/10.17016/2380-7172.2772).

Table 11. Types of bills not paid in full last month (by homeownership status)

Percent

Bills	Home- owner	Renter	All adults
Water, gas, and electric bills	3	11	5
Phone, internet, and cable bills	2	8	4
Rent or mortgage	1	7	3
Car payment	1	6	3
Credit card (less than minimum payment)	2	4	3
Any bills not paid in full	11	27	17

Note: Among all adults. Respondents could select multiple answers. Respondents could also select that they did not pay all bills in full but that the unpaid bill was not one of these options.

Renters were more likely than homeowners to say they did not pay all their bills in the prior month (table 11). In part, this reflects that renters have lower incomes than homeowners, although even for those with similar incomes, the share of renters who did not pay at least one bill exceeded that for homeowners.

Those who did not pay at least one bill in full were asked about several specific bill types. Of these, the most common types of bills people did not pay in full were a water, gas, or electric bill (5 percent) or a phone, internet, or cable bill (4 percent). Across each of these bill types, renters also had higher rates of nonpayment.

Most adults said that price increases made their financial situation worse. Sixty-five percent of adults said that changes in the prices they paid compared with the prior year had made their financial situation worse, including 19 percent who said price changes had made their financial situation much worse. In contrast, 4 percent of adults said that price changes compared with the prior year had made their financial situation better. Thirty-one percent of adults said overall changes in the prices they paid had little to no effect on their financial situation in the last year.

Adults with income under \$100,000 were more likely to say that price changes had made their financial situation worse compared with responses from higher-income adults (table 12).²⁹ White and Hispanic adults, adults with a disability, and parents living with their children under age 18 were also more likely to say that changes in prices they paid compared with a year ago had made their financial situation worse.

Most people took some action in response to higher prices. The most common actions were spending changes, including switching to a cheaper product (62 percent of adults), using less of or stopping using a product (61 percent), or delaying a major purchase (48 percent) (table 13). Forty-five percent of adults reported they reduced savings. Increasing borrowing was less common, as were activities to generate additional income, such as working more or asking for a raise.³⁰

²⁹ This result could reflect both the limited financial buffers that low-income households have as well as differential rates of inflation for high- and low-income households. Recent research has observed that low-income households experience slightly higher rates of inflation than those with higher incomes (Joshua Klick and Anya Stockburger, "Inflation Experiences for Lower and Higher Income Households," Spotlight on Statistics, U.S. Bureau of Labor Statistics, December 2022, https://www.bls.gov/spotlight/2022/inflation-experiences-for-lower-and-higher-income-households/home.htm).

³⁰ These results reflect those who indicated that they asked for a raise specifically because of higher prices, which is lower than overall share who asked for a raise, as discussed in the "Employment" section of this report.

Table 12. Changes in prices paid compared with last year made financial situation worse (by demographic characteristics) Percent				
Characteristic	Much worse	At least somewha worse		
Family income				
Less than \$25,000	29	67		
\$25,000-\$49,999	24	70		
\$50,000-\$99,999	20	68		
\$100,000 or more	11	58		
Race/ethnicity				
White	19	67		
Black	16	54		
Hispanic	24	66		
Asian	9	54		
Disability status				
Disability	27	71		
No disability	17	63		
Parental status				
Parents (living with own children under age 18)	23	69		
All other adults	18	63		
Overall	19	65		

Table 13. Actions taken in response to higher prices in the prior 12 months (by year) Percent				
Action	2022	2023		
Spending				
Switched to cheaper products	64	62		
Used less or stopped using products	66	61		
Delayed a major purchase	49	48		
Saving/borrowing				
Reduced savings	51	45		
Increased borrowing	15	15		
Income				
Worked more or got another job	18	18		
Asked for a raise	8	9		
Took any action	83	79		
Took any action Note: Among all adults. Respondents coanswers.				

Compared with actions taken in 2022 in response to higher prices, people were less likely to report spending changes or reduced savings but slightly more likely to report asking for a raise.

Adults who had less margin between their spending and their income appeared more

likely to take action in response to higher prices. Among adults who said their spending exceeded their income in the month before the survey, 92 percent took at least one action in response to higher prices. Among those whose spending was less than their income, a lower 71 percent took at least one action.

Food Sufficiency

Inability to afford food is a particularly severe hardship. To measure this type of material hardship, the 2023 survey included a new question about food in the household. Seven percent of adults said that members of their household sometimes or often did not have enough to eat in the prior month, referred to here as "food insufficiency." An additional 26 percent of adults said that mem-

Table 14. Sometimes or often did not have enough to eat in the prior month (by demographic characteristics) Characteristic Percent **Family income** Less than \$25,000 21 \$25,000-\$49,999 10 \$50,000-\$99,999 5 \$100,000 or more 1 Age 18-29 11 10 30-44 45-59 7 60+ 3 Race/ethnicity White 5 Black 10 13 Hispanic Asian 4 **Disability status** Disability 15 No disability 6 **Parental status** Parents (living with own children under age 18) 11 All other adults 6

Overall

Note: Among all adults.

bers of their household had enough to eat in the prior month but not always the kinds of food they wanted to eat.³¹

Twenty-one percent of adults with a family income less than \$25,000 said members of their household sometimes or often did not have enough to eat in the past month, as did 10 percent of those with a family income between \$25,000 and \$50,000 (table 14). Younger adults, Black and Hispanic adults, adults with a disability, and parents living with their children under age 18 were also more likely to report food insufficiency in their household in the prior month than other adults.

Health-Care Expenses

Forgoing medical treatment is another reflection of financial hardship. Twenty-seven percent of adults went without some form of medical care in 2023 because they could not afford it, similar to the share in 2022 but up from 24 percent in 2021 (figure 20). Dental care was the most frequently skipped, followed by visiting a doctor (table 15). Some

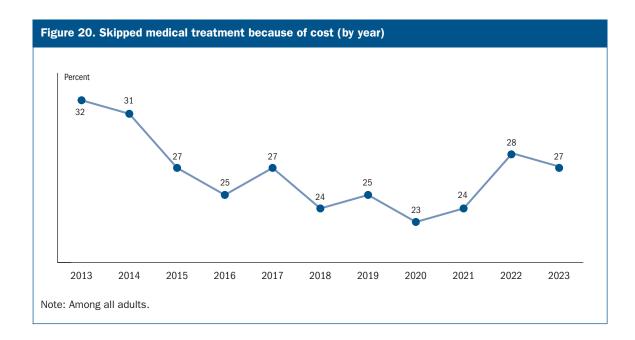
people also reported skipping prescription medicine, follow-up care, or mental health visits.

7

The likelihood of skipping medical care because of cost was strongly related to family income. Among those with family income less than \$25,000, 42 percent went without some medical care because they could not afford it, compared with 12 percent of adults making \$100,000 or more.

Unexpected or large medical expenses can be a particular financial hardship for families. Twentythree percent of adults had major, unexpected medical expenses in the prior 12 months, with the

The U.S. Department of Agriculture (USDA) defines food insufficiency as sometimes or often not having enough to eat, and marginal food insufficiency as having enough to eat but not always the kinds of foods they wanted to eat. See the USDA Economic Research Service at https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/measurement/. The SHED food insufficiency question is similar to questions fielded on the Census Household Pulse survey and the annual Current Population Survey Food Security Supplement (CPS-FSS), although the reference periods are different, which may contribute to differences in their estimates.



median amount between \$1,000 and \$1,999. Seventeen percent of adults had debt from their own medical care or that of a family member (not necessarily from the past year). The share with outstanding medical debt has ranged from 15 to 18 percent each year since the question was first asked in 2019.

Health insurance is one way that people can pay for routine medical expenses and protect against the financial burden of large, unexpected expenses. In 2023, 91 percent of

Table 15. Forms of medical treatment skipped because of cost in the prior 12 months				
Туре	Percent			
Dental care	19			
Seeing a doctor or specialist	15			
Prescription medicine	10			
Follow-up care	9			
Mental health care or counseling	9			
Any treatment	27			
Note: Among all adults. Respondents could select multiple answers.				

adults had health insurance, similar to that seen each year since 2016, but up from the 85 percent who reported having health insurance in 2013 when the survey began.

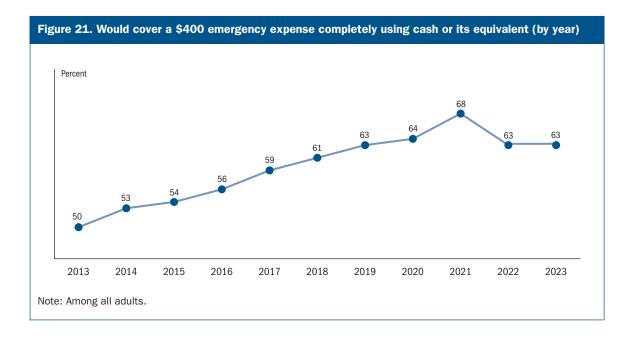
Those without health insurance were more likely to forgo medical treatment because they could not afford it. Among the uninsured, 46 percent went without medical treatment because they could not afford it, compared with 25 percent among the insured.

Unexpected Expenses and Emergency Savings

Relatively small, unexpected expenses, such as a car repair or a modest medical bill, can be a hardship for many families, especially those without a financial cushion. When faced with a hypothetical expense of \$400, 63 percent of all adults in 2023 said they would have covered it exclu-

sively using cash, savings, or a credit card paid off at the next statement (referred to, altogether, as "cash or its equivalent"). The remainder said they would have paid by borrowing or selling something or said they would not have been able to cover the expense.

The share who would pay using cash or its equivalent was unchanged from 2022 but down from a high of 68 percent in 2021, and around the levels in 2019 and 2020 (figure 21).³² The higher shares who said they would pay with cash or its equivalent in 2021 is consistent with other research showing that fiscal relief measures and a pullback in consumer spending boosted saving in the early part of the COVID-19 pandemic.³³



Among the 37 percent of adults who would not have covered a \$400 expense completely with cash or its equivalent, most would pay some other way, and some said that they would be unable to pay the expense at all. For these adults, the most common approach was to use a credit card and then carry a balance, although many indicated they would use multiple approaches. Thirteen percent of all adults said they would be unable to pay the expense by any means (table 16), unchanged from 2022 but up from 11 percent in 2021.

³² Since 2013, when this question was first asked, median household incomes increased as did consumer prices. To check how changes in price levels affect responses to this question, the 2022 survey asked one-fifth of respondents how they would handle a \$500 expense instead. Changing the threshold only altered the share who would pay in cash by 0.5 percentage points, suggesting that shifts in the price level have not materially affected the trend in this series.

For details on the increase in savings during the pandemic, see Aditya Alandangady, David Cho, Laura Feiveson, and Eugenio Pinto, "Excess Savings during the COVID-19 Pandemic," Finance and Economics Discussion Series Notes (Washington: Board of Governors of the Federal Reserve System, October 21, 2022), https://doi.org/10.17016/2380-7172.3223; and for details on the effects of relief measures on incomes through the pandemic, see Jeff Larrimore, Jacob Mortenson, and David Splinter, "Earnings Business Cycles: The Covid Recession, Recovery, and Policy Response," Journal of Public Economics 225 (2023): 104983.

Some of those who would not have paid an unexpected \$400 expense with cash or its equivalent likely still had access to \$400 in cash. Instead of using that cash to pay for the expense, they may have chosen to preserve their cash as a buffer for other expenses.

To explore this potential difference between how people would pay for a small, unexpected expense and whether they could pay for it with cash or the equivalent, the survey included a question asking people what the largest emergency expense was that they could handle

\$400 emergency expense	Percent
Put it on a credit card and pay it off over time	16
Borrow from a friend or family member	10
Sell something	7
Use money from a bank loan or line of credit	3
Use a payday loan, deposit advance, or overdraft	2
Would not be able to pay for the expense right now	13
Note: Among all adults. Respondents could select answers.	multiple

using only savings. Eighteen percent of adults said the largest emergency expense they could handle right now using only savings was under \$100, and 14 percent said they could handle an expense of \$100 to \$499 (table 17).

Sixty-eight percent of adults said they could pay an expense of at least \$500 using only their current savings (table 17), unchanged from 2022. This is a somewhat larger share than the 63 percent of adults who said they would pay an unexpected \$400 expense with cash or the equivalent, suggesting that some people do choose to pay with other methods, even if they have cash savings available to them.³⁴

Table 17. Largest emergency expensindividuals could handle right now us savings	
Amount	Percent
Less than \$100	18
\$100-\$499	14
\$500-\$999	10
\$1,000-\$1,999	10
\$2,000 or more	48
Note: Among all adults.	

Some financial challenges, such as a job loss,

require more financial resources than would an unexpected \$400 expense. One common measure of financial resiliency is whether people have savings sufficient to cover three months of expenses if they lost their primary source of income. In 2023, 54 percent of adults said they had set aside money for three months of expenses in an emergency savings or "rainy day" fund—unchanged from 2022 but down from a high of 59 percent of adults in 2021.

³⁴ The distinction between how people would or could pay small emergency expenses is discussed further in box 3 from Board of Governors of the Federal Reserve System, Report on the Economic Well-Being of U.S. Households in 2019, Featuring Supplemental Data from April 2020 (Washington: Board of Governors, May 2020), https://www.federalreserve.gov/publications/files/2019-report-economic-well-being-us-households-202005.pdf.

For those who did not set aside money for this purpose, some would have dealt with a loss of their main source of income by borrowing, selling assets, or drawing on other savings. Fifteen percent of all adults said that they could have covered three months of expenses in this way. Thirty-one percent of adults indicated they could not cover three months of expenses by any means.

Banking and Credit

Access to financial services from banks and credit unions can be important for people's financial well-being. Most adults had a bank account and were able to obtain credit in 2023, but notable gaps in access to financial services still exist, particularly among those with low income, Black and Hispanic adults, and those with a disability.

Use of relatively new financial services like cryptocurrency for transactions and Buy Now, Pay Later (BNPL) remained low compared with use of traditional payment and credit methods. That said, while still low overall, use of these newer products tended to be higher among lower-income adults and among Black and Hispanic adults.

Bank Account Ownership

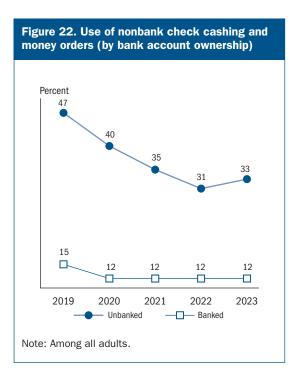
Six percent of adults were "unbanked" in 2023, meaning neither they nor their spouse or partner had a checking, savings, or money market account. This share was unchanged from 2022.

Unbanked rates remained far higher among low-income adults. Twenty-three percent of adults with income below \$25,000 were unbanked compared with 1 percent of adults with income of \$100,000 or more. Unbanked rates were also higher among younger adults, Black and Hispanic adults, and adults with a disability (table 18).

Overall, 12 percent of adults with a bank account said they paid an overdraft fee in the prior 12 months, nearly unchanged from 2022. Among banked adults, higher shares of those with low or middle income, Black and Hispanic adults, and adults with a disability paid an overdraft fee in the prior 12 months (table 19).

Table 18. Unbanked rate (by demographic characteristics)			
Characteristic	Percent		
Family income			
Less than \$25,000	23		
\$25,000-\$49,999	8		
\$50,000-\$99,999	2		
\$100,000 or more	1		
Age			
18-29	11		
30-44	9		
45-59	5		
60+	2		
Race/ethnicity			
White	4		
Black	14		
Hispanic	11		
Asian	4		
Disability status			
Disability	11		
No disability	5		
Overall	6		
Note: Among all adults.			

Characteristic	Percent
Family income	·
Less than \$25,000	16
\$25,000-\$49,999	17
\$50,000-\$99,999	14
\$100,000 or more	7
Age	
18-29	15
30-44	16
45-59	12
60+	6
Race/ethnicity	
White	9
Black	19
Hispanic	17
Asian	6
Disability status	
Disability	16
No disability	10
Overall	12



Nonbank Check Cashing and Money Orders

Some people go outside of traditional banks and credit unions for certain financial services. Fourteen percent of adults used nonbank check cashing or money orders in 2023. This share was similar to 2022 yet down 3 percentage points from 2019, before the pandemic.

Both banked and unbanked adults used nonbank providers to conduct financial transactions, but the unbanked were much more likely to have done so. Twelve percent of banked adults used a nonbank money order or check cashing service, compared with 33 percent of unbanked adults (figure 22).

Use of nonbank money orders and check cashing has fallen among both unbanked and banked adults since 2019, although use has flattened out over the past couple of years (figure 22). One reason for the decline since 2019 may be that people have substituted away from money orders and check cashing services to other nonbank products and services not asked about on the survey. The market for financial products and services continues to evolve, particularly in the digital space.

Similar to demographic patterns in bank account ownership, use of nonbank check cashing and money orders was more common among those with lower income, Black and Hispanic adults, and adults with a disability

(table 20). Use among Black adults was particularly high at about 3 in 10.

Cryptocurrency

Cryptocurrencies are relatively new digital assets that may be held as an investment or used for making financial transactions.³⁵ Use of cryptocurrency for either purpose continued to fall in 2023. Overall, 7 percent of adults held or used cryptocurrency in 2023, down 3 percentage points from 2022 and down 5 percentage points from 2021 (table 21).

Buying or holding cryptocurrency as an investment remained more common than using it for financial transactions. Seven percent of adults bought or held cryptocurrency as an investment in the prior 12 months. In contrast, 2 percent of adults said they used cryptocurrency to make a financial transaction: 1 percent used cryptocurrency to buy something or make a payment, and 1 percent used it to send money to friends or family (table 21).³⁶

While only a small share of adults used cryptocurrency to send money to friends or family, the survey asked those who did if the recipient was outside of the United States. Over the past two years, one-fourth of adults who used cryptocurrency to send money to friends or family indicated that at least one transfer was made internationally.³⁷

Characteristic	Percent
Family income	Torocit
Less than \$25,000	25
\$25,000-\$49,999	20
\$50,000-\$99,999	13
\$100,000 or more	5
Age	
18-29	16
30-44	16
45-59	14
60+	9
Race/ethnicity	
White	9
Black	28
Hispanic	21
Asian	7
Disability status	
Disability	22
No disability	12
Overall	14

Table 21. Cryptocurrency use			
Type of use	2021	2022	2023
Bought cryptocurrency or held as an investment	11	8	7
Used cryptocurrency to buy something or make a payment	2	2	1
Used cryptocurrency to send money to friends or family	1	2	1
Any use of cryptocurrency	12	10	7
Note: Among all adults. Respondents could select multiple answers.			

³⁵ Cryptocurrencies are decentralized digital assets that have a distributed ledger and can be used for peer-to-peer payments. For additional information on cryptocurrencies, see Board of Governors of the Federal Reserve System, *Money and Payments: The U.S. Dollar in the Age of Digital Transformation* (Washington: Board of Governors, January 2022), https://www.federalreserve.gov/publications/money-and-payments-discussion-paper.htm.

³⁶ Because the survey is conducted online, the sample population may be more technologically connected than the overall population, which could increase the share of adults reporting use of emerging technologies such as cryptocurrencies.

³⁷ Data from both the 2022 and 2023 SHED are used here because of the small number of people who used cryptocurrency for this purpose in each individual year.

Table 22. Main reason people used crypto- currency for financial transactions		
Reason	Percent	
Person or business receiving the money preferred		
cryptocurrency	29	
To send the money faster	18	
Privacy	16	
Cheaper	13	
Safer	7	
Don't trust banks	4	
Other	13	
Note: Among adults who used cryptocurrency for f transactions.	inancial	

Table 23. Cryptocurren	cy use (b	y demog	raphic)
Characteristic	Investment only	Transac- tions	Any
Family income			
Less than \$25,000	4	4	7
\$25,000-\$49,999	4	1	5
\$50,000-\$99,999	5	1	6
\$100,000 or more	8	1	9
Age			
18-29	7	3	10
30-44	8	3	11
45-59	6	2	8
60+	2	*	2
Race/ethnicity			
White	5	1	6
Black	5	3	8
Hispanic	7	3	9
Asian	9	2	11
Gender			
Male	8	2	11
Female	3	1	4
Note: Among all adults. * Less than 1 percent.			

The survey asked those who used cryptocurrency to make financial transactions for the main reason they did so (table 22). At nearly 3 in 10, the most cited reason was that the person or business receiving the money preferred cryptocurrency, followed by ability to send the money faster and for privacy concerns. Relatively few transactional cryptocurrency users indicated that either safety (7 percent) or a lack of trust in banks (4 percent) contributed to this choice.

Use of cryptocurrency differed across demographic and socioeconomic characteristics (table 23). Use was more common among younger-to-middle age adults and among men, both for investment and transactions.

In contrast with age and gender, patterns by income, race, and ethnicity differed by whether the cryptocurrency was used for investment purposes or to conduct financial transactions. Adults with income of \$100,000 or more were more likely than adults with lower incomes to hold cryptocurrency as an investment, whereas those with income less than \$25,000 were more likely than those with higher incomes to use cryptocurrency for financial transactions. Looking across race and ethnicity shows that holding cryptocurrency as an investment was most likely among Asian adults. In contrast, use of cryptocurrency for financial transactions was more common among Black and Hispanic adults than White adults.

Use of cryptocurrency for financial transac-

tions was more common among the unbanked as well as those who used nonbank check cashing and money orders. Four percent of unbanked adults used cryptocurrency for financial transactions, compared with 2 percent among banked adults. Regardless of bank account ownership, those who used nonbank check cashing or money orders had a greater propensity to use cryptocurrency for transactions—5 percent among those who used nonbank check cashing or money orders compared with 1 percent among those who did not. That said, use of cryptocurrency for financial transactions remained very low, even among groups who were more likely to use cryptocurrency in this way.

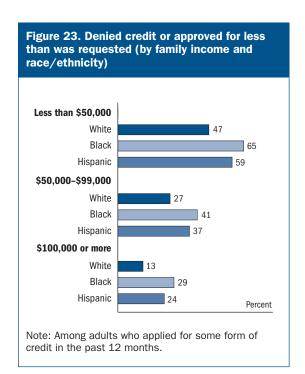
Credit Outcomes and Perceptions

Thirty-six percent of adults applied for any type of credit in 2023, unchanged in recent years, yet down from 41 percent in 2019, before the pandemic. Among those who applied, just under one-third were either denied credit or approved for less credit than they requested, up 2 percentage points from 2022 and up 5 percentage points from 2021.

Despite the higher denial rates, consumer confidence about credit card applications remained unchanged from 2022. Sixty-three percent of adults were "very confident" that their application would be approved if they applied for a credit card, the same as in 2022. Similarly, the share of adults "not confident" that their application would be approved held steady at 14 percent.

Lower-income adults were far more likely to be denied credit or approved for less than requested. Fifty-three percent of credit applicants with income below \$50,000 experienced such actions, compared with 16 percent of those with income above \$100,000.

Denial rates also differed by race and ethnicity, with Black and Hispanic applicants being particularly likely to report a denial or an approval for less credit than requested. Moreover, Black and Hispanic adults saw higher denial rates regardless of income level (figure 23).



Credit Cards

People use credit cards in different ways. Some use credit cards primarily to make payments, paying off their balances in full each month and avoiding interest charges. Others carry a balance and incur borrowing costs.

Eighty-two percent of adults had a credit card in 2023.³⁸ They were nearly evenly split between the people who paid off their balances in each of the previous 12 months and people who carried bal-

Table 24. Credit card access and usage (by demographic characteristics) Percent Carried a balance Carried Has a (among a balance Characteristic credit credit (among all card card adults) holders) **Family income** Less than \$25,000 46 56 26 \$25,000-\$49,999 75 60 45 \$50,000-\$99,999 52 46 89 \$100,000 or more 97 37 36 Age 18-29 65 45 29 42 30 - 4480 53 45-59 86 54 47 60+ 91 39 35 Race/ethnicity White 86 42 36 Black 70 72 50 44 Hispanic 74 59 Asian 90 24 21 **Disability status** Disability 38 69 56 No disability 84 45 38 **Overall** 47 Note: Among all adults. Carried a balance reflects the share who

carried a balance at least once in the past year.

ances from month to month at least once in the prior year. Just about one-quarter said they carried a balance most of the time during the prior 12 months.

Almost all adults with an income of at least \$100,000 had a credit card. At lower income levels, having a credit card was less common, though adults at these income levels who did have credit cards were more likely to use them to carry balances from month to month. Consequently, middle-income adults were the most likely to have a credit card that they used to finance purchases by carrying balances from one month to the next (table 24).

Credit card usage also differed by race and ethnicity, age, and disability status. Ninety percent of Asian adults had a credit card, followed by 86 percent of White adults, 74 percent of Hispanic adults, and 70 percent of Black adults. While credit card ownership was lower among Black and Hispanic adults, those who did have a credit card were more likely to carry a balance. Young adults and those with a disability were also less likely to have a credit card than were older adults or those without a disability.

³⁸ This share is higher than the 72 percent of households with a credit card in the Federal Deposit Insurance Corporation (FDIC) 2021 FDIC National Survey of Unbanked and Underbanked Households (Washington: FDIC, October 2022), https://www.fdic.gov/analysis/household-survey/2021report.pdf.

Buy Now, Pay Later

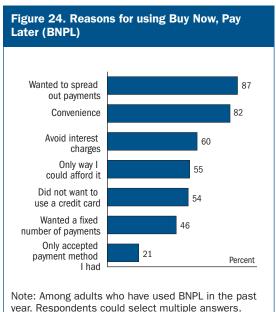
BNPL provides consumers the option to pay for a purchase with a small number of equal payments (usually four), often without being charged interest. For example, someone purchasing a \$100 item may be able to make one payment of \$25 at the time of purchase, then make three additional monthly payments of \$25.

Fourteen percent of people used BNPL in the prior 12 months, up 2 percentage points from 2022.

The top two reasons for using BNPL were wanting to spread out payments (87 percent) and convenience (82 percent) (figure 24). Notably, over half (55 percent) of those who used BNPL—and an even higher 69 percent of those with incomes less than \$50,000 who used BNPL—said they used BNPL because it was the only way they could afford a purchase.

Use of BNPL was more common among lowand middle-income adults, Black and Hispanic adults, and women (table 25). Differences by race and ethnicity were large, with Black and Hispanic adults about twice as likely to use BNPL as White or Asian adults. Additionally, sizeable differences remain even after controlling for other factors like income, age, and self-perceived credit rating.

People also differed in their use of BNPL according to their self-reported credit rating (figure 25). Those who rated their credit as "poor" and "fair" were the most likely to use BNPL, followed by those rating their credit as



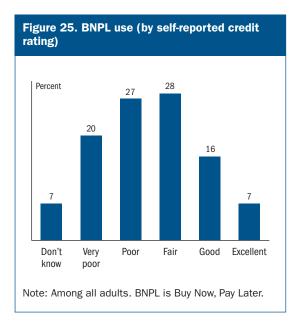
year. Respondents could select multiple answers.

Table 25. Buy Now, Pay Later (BNPL) use

(by demographic characteristics) Percent				
Characteristic	Used BNPL	Paid late (among users)		
Family income				
Less than \$25,000	14	31		
\$25,000-\$49,999	18	21		
\$50,000-\$99,999	15	17		
\$100,000 or more	10	9		
Age				
18-29	17	23		
30-44	17	20		
45-59	15	19		
60+	8	8		
Race/ethnicity				
White	10	13		
Black	20	18		
Hispanic	21	26		
Asian	10	n/a		
Gender				
Male	12	16		
Female	15	21		
Overall	14	18		

Note: Among all adults.

n/a Not applicable.



"very poor." Moreover, among those who used BNPL, adults with lower self-reported credit ratings were also more likely to cite "only way I could afford it" or "only accepted payment method I had" as reasons for using BNPL than adults who rated their credit higher.

Most people who used BNPL made their payments on time. Overall, 18 percent of people who used BNPL in the prior 12 months were late making a payment, up 1 percentage point from 2022. However, late payments were more common among those with lower income, Hispanic adults, and younger adults (table 25). Nearly 6 in 10 of those late making a payment (11 percent of those who used BNPL) said they were charged extra for being late.

Nonbank Small Dollar Credit

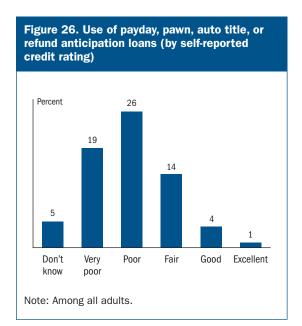
Consumers with negative credit histories, or no credit history, sometimes use nonbank credit products like payday or pawn loans when a small dollar credit need arises. These products typically have high borrowing costs.

In 2023, 6 percent of adults used a payday, pawn, auto title, or tax refund anticipation loan, up 1 percentage point from 2022. While overall use tends to be small, use is more likely among adults with lower income, Black and Hispanic adults, and adults with a disability (table 26). Notably, differences by race, ethnicity, and disability status were present even after controlling for other factors like income an age.

Similar to those who used BNPL, adults with lower self-reported credit ratings were more likely to use one of these products (figure 26). Just above one-fourth of those rating their credit as "poor" did so, compared with only 1 percent of those rating their credit as "excellent." Unlike BNPL, however, use of these products was much higher among those who did not have a credit card (13 percent) than among those who did (4 percent).

Table 26. Use of payday, pawn, auto title, and refund anticipation loans (by demographic characteristics)

characteristics)		
Characteristic	Percent	
Family income		
Less than \$25,000	10	
\$25,000-\$49,999	10	
\$50,000-\$99,999	5	
\$100,000 or more	2	
Age		
18-29	7	
30-44	9	
45-59	6	
60+	2	
Race/ethnicity		
White	3	
Black	10	
Hispanic	11	
Asian	3	
Disability status		
Disability	9	
No disability	4	
Overall	6	
Note: Among all adults.		



Housing

Housing represents the largest expense for most families, and consequently, housing decisions have the potential to substantially affect economic outcomes. The majority of adults owned their homes in 2023, though homeownership was less common among lower–income adults. Those who rent their homes, rather than own, most often said they did so because of financial constraints. That said, many renters noted that renting was more convenient than owning.

Despite the risk of financial losses, some homeowners do not have homeowners insurance. Those with low incomes and those in regions with more people affected by natural disasters were more likely to say that they did not have homeowners insurance.

Homeowners

Sixty-four percent of adults owned their homes. Yet, the likelihood of owning varied substantially by income. Thirty-six percent of adults with less than \$50,000 of income own their home, compared with 87 percent of adults with a family income of \$100,000 or more. The income gap in homeownership is even greater among adults under age 60, as older adults frequently have higher wealth and may be less reliant on income for homeownership. Among adults under age 60, just over one-fourth of adults with less than \$50,000 of income own, well below the 84 percent homeownership rate seen for similarly aged adults with over \$100,000 of income.

Gaps in homeownership rates were also apparent by other demographic characteristics. Black and Hispanic households were less likely to own than White and Asian households. Adults with a disability were also less likely to own (table 27).

About two-thirds of adults who owned their home had a mortgage in 2023. The median monthly mortgage payment was \$1,500.⁴⁰ Mortgage payment amounts differed by census regions and the years people moved into their home (table 28). Likely reflecting differences in home prices across the country, mortgage payments were higher in the Northeast and West, compared with the Midwest and South. Consistent with increases in mortgage rates that began in early 2022 that

³⁹ Older adults, even those with lower incomes, are much more likely to own their homes free and clear. For example, among adults with incomes less than \$50,000, nearly 40 percent of those age 60 or older own their home free and clear, compared with 6 percent of those under age 60.

⁴⁰ Owners with a mortgage were asked for the total mortgage payment that they send to their bank, which will typically include escrow payments for taxes and homeowners insurance but will not include utilities.

Characteristic	Percent
Family income	
Less than \$25,000	26
\$25,000-\$49,999	48
\$50,000-\$99,999	69
\$100,000 or more	87
Age	
18-29	26
30-44	60
45-59	76
60+	83
Race/ethnicity	
White	71
Black	50
Hispanic	51
Asian	65
Disability status	
Disability	53
No disability	67
Overall	64

Table 28. Median monthly mortgage payment (by census region and most recent move)			
Census region	Moved before 2022	Moved in 2022 or 2023	Overall
Northeast	\$1,500	\$2,200	\$1,500
Midwest	\$1,200	\$1,500	\$1,200
South	\$1,385	\$2,000	\$1,422
West	\$1,700	\$2,800	\$1,745
Overall	\$1,400	\$2,100	\$1,500
Note: Among homeowners who reported a positive monthly			

increased housing payments for new purchases, mortgage payments were also larger among those who moved in 2022 or 2023 relative to those who moved into their homes in earlier years.⁴¹

mortgage payment. Owners with a mortgage were asked for the total mortgage payment that they send to their bank.

Renters

Just above one-fourth of adults (27 percent) rented their home in 2023.⁴² Black and His-

panic adults and adults with a disability were disproportionately likely to rent. Additionally, lower-income adults as well as those who live in low- and moderate-income neighborhoods or who live in metro areas were more likely to rent (table 29).

Median reported rent was up about 10 percent in 2023 relative to that seen in the previous year. In 2023, the median rent payment reported in the survey was \$1,100. This compares with a median reported rent of \$1,000 in the 2022 survey.

Like homeowners with a mortgage, renters in the Northeast and West had higher monthly rent payments compared with the those in the Midwest and South, as measured by the median rental payment in the region (table 30). However, the median monthly rental payments were smaller than

⁴¹ For details on average mortgage rates over time, see Freddie Mac, "Current Mortgage Rate Data Since 1971," https://www.freddiemac.com/pmms.

⁴² The share who own plus the share who rent does not sum to 100 percent because some people live rent free in a house that neither they nor their spouse or partner own.

Characteristic	Percent
Family income	
Less than \$25,000	46
\$25,000-\$49,999	41
\$50,000-\$99,999	27
\$100,000 or more	12
Age	
18-29	45
30-44	34
45-59	21
60+	14
Race/ethnicity	
White	21
Black	41
Hispanic	37
Asian	25
Disability status	
Disability	37
No disability	25
MSA status	
Metro	28
Non-Metro	22
Neighborhood income	
LMI neighborhood	42
Non-LMI neighborhood	21
Overall	27

Table 30. Median monthly rent payment (by census region and most recent move)			
Census region	Moved before 2022	Moved in 2022 or 2023	Overall
Northeast	\$1,200	\$1,600	\$1,200
Midwest	\$ 800	\$ 979	\$ 875
South	\$ 900	\$1,200	\$1,000
West	\$1,300	\$1,600	\$1,400
Overall	\$1,045	\$1,231	\$1,100
Note: Among renters who reported a positive monthly rental payment.			

monthly mortgage payments made by homeowners. Renters who moved in 2023 or 2022 also had higher rent payments compared with those who did not move in the prior two years. 43

Renter Experiences

Renters cited multiple reasons for renting their homes. Similar to reasons reported in 2022, financial constraints led many adults to rent their home instead of owning in 2023. The most cited reason for renting was an inability to afford a down payment—in 2023, nearly two-thirds of renters cited this as a reason. Four in 10 renters indicated that they rent because they cannot qualify for a home

mortgage, and 48 percent said they rent because they cannot afford the monthly mortgage payment (table 31).

Although many renters noted financial constraints, these were not the only reasons for renting. More than one-third of renters preferred to rent than to own. The majority of renters (57 percent) said that renting is more convenient, and 44 percent rent their homes because they perceive owning as a larger financial risk. Forty-two percent of renters found it cheaper to rent than own.

⁴³ In addition to reflecting changes in rent prices over time for new leases, the differences in rent prices for those who moved recently may reflect differences in who decides to move each year.

Table 31. Reasons for renting (by year) Percent			
Reason	2022	2023	
Can't afford down payment	65	65	
More convenient or flexible to rent	56	57	
Can't afford mortgage monthly payment	44	48	
Renting is less financially risky	42	44	
Cheaper to rent	42	42	
Can't qualify for home mortgage	40	40	
Prefer to rent	36	36	
Trying to buy	32	30	
Note: Among renters. Respondents could select multiple answers.			

There was a slight uptick in the share of renters who faced challenges paying their rent in 2023. Nineteen percent of renters reported that they had been behind on their rent at some point in the past year, compared with 17 percent who said they were behind in 2022. Black and Hispanic renters were more likely to be behind on rent payments than White and Asian renters. In 2023, Black renters were more than twice as likely—and Hispanic renters were almost twice as likely—as White renters to report being behind on rent at some point in the past year.

The cost of housing can cause some people to move. However, relatively few renters said they moved primarily because of an increase in rent. Four percent of renters (24 percent of current renters who moved in 2023) said the main reason they moved was rent increased at their previous home.

Other renters move because of eviction or threat of eviction. Two percent of renters moved in the prior year because of eviction or threat of eviction. This represents 15 percent of renters who moved during 2023.

Neighborhood Satisfaction

The quality of people's neighborhoods, in addition to their housing, can affect well-being and opportunities for the future. Neighborhood quality and characteristics can also influence the decision of where to live.

Table 32. Satisfied with local neighborhood characteristics		
Characteristic	Percent	
Overall quality	76	
Quality of your local schools (among parents of children under age 18)	66	
Crime risk	61	
Natural disaster and severe weather risk	65	
Cost of housing	37	
Note: Among all adults. Share satisfied includes t somewhat or very satisfied with the characteristic		

Overall, 76 percent of adults were either somewhat or very satisfied with the overall quality of their neighborhood (table 32). Most adults were also satisfied with the level of crime risk, quality of local schools, and the risk from natural disasters. However, only 37 percent were satisfied with the cost of housing in their neighborhood.

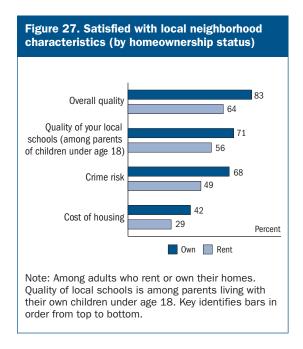
People's satisfaction with their neighborhoods differed by homeownership status. Adults who

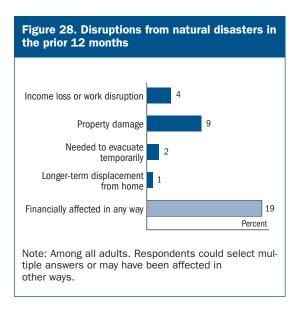
rent were less likely to be satisfied with their neighborhood overall, as well as less likely to be satisfied with the neighborhood characteristics (figure 27). For example, less than one in three renters were satisfied with the cost of housing in their neighborhood, compared with 42 percent of homeowners.

Natural Disaster Risks

People may face a variety of financial challenges in the event of natural disasters or severe weather events. Property damage or loss is one of the largest financial risks, particularly for homeowners without homeowners insurance. Natural disasters and extreme weather can cause other disruptions, such as missing work or higher bills for heating or cooling homes.

Nearly 2 in 10 adults reported being financially affected by natural disasters or severe weather events (such as flooding, hurricanes, wildfires, or extreme temperatures) during the prior 12 months. Most of these effects were modest, as 12 percent of adults said that they were slightly affected by natural disasters. Yet 5 percent of adults said that they were moderately affected, and 2 percent said that they were substantially affected financially by natural disasters. When asked about how they were affected, the most common way was





property damage, with nearly 1 in 10 adults affected (figure 28).

The effects of natural disasters were not experienced uniformly across demographic groups or geography. Adults with lower incomes and nonwhite adults were more likely to be financially affected by a natural disaster. Nearly one-fourth of adults living in the South were financially affected by a natural disaster, compared with 13 percent in the Northeast (table 33). Additionally, 10 percent of adults in the South were moderately or severely affected by natural disasters, exceeding that seen in other regions.

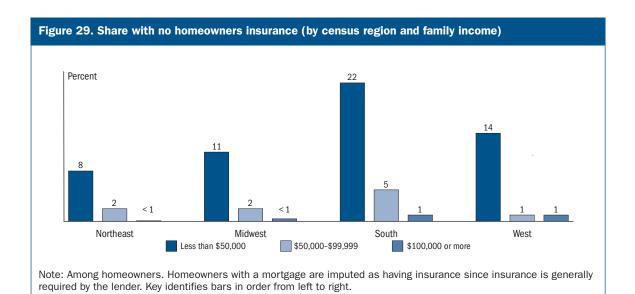
Table 33. Financially affected by natural disaster or severe weather event (by demographic characteristics)		
Characteristic	Percent	
Family income	·	
Less than \$25,000	25	
\$25,000-\$49,999	21	
\$50,000-\$99,999	19	
\$100,000 or more	16	
Race/ethnicity		
White	17	
Black	21	
Hispanic	23	
Asian	22	
Census region		
Northeast	13	
Midwest	15	
South	24	
West	19	
Overall	19	

Some adults undertook mitigation activities, such as improving their property or purchasing additional insurance, to reduce their financial risks from natural disasters. Making improvements to one's property was the most common mitigation activity, with 18 percent of adults doing so, followed by investigating other places to live (13 percent) and purchasing additional insurance (5 percent). Those who had been financially affected by a natural disaster were more likely to undertake each of these mitigation activities: one-third made improvements to their property to reduce risk, and one-quarter investigated other places to live.

While some people purchased additional insurance to help mitigate financial risk from natural disasters, others had no homeowners insurance. At least 4 percent of homeowners (or 13 percent of owners who own their home free and clear) did not have homeowners insurance.⁴⁴

Homeowners who appear to have a higher risk of being financially affected by a natural disaster were also less likely to have homeowners insurance. Homeowners with lower income, those living in the South, and homeowners who had already been financially affected by a natural disaster were all less likely to have homeowners insurance. For example, more than 2 in 10 homeowners in the South with an income less than \$50,000 did not have homeowners insurance (figure 29). If limiting the former group to only those homeowners who own their home free and clear, the share of low- and moderate-income homeowners in the South without insurance is nearly 4 in 10.

⁴⁴ Homeowners with a mortgage generally are required to have homeowners insurance. Therefore, only those who own their home free and clear were asked if they have homeowners insurance. A small share of homeowners with a mortgage may not have insurance, although these individuals may have lender-placed insurance.



Higher Education and Student Loans

The self-assessed value of higher education, while generally positive, depends on several aspects of an individual's educational and personal experience, including the type of institution attended, use of student loans, and age. In 2023, rates of education and types of institutions attended continued to vary by different demographic characteristics such as parental education, age, and race and ethnicity. Finally, following the restart of federal student loan payments in the fall of 2023, the share of student loan borrowers who were required to make payments rose compared with 2022, returning to pre-pandemic levels.

Educational Attainment

Most adults have enrolled in some education after high school, although rates vary across demographic groups. Seventy percent of adults had ever attended an educational program after high school, whereas just over half

Table 34. Educational attainment (by age, race/ethnicity, and parental education) Percent				
Characteristic	Ever enrolled in an educational program after high school	Received bach- elor's degree or more		
Age				
18-29	76	34		
30-44	71	42		
45-59	71	38		
60+	66	33		
Race/ethnicity				
White	73	41		
Black	67	27		
Hispanic	58	21		
Asian	90	67		
Highest education of any parent/guardian				
Less than a bachelor's degree	62	25		
Bachelor's degree or more	92	66		
Overall	70	37		
Note: Among all adults.				

had received at least a certificate or technical degree, and 37 percent had received at least a bachelor's degree. Consistent with increasing rates of college attendance over time, the share of adults who had ever enrolled in an educational program after high school was higher for younger adults than for older adults (table 34).⁴⁵ The share with education beyond high school also varied substantially by race and ethnicity, with Hispanic adults being much less likely than others to have ever attended college while Asian adults were more likely than others to have attended college.

The likelihood of obtaining a bachelor's degree or more was higher among those whose parents were college graduates. Among adults who have at least one parent with a bachelor's degree, 66 percent received at least a bachelor's degree themselves. In contrast, 25 percent of adults whose parents did not complete a bachelor's degree did not receive one themselves.

⁴⁵ Though college enrollment rates among recent high school completers peaked at about 70 percent in 2009 and have since stagnated or fallen, enrollment rates remain historically high, averaging more than two-thirds of recent high school completers from 2010–19 and more than 60 percent from 2020–22, compared with 45 percent in 1965 (see National Center for Educational Statistics, "Digest of Educational Statistics" at https://nces.ed.gov/programs/digest/d23/tables/dt23_302.20.asp).

The type of institution attended also varied with parental education and race. Most adults who attended an educational program beyond high school went to public institutions (70 percent), while less than one-fourth attended private not-for-profit schools and 7 percent attended private for-profit schools. Although private for-profit schools comprised a relatively small share of the higher education attendance for students of a range of backgrounds, adults whose parents did not have a bachelor's degree were more likely to attend a private for-profit institution than those who had a parent with a bachelor's degree—9 percent versus 3 percent, respectively. Additionally, 11 percent of Black adults and 13 percent of Hispanic adults who pursued education beyond high school attended for-profit schools—much higher than the shares of White and Asian adults who pursued postsecondary education who attended for-profit schools (5 percent and 4 percent, respectively).

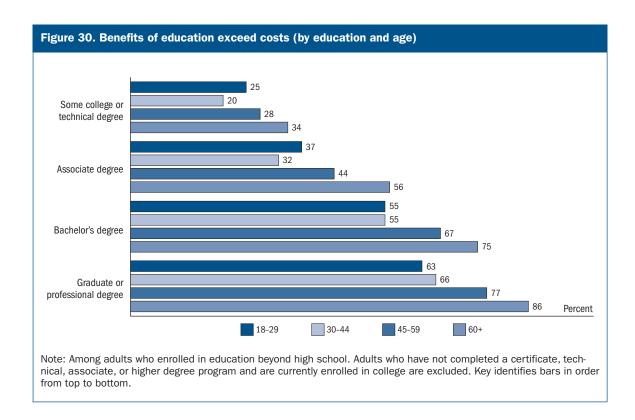
Overall Value of Higher Education

Consistent with higher rates of financial well-being among those who have more education, discussed in the "Overall Financial Well-Being" section of this report, more than one-half of adults who ever enrolled in an educational program beyond high school (and were not currently enrolled) said that the lifetime financial benefits of their higher education exceeded the financial costs. Heanwhile, one in five said that the costs were higher. The rest saw the benefits as about the same as the costs. These self-assessments of the value of education have changed little in recent years.

The self-assessed value of higher education, while generally positive, depends on several aspects of a person's educational experience. In particular, those who completed their program and received at least an associate degree were far more likely to see net benefits than those who did not complete a degree. Among those who enrolled in education beyond high school but did not complete at least an associate degree, 28 percent said the benefits of their education exceeded the cost. This compares with 43 percent of those with an associate degree and 68 percent of those with at least a bachelor's degree.

The self-assessed value of higher education also increased with age. Among those who completed at least some college or a technical degree and were not currently enrolled, those who were age 45 and older had more positive assessments of the value of their education than those under age 45 who completed the same level of education (figure 30). These age differences may reflect that older adults have had a longer time to experience the benefit of their education than younger

⁴⁶ In the sections "Overall Value of Higher Education" and "Look Back on Education Decisions," the results on the benefits of education and changes to education reflect the answers of people who have ever enrolled in an educational program beyond high school and either completed a certificate, technical, associate, or higher degree program or were not enrolled at the time of the survey. Thus, those who were currently enrolled in college but did not have a degree are not included.



adults. This variation may also be driven by the rising costs of higher education and the increased use of student loans, which makes costs remain more salient into adulthood.⁴⁷

Reflecting that student loans may affect perceptions of higher education, 44 percent of those with student loans who completed at least an associate degree said the benefits of their education exceeded the costs. By comparison, 68 percent of adults with an associate degree or higher who had either completely paid off their student loans or never had debt said the benefits of their education exceeded the costs.

The type of institution attended was also associated with differences in how people viewed their education.⁴⁸ Among those with an associate degree or higher, 64 percent of those who attended public institutions saw their educational benefits as greater than their costs, as did 66 percent of

⁴⁷ From 1995 to 2015, net tuition, fees, room, and board rose 54 percent at public four-year institutions and 29 percent at private, nonprofit, four-year institutions in real terms. (Sandy Baum and Jennifer Ma, *Trends in College Pricing* 2014, (New York: The College Board, 2014), https://research.collegeboard.org/pdf/trends-college-pricing-2014-full-report.pdf). In the current school year, net tuition, housing, food, and fees at public and private nonprofit institutions are slightly lower in real terms than they were in the 2014–15 school year. (Jennifer Ma and Matea Pender, *Trends in College Pricing and Student Aid* 2023, (New York: The College Board, 2023), https://research.collegeboard.org/media/pdf/Trends Report 2023 Updated.pdf

⁴⁸ Individuals do not self-report the type of institution in the survey. Instead, the institution type is assigned by matching the name and location of the college reported by the individual with data from the Center on Postsecondary Research at the Indiana University School of Education (https://cpr.indiana.edu/). For individuals who completed an associate or bachelor's degree, institution type is based on the school from which they received the degree. For other individuals, it is based on the last school attended.

those who attended private not-for-profit institutions. However, a far lower 38 percent of those who attended for-profit institutions felt their education's benefits were greater than its costs.

Look Back on Education Decisions

Another way to assess the value of education is to consider what people would have done differently if given the chance. Most people value the education they received, but with the benefit of hindsight and life experience, it was also common to think that different educational decisions could have been better.

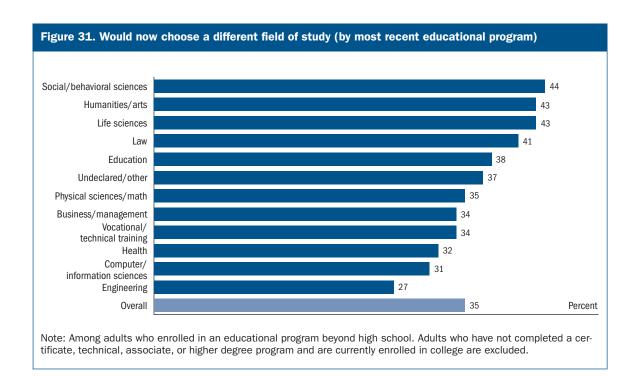
Completing more education was the most common change individuals would have made regarding their education. Forty-five percent of adults who attended an educational program beyond high school and were not currently enrolled said that they would complete more education in hindsight. This includes 61 percent of those with less than a bachelor's degree. In contrast, just 10 percent of people who pursued education beyond high school said that they would have completed less education or not gone to college if they could make their education decisions again.

Additionally, reassessments of educational decisions varied by the type of institution attended. Thirty-nine percent of those who received a bachelor's degree from a for-profit institution said they would have attended a different school in hindsight, compared with 25 percent of those who received their bachelor's degree from a private not-for-profit institution and 19 percent who received their bachelor's degree from a public institution. ⁴⁹ This gap by institution type is smaller than in recent years, but it remains the case that those with a degree from for-profit institutions are far more likely to say that they would have changed the school attended. This difference remains even after accounting for the level of education completed, the parents' level of education, and demographic characteristics of the student.

Among adults who attended an educational program beyond high school and were not currently enrolled in an educational program, the changes they said they would now make to their educational decisions were also related to the type of educational program they completed most recently. Those whose most recent educational program was engineering, computer and information sciences, or health reported the lowest rates of saying they would choose a different field for their undergraduate degree (figure 31).⁵⁰ The share who would change their field of study across

⁴⁹ These results are similar if those who completed less than a bachelor's degree are included.

Each category of educational programs may contain multiple fields of study, so it is possible that some respondents who said they would choose a different field of study in hindsight would not change their educational program. Additionally, respondents are asked to identify the educational program for their most recent degree, whereas the question about changing fields of study in hindsight asks respondents about undergraduate degrees. Because of this, these questions do not ask about the same degree program for people with more than a bachelor's degree. However, our findings do not change when people with more than a bachelor's degree are excluded: adults who studied humanities/arts, social/behavioral sciences, or life sciences remain the most likely to say they would change their field of study at 45, 45, and 50 percent respectively, while those who studied engineering remain the least likely to say this (28 percent).



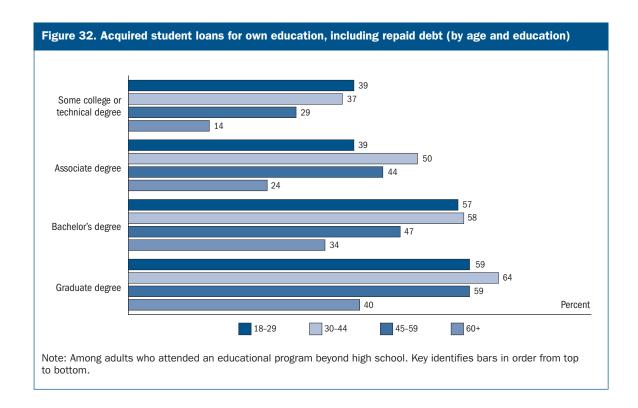
educational programs is broadly consistent with patterns for how people see the relative costs and benefits of their education. For example, 73 percent of those who studied engineering said the benefits of education exceeded the costs—the highest of any field of study. Nevertheless, in every educational program people were more likely to say that the benefits exceeded costs than to say that costs exceeded benefits.

Incidence and Types of Education Debt

It is common to use debt to finance higher education. Thirty percent of all adults—representing more than 4 in 10 people who pursued education beyond high school—said they took out student loans for their education. This includes 18 percent of those who still owed money on outstanding loans ("student loan borrowers") and 24 percent who borrowed but fully repaid their education debts.

The share of adults who attended an educational program beyond high school and took out student loans for their education varied across age groups. Adults ages 30 to 44 were most likely to have taken out student loans for their education, while older adults were less likely to do so, consistent with the upward trend in educational borrowing over the past several decades (figure 32).⁵¹

⁵¹ Student loan borrowing has declined in real terms since its peak in 2010–11 but remains substantially above the levels from the mid-1990s. (Jennifer Ma and Matea Pender, Trends in College Pricing and Student Aid 2023 (New York: The College Board, 2023), https://research.collegeboard.org/media/pdf/Trends Report 2023 Updated.pdf).

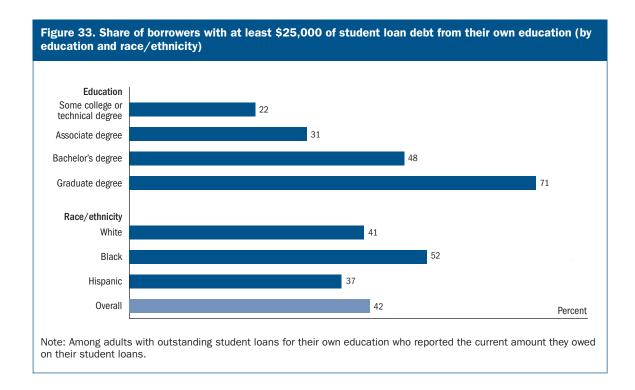


Additionally, adults who completed higher levels of education were more likely to have taken out student loans than those who completed lower levels of education.

Most student loan borrowers with outstanding debt owed less than \$25,000 on their loans.⁵² The median amount of education debt in 2023 among those with any outstanding debt for their own education was between \$20,000 and \$24,999. Twenty-eight percent of student loan borrowers had less than \$10,000 in outstanding student debt. Student debt balances also varied across different demographic groups. Borrowers with higher levels of education were more likely to carry higher balances of student loan debt (figure 33). Black borrowers were more likely than White and Hispanic borrowers to carry higher balances on student loan debt.

The incidence of education debt varied by the type of institution attended. Among those who attended public institutions, 40 percent either previously held debt or currently had debt as of October 2023, compared with 57 percent of those who attended private not-for-profit schools and 63 percent who attended private for-profit institutions. In 2023, people with outstanding student loan debt who attended private not-for-profit schools were more likely to hold higher balances of student loan debt (median amount between \$25,000 and \$29,999) than those who went to either private for-profit or public schools (median amount of debt between \$15,000 and \$19,999).

⁵² All amounts of student debt among adults with outstanding student loans for their own education are for those who reported the current amount they owed on these student loans.



Some people also took out student loans to assist family members with their education through either a co-signed loan with the student or a loan taken out independently. Although this was less common than borrowing for one's own education, 5 percent of all adults had student loans that paid for a child's or grandchild's education. Among those who had outstanding debt for a child's or grandchild's education, the median amount of debt was between \$15,000 and \$19,999.

Student Loan Payment Status

The pause on federal student loan payments that had been in place since early in the pandemic ended in 2023. As a result, interest charges on federal student loans resumed in September 2023, and payments were required as of October 2023, just before the 2023 survey was fielded.⁵⁴

With the restart of federal student loan payments, the share of student loan borrowers making payments returned to pre-pandemic levels. As of October 2023, 65 percent of borrowers with stu-

⁵³ The median amount of student debt for adults with outstanding student loans for their child's or grandchild's education is among those who reported the current amount they owed on these student loans.

The Coronavirus Aid, Relief, and Economic Security Act temporarily paused payments on federally held student loans beginning in March 2020, although borrowers with private student loans were still required to make payments during this time. This payment pause for federal student loan borrowers was extended multiple times and ended on September 1, 2023. (See U.S. Department of Education at https://studentaid.gov/announcements-events/covid-19.) As a part of the resumption of student loans payments, anyone who qualified for a payment pause was also automatically eligible for an "on-ramp transition period." While payments are still due and interest will still accrue during this period, accounts will not be considered delinquent, be reported to credit agencies, nor go into default until September 30, 2024. (See U.S. Department of Education at https://studentaid.gov/manage-loans/repayment/prepare-payments-restart.)

Characteristic	Percent
Family income	
Less than \$25,000	24
\$25,000-\$49,999	24
\$50,000-\$99,999	15
\$100,000 or more	7
Education	
Some college or technical degree	28
Associate degree	22
Bachelor's degree	7
Graduate degree	7
Race/ethnicity	
White	10
Black	23
Hispanic	27
Asian	13
Overall	16

dent loans for their own education reported that they were currently required to make monthly payments on their student loans. This is well above the 37 percent of borrowers who reported they were required to make payments in 2022 and is similar to the 66 percent of borrowers who reported owing monthly payments in 2019. ⁵⁵ Additionally, in 2023, 16 percent of borrowers reported being behind on payments or in collections for one or more of their student loans, up slightly from the 15 percent in 2022 but still slightly below the 17 percent from 2019.

Similar to findings in previous years, borrowers with less education or lower income were more likely to be behind on their student loan payments. Twenty-two percent of borrowers with loans outstanding who completed an associate degree reported being behind, compared with 7 percent of borrowers with a

bachelor's degree (table 35).⁵⁶ Similarly, nearly one-fourth of borrowers earning less than \$25,000 were behind on student loan payments, while 7 percent of borrowers earning \$100,000 or more were behind. In addition to these differences by income and education level, Hispanic and Black borrowers reported higher rates of being behind on student loan payments.

Difficulties with student loan payments also varied by the type of institution attended. Twenty-seven percent of borrowers with outstanding student loans for their own education who attended for-profit institutions were behind on student loan payments, versus 13 percent of those who attended public institutions and 11 percent who attended private not-for-profit institutions.

Although it is common to focus only on those with outstanding debt, many people who borrowed for their education had repaid their loans completely. Excluding people who have paid off their debt could overstate difficulties with repayment. Indeed, the share of adults who were behind on their

⁵⁵ In the 2022 and 2023 surveys, the question about borrowing for one's own education asked only about student loans, whereas the 2019 survey included other forms of debt used to pay for education. Nonetheless, 95 percent of those who had outstanding debt for their own education in 2019 had student loans.

⁵⁶ Currently enrolled students are frequently not required to make payments, so they are less likely to fall behind. Among those with less than an associate degree who are not currently enrolled and owe outstanding student loans on their own education, a larger 38 percent of borrowers are behind.

payments is much lower when accounting for all who ever borrowed, including those who had completely repaid that debt.

Among those who ever incurred debt for their education, 7 percent were behind on their payments at the time of the 2023 survey, and 36 percent had outstanding debt and were current on their payments. Fifty-seven percent had completely paid off their loans, up 7 percentage points from the prior survey. Nevertheless, the demographic and educational characteristics of those who were behind on payments remain similar when also incorporating those who have paid off their loans.

Retirement and Investments

Retirees generally report high levels of financial well-being, but those with income from employment, pensions, or investments were doing substantially better than those who relied solely on Social Security or other public income sources. Among non-retirees, the share who felt like their retirement savings were on track increased in 2023, although most still did not feel their retirement savings were on track.

Current Retirees

Retirees represent a sizeable portion of the adult population. Twenty-seven percent of adults in 2023 considered themselves to be retired, even though some were still working in some capacity.⁵⁷ Fifteen percent of retirees had done some work for pay or profit in the prior month. Consequently, 4 percent of all adults considered themselves retired but were still working. Part-time work was more common among retirees than full-time work (11 percent and 4 percent of retirees, respectively).

Retirees with less education and those with a disability were less likely to work in retirement. Twelve percent of retirees with a high school degree or less reported they were still working, compared with 17 percent of retirees with a bachelor's degree or more. Nine percent of retirees with a disability were working, while 16 percent of retirees without a disability were working.⁵⁸

In deciding when to retire, most retirees indicated that their preferences played a role, although life events contributed to the timing of retirement for a substantial share. Many indicated that multiple factors contributed to their timing. Fifty-one percent of retirees said a desire to do other things or to spend time with family was important for their decision of when to retire, and 47 percent said they retired because they reached a normal retirement age.

Nonetheless, 29 percent of retirees said that a health problem was a factor in their decision of when to retire, and 16 percent said they retired in part to care for family members. One in 10 said

⁵⁷ In this report, descriptions of current retirees include everyone who reported being retired, including those who also reported that they are working.

Retirees with a high school degree or less were more than twice as likely as retirees with a bachelor's degree to have a disability, which may contribute to some of the differences in employment by education. Data from the Current Population Survey (CPS) show that a rising share of older adults are working compared with two decades ago. However, the share of older adults who report that health issues are the reason they are not working has also risen over this time, and most of this increase in older adults who are not working because of health issues has been among those without college degrees (David H. Montgomery, "Who's Not Working? Understanding the U.S.'s Aging Workforce" (Minneapolis: Federal Reserve Bank of Minneapolis, February 2023), https://www.minneapolisfed.org/article/2023/whos-not-working-understanding-the-uss-aging-workforce).

they were forced to retire or that work was not available. Collectively, health problems, caring for family, and lack of work contributed to the timing of retirement for 46 percent of retirees.

Retiring due to health problems, lack of work, or caring for family was far more common among those with less education. Fifty-three percent of retirees with a high school degree or less cited one of these reasons for the timing of their retirement, compared with 32 percent of those with at least a bachelor's degree.

Table 36. Sources of income among retirees (by age) Percent		
Income source	age 65+	Overall
Social Security (including Old-Age and DI)	92	77
Pension	64	56
Interest, dividends, or rental income	52	48
Wages, salaries, or self-employment	26	33
Cash transfers, other than Social Security	5	8

answers. Sources of income include the income of a spouse or partner. DI is disability insurance.

Social Security remained the most common source of retirement income, but 80 percent of retirees had one or more sources of private income. This included 56 percent of retirees with income from a pension; 48 percent with interest, dividends, or rental income; and 33 percent with labor income (table 36).⁵⁹ Seventy-seven percent of retirees received income from Social Security in the prior 12 months, including 92 percent of retirees age 65 or older.

Retirees who reported that their family income included labor income (such as wages, sala-

ries, or self-employment income) were generally younger than retirees overall, and many had a working spouse. The median age of retirees whose family income included labor income was 66, compared with a median age of 69 for all retirees. Moreover, while 38 percent of retirees whose family income included labor income said they worked for pay or profit in the month prior to the survey despite being retired, a larger 59 percent reported they had a spouse who worked for pay or profit in the prior month.

While retirees as a group had generally high levels of financial well-being, this varied depending on the individual's sources of income. In 2023, 80 percent of all retirees said they were doing at least okay financially. Among retirees whose family income included wages or other sources of labor income, a higher share (85 percent) reported they were doing at least okay financially.

Among retirees who did not have labor income, those who had pensions or income from interest, dividends, or rents were doing better financially than those who were reliant solely on Social Security and cash transfers from other government programs or reported no income sources in

 $^{^{59}}$ The type of pension was not specified, so pension income may include income from defined benefit plans, which pay a fixed monthly amount, and defined contribution plans, such as 401(k) and 403(b) plans.

2023.⁶⁰ Fifty-two percent of retirees who did not have private income said they were doing at least okay financially (table 37). This was far below the share of retirees who had income from private sources, such as pensions and investments, who were doing at least okay financially.

Retirement Savings and Investments

Most adults had tax-preferred retirement accounts, defined benefit pensions, or other assets that they may be able to tap to meet

Table 37. Financial well-being among retirees without labor income (by other sources of private income in the prior 12 months)

Percent

Income sources	At least okay financially
No private income	52
Pension	78
Interest, dividends, or rents	88
Pension + interest, dividends, or rents	95

Note: Among retirees without labor income. Sources of income include the income of a spouse or partner. Categories are mutually exclusive, so "Pension," for example, indicates the retiree had income from a pension but not interest, dividends, or rents. Retirees may have received income from public sources as well.

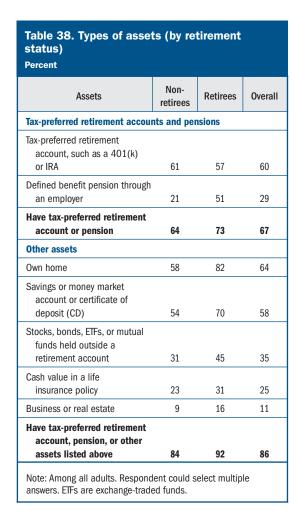
expenses in retirement. Sixty-seven percent of adults had assets that are specifically designated for producing income in retirement, including the 60 percent of adults who had a tax-preferred retirement account, such as a 401(k) plan through an employer, individual retirement account (IRA), or Roth IRA, and 29 percent who had a defined benefit pension through an employer (table 38).⁶¹ Outside of designated retirement assets, other assets, such as home equity and savings in a taxable investment account, can also be important sources of financial security in retirement.⁶²

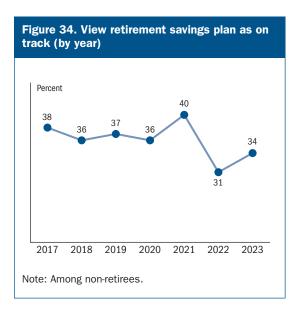
Retirees are more likely than non-retirees to have most types of assets (table 38). Focusing on assets that are specifically designed to provide income for retirement, retirees are more likely than non-retirees to have a defined benefit pension from an employer. However, non-retirees are more likely than retirees to have a tax-preferred retirement savings accounts like an employer-sponsored defined contribution retirement plan, such as a 401(k) plan, or an IRA. This difference in types of

⁶⁰ For context on the income sources highlighted here, a "three-legged stool" has been used as a metaphor for a retirement savings strategy that includes Social Security, private pensions, and other savings and investments. For a history of this metaphor, see Larry DeWitt, "Origins of the Three-Legged Stool Metaphor for Social Security," Research Notes & Special Studies by the Historian's Office (Washington: Social Security Administration, May 1996), https://www.ssa.gov/history/stool.html.

⁶¹ Accounts like 401(k) plans and IRAs are tax preferred in that they receive some type of favorable treatment to incentivize retirement savings. In the case of traditional 401(k) and IRA accounts, contributions to the accounts and account income and appreciation are not taxed at the time they are received, but rather taxes are deferred until the money is withdrawn, typically in retirement. In contrast, contributions to Roth 401(k) and Roth IRA accounts do not receive a tax deduction, but the full balance of the account, including contributions, income, and appreciation, is not taxable when withdrawn in retirement.

While the assets listed here include many sources that people could tap to generate income for retirement, they do not reflect all types of assets people may hold. In particular, many adults have an automobile, and as discussed in the "Banking and Credit" section of this report, most adults have a checking or other transaction account. The triennial Survey of Consumer Finances (SCF) provides detailed estimates of the types of assets and liabilities held by U.S. households and the value of their holdings. For the most recent estimates from the SCF, see Aditya Aladangady, Jesse Bricker, Andrew C. Chang, Sarena Goodman, Jacob Krimmel, Kevin B. Moore, Sarah Reber, Alice Henriques Volz, and Richard A. Windle, Changes in U.S. Family Finances from 2019 to 2022: Evidence from the Survey of Consumer Finances (Washington: Board of Governors of the Federal Reserve System, October 2023), https://doi.org/10.17016/8799.





designated retirement assets held by retirees and non-retirees likely reflects the declining prevalence of employer-sponsored defined benefit pensions and the wider use of tax-preferred retirement savings accounts in recent decades. 63

While most non-retired adults had some type of tax-preferred retirement account (such as a 401(k), IRA, or Roth IRA) or a defined benefit

pension, 34 percent of non-retirees thought their retirement saving was on track.⁶⁴ The share of non-retirees who thought their retirement saving was on track was up from 31 percent in 2022 but below the shares who thought their saving was on track in 2017 through 2021 (figure 34).

Retirement savings and perceived preparedness differed across demographic groups. Younger non-retirees were less likely to have tax-preferred retirement accounts and defined benefit pensions and less likely to view their retirement savings plan as on track than older non-retirees. Compared with all non-retirees, Black and Hispanic non-retirees were less likely to have these types of designated retirement assets and to view their retirement savings as on track, while White and Asian non-retirees were more likely to have such assets and say they were on track. Men were

⁶³ For history on IRAs, see Congressional Research Service, Individual Retirement Account (IRA) Ownership: Data and Policy Issues, December 9, 2020, https://crsreports.congress.gov/product/pdf/R/R46635/3. For recent context on employer-sponsored retirement plans, see Congressional Research Service, A Visual Depiction of the Shift from Defined Benefit (DB) to Defined Contribution (DC) Pension Plans in the Private Sector, December 27, 2021, https://crsreports.congress.gov/product/pdf/IF/IF12007.

⁶⁴ The question did not prompt respondents to consider any particular type of assets or level of income in their answer, and so survey respondents could determine for themselves what they considered on track.

slightly more likely than women to have designated retirement assets and to say their retirement savings plan was on track (table 39).

Non-retirees with a disability were also less likely to have designated retirement assets and to view their savings as on track. Among non-retirees with a disability, just 33 percent had tax-preferred retirement savings accounts, 13 percent had a defined benefit pension, and 11 percent viewed their savings as on track. Adults with a disability have a lower rate of employment compared with adults without a disability. In addition, adults with a disability who receive means-tested benefits may face asset limits that would deter holding any savings they may have accrued. 65

Although money in retirement accounts is intended to be preserved for retirement, occasionally these savings can also act as a source of emergency funds for non-retirees who face economic hardships. Overall, 10 percent of non-retired adults tapped their retirement savings by borrowing from or cashing out funds from their retirement accounts in the prior 12 months. 66

retirement account, defined benefit pension and view retirement savings plan as on track (by demographic characteristics) Percent			
Characteristic	Tax- preferred retirement account	Defined benefit pension	Retirement savings on track
Age			
18-29	43	8	26
30-44	63	19	34
45-59	72	32	38
60+	75	36	45
Race/ethnicity			
White	68	23	40
Black	51	21	25
Hispanic	45	16	21
Asian	75	26	46
Disability status			
No disability	65	22	37
Disability	33	13	11
Gender			
Male	63	22	36
Female	60	20	32
Overall	61	21	34
Note: Among non-retirees.			

Table 39. Non-retirees with a tax-preferred

Non-retirees who are contributing to tax-preferred retirement accounts may do so through a payroll deduction or other regular contribution. Reducing the amount of these regular contributions is another way that non-retirees can increase their disposable income to help make ends meet. Nine percent of non-retirees said that they reduced their regular contributions to their retirement accounts in the prior 12 months. Some people tapped their retirement accounts by borrowing from or cashing out funds and also said they reduced regular contributions to their accounts. Overall,

⁶⁵ SSI and Social Security Disability Insurance (SSDI) are federal programs to support adults with a disability who meet medical and other requirements. SSI recipients must have limited income and resources, but SSDI recipients do not have to meet income and resource limits to qualify for benefits. See Social Security Administration, Red Book: A Guide to Work Incentives and Employment Supports for Persons with Who Have a Disability Under the Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI) Programs, SSA Publication No. 64-030, August 2023, https:// www.ssa.gov/redbook/.

⁶⁶ The question on borrowing from or cashing out retirement savings was changed on the 2023 survey, so is not directly comparable with earlier years.

Table 40. Non-retirees who borrowed or cashed out money from a retirement account or reduced regular retirement account contributions in the prior 12 months (by economic hardship) Percent Borrowed or Reduced regular con-Hardship cashed out money tributions Had unexpected, out-of-pocket major medical expenses 15 13 9 7 No Laid off from a job Yes 21 18 8 Nο 10 **O**verall 10 9 Note: Among non-retirees.

16 percent of non-retirees took any of these three actions with their retirement accounts in the prior 12 months.

Non-retirees who had a major unexpected medical expense or who experienced a layoff were more likely to have tapped the funds in their retirement accounts, compared with other adults (table 40). They also were more likely to have reduced their regular contributions to retirement accounts.⁶⁷

Tapping retirement accounts and reducing regular contributions can help people handle economic hardships or other changes to income or expenses, but this may come at a cost to their longer-term financial security.

While 34 percent of non-retirees overall said their retirement savings plan was on track, only 28 percent of retirees who had reduced their regular contributions to retirement accounts in the prior 12 months thought their retirement savings plan was on track. Among non-retirees who had borrowed from or cashed out funds from their retirement accounts in the prior year, the share who said they were on track was lower, at 20 percent.

Comfort Managing Investments

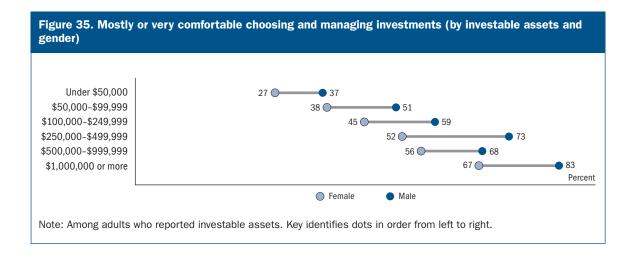
Given the importance of retirement savings accounts and other self-directed investments, individuals need to have the skills and knowledge required to manage their own investments or to select a paid professional to do so. People varied in their comfort with choosing and managing their investments. Forty-five percent of adults said they were mostly or very comfortable choosing and managing their investments, while 55 percent of adults said they were not comfortable or only slightly comfortable.

A higher share of men expressed comfort about managing their investments than women. Fiftytwo percent of men said they were mostly or very comfortable choosing and managing their invest-

⁶⁷ For more on early withdrawals and the relationship with economic shocks and income, see Robert Argento, Victoria L. Bryant, and John Sabelhaus, "Early Withdrawals from Retirement Accounts during the Great Recession," *Contemporary Economic Policy* 33, no. 1 (2015), 1–16.

⁶⁸ The question asked about choosing and managing investments but did not specify a type of investment, so people could answer according to the assets they considered to be investments. In prior years of the survey, a similar question was asked of non-retirees with self-directed retirement accounts. This question was changed in the 2023 survey and asked of all respondents.

ments, while 38 percent of women gave these responses. For both men and women, the share of adults who were comfortable managing their investments generally rose along with the value of investable assets (figure 35). Nonetheless, a higher share of men was comfortable managing their investments, compared with women with the same level of investable assets. ⁶⁹



⁶⁹ Comfort managing investments also rises with education, but differences by gender and investable assets persist even when controlling for education.

Description of the Survey

The Survey of Household Economics and Decisionmaking was fielded from October 20 through November 5, 2023. This was the 11th year of the survey, conducted annually in the fourth quarter of each year since 2013.⁷⁰ Staff of the Federal Reserve Board wrote the survey questions in consultation with other Federal Reserve System staff, outside academics, and professional survey experts.

Ipsos, a private consumer research firm, administered the survey using its KnowledgePanel, a nationally representative probability-based online panel. Since 2009, Ipsos has selected respondents for KnowledgePanel based on address-based sampling (ABS). SHED respondents were then selected from this panel.

Survey Participation

Participation in the 2023 SHED depended on several separate decisions made by respondents. First, they agreed to participate in Ipsos's KnowledgePanel. According to Ipsos, 9.7 percent of individuals contacted to join KnowledgePanel agreed to join (study-specific recruitment rate). Next, they completed an initial demographic profile survey. Among those who agreed to join the panel, 61.0 percent completed the initial profile survey and became a panel member (study-specific profile rate). Finally, selected panel members agreed to complete the 2023 SHED.

Of the 16,656 panel members contacted to take the 2023 SHED, 11,488 participated and completed the survey, yielding a final-stage completion rate of 69.0 percent.⁷¹ Taking all the stages of recruitment together, the cumulative response rate was 4.1 percent.⁷² After removing a small number of respondents because of high refusal rates or completing the survey too quickly, the final sample used in the report included 11,400 respondents.⁷³

⁷⁰ Data and reports of survey findings from all past years are available at https://www.federalreserve.gov/consumerscommunities/shed.htm.

⁷¹ Three hundred seventy-five respondents were not included in the analysis because they started, but did not complete, the survey (known as break-offs). The study break-off rate for the SHED was 3.2 percent.

⁷² The cumulative response rate for the SHED is comparable with the response rates for telephone surveys. According to the Pew Research Center, telephone survey response rates in 2018 were around 6 percent (see Courtney Kennedy and Hannah Hartig, "Response Rates in Telephone Surveys Have Resumed Their Decline," Pew Research Center (PRC) Report (Washington: PRC, February 27, 2019), https://www.pewresearch.org/short-reads/2019/02/27/response-rates-in-telephone-surveys-have-resumed-their-decline/.

⁷³ Of the 11,488 respondents who completed the survey, 88 were excluded from the analysis in this report because of either leaving responses to a large number of questions missing, completing the survey too quickly, or both.

Targeted Outreach and Incentives

To increase survey participation and completion among hard-to-reach demographic groups, Board staff and Ipsos used a targeted communication plan with monetary incentives. The target groups—young adults ages 18 to 29; adults with less than a high school degree; adults with household income under \$50,000 who are under age 60; and those who are a race or ethnicity other than White, non-Hispanic—received additional email reminders during the field period, as well as additional monetary incentives.

All survey respondents not in a target group received a \$5 incentive payment after survey completion. Respondents in the target groups received a \$15 incentive. These targeted individuals also received an additional follow-up email during the field period to encourage completion.⁷⁴

Survey Questionnaire

The 2023 survey took respondents 20.5 minutes (median time) to complete.

A priority in designing the survey questions was to understand how individuals and families—particularly those with low- to moderate-income—were faring financially. The questions were intended to complement and augment the base of knowledge from other data sources, including the Board's Survey of Consumer Finances. In addition, some questions from other surveys were included to allow direct comparisons across datasets.⁷⁵ The full survey questionnaire can be found in appendix A of this report.

Survey Mode

While the sample was drawn using probability-based sampling methods, the SHED was administered to respondents entirely online. Online interviews are less costly than telephone or in-person interviews and can be an effective way to interview a representative population.⁷⁶ Ipsos's online panel offers some additional benefits. Their panel allows the same respondents to be re-interviewed in subsequent surveys with relative ease, as they can be easily contacted for several years.

⁷⁴ All participants received a pre-notification email before the survey launch. They also received a reminder on the third day of the field period in addition to the initial survey invitation. Targeted respondents received one additional email reminder on day seven of fielding.

⁷⁵ For a comparison of results to select overlapping questions from the SHED and Census Bureau surveys, see Jeff Larrimore, Maximilian Schmeiser, and Sebastian Devlin-Foltz, "Should You Trust Things You Hear Online? Comparing SHED and Census Bureau Survey Results," Finance and Economics Discussion Series Notes (Washington: Board of Governors of the Federal Reserve System, October 15, 2015), https://doi.org/10.17016/2380-7172.1619.

⁷⁶ David S. Yeager, et al., "Comparing the Accuracy of RDD Telephone Surveys and Internet Surveys Conducted with Probability and Non-Probability Samples," *Public Opinion Quarterly* 75, no. 4 (2011): 709–47.

Furthermore, internet panel surveys have numerous existing data points on respondents from previously administered surveys, including detailed demographic and economic information. This allows for the inclusion of additional information on respondents without increasing respondent burden. The respondent burdens are further reduced by automatically skipping irrelevant questions based on responses to previous questions.

The "digital divide" and other differences in internet usage could bias participation in online surveys, so recruited panel members who did not have a computer or internet access were provided with a laptop and access to the internet to complete the surveys. Even so, individuals who complete an online survey may have greater comfort or familiarity with the internet and technology than the overall adult population, which has the potential to introduce bias in the characteristics of who responds.

Sampling and Weighting

The SHED sample was designed to be representative of adults age 18 and older living in the United States.

The Ipsos methodology for selecting a general population sample from KnowledgePanel ensured that the resulting sample behaved as an equal probability of selection method (EPSEM) sample. This methodology started by weighting the entire KnowledgePanel to the benchmarks in the latest March supplement of the Current Population Survey (CPS) along several geo-demographic dimensions. This way, the weighted distribution of the KnowledgePanel matched that of U.S. adults. The geo-demographic dimensions used for weighting the entire KnowledgePanel included gender, age, race, ethnicity, education, census region, household income, homeownership status, and metropolitan area status.

Using the above weights as the measure of size (MOS) for each panel member, in the next step a probability proportional to size (PPS) procedure was used to select study specific samples. This methodology was designed to produce a sample with weights close to one, thereby reducing the reliance on post-stratification weights for obtaining a representative sample.

After the survey collection was complete, statisticians at Ipsos adjusted weights in a post-stratification process that corrected for any survey non-response as well as any non-coverage or under- and oversampling in the study design. The following variables were used for the adjustment of weights for this study: age, gender, race, ethnicity, census region, residence in a metropolitan area, education, and household income. These weighting variables are consistent with those used

⁷⁷ This approach also may allow for the retroactive linking of information learned about respondents from other data, as was done in 2022 to identify Asian respondents in earlier years of the survey.

74

in earlier waves of the survey. Demographic and geographic distributions for the noninstitutionalized, civilian population age 18 and older from the March CPS were the benchmarks in this adjustment. Household income benchmarks were obtained from the March 2023 CPS. The weighted sample for the 2023 SHED is representative of the estimated 258 million U.S. adults age 18 and older from the March 2023 CPS.

One feature of the SHED is that a subset of respondents also participated in prior waves of the survey. In 2023, about one-third of respondents had participated in the fall 2022 survey. Prior year case identifiers for these repeat respondents are available in the publicly available dataset, along with weights for this subset of respondents. These weights use a similar procedure as described above to ensure estimates based on the repeated sample are representative of the U.S. population.

Although weights allow the sample population to match the U.S. population (excluding those in the military or in institutions, such as prisons or nursing homes) based on observable characteristics, similar to all survey methods, it remains possible that non-coverage, non-response, or occasional disparities among recruited panel members result in differences between the sample population and the U.S. population. For example, address-based sampling likely misses homeless populations, and non-English speakers may not participate in surveys conducted in English.⁷⁸

Despite an effort to select the sample such that the unweighted distribution of the sample more closely mirrored that of the U.S. adult population, the results indicate that weights remain necessary to accurately reflect the composition of the U.S. population. Consequently, all results presented in this report use the post-stratification weights produced by Ipsos for use with the survey.

Item Non-response and Imputation

Item non-response in the 2023 SHED was handled by imputation. Typically, less than 1 percent of observations were missing for each question, although non-response was higher for some questions. 79 As a result, population estimates were not sensitive to the imputation procedure and a

⁷⁸ For example, while the survey was weighted to match the race and ethnicity of the entire U.S. adult population, there is evidence that the Hispanic population in the survey were somewhat more likely to speak English at home than the overall Hispanic population in the United States. In the 2023 SHED, the percent of Hispanic adults who speak Spanish at home is below estimates from the 2022 American Community Survey. See table B16006 at https://data.census.gov. For a comparison of results to select questions administered in Spanish and English, see Board of Governors of the Federal Reserve System, Report on the Economic Well-Being of U.S. Households in 2017 (Washington: Board of Governors, May 2018), https://www.federalreserve.gov/publications/files/2017-report-economic-well-being-us-households-201805.pdf.

⁷⁹ Because item non-response is very low in the SHED, 2023 estimates are comparable with earlier years of the survey where item non-response was handled differently.

simple regression approach was used. 80 For continuous variables such as rent and mortgage payment amounts, a hot deck approach was used. 81

The imputation procedure was carried out as follows:

- 1. Impute questions, like income and education, to be used in the imputation models throughout.
- 2. Continue at the beginning of the survey and impute missing values sequentially, question by question.

In some cases, the imputation for one question affected later questions by switching an observation from out-of-universe to in-universe or vice versa. These cases were handled by imputing the missing "downstream" question response or recoding it to missing, where appropriate.

Each variable in the publicly available SHED dataset has a corresponding imputation flag, 'var'_iflag, which is set to 1 if the observation was imputed and 0 otherwise. For example, the first question of the survey about whether the respondent lived with their spouse or partner, LO_a, has a corresponding imputation flag of LO_a_iflag. This question had 42 missing values that were imputed, accounting for 0.37 percent of all observations.

⁸⁰ A logit regression was used for binary variables, a multinomial logit for categorical variables, an ordinal logit for ordered values, and a linear regression for continuous values. Typical predictors included income, education, race and ethnicity, age, gender, and metropolitan status but varied depending on how well they predicted the variable of interest and item non-response. Additional predictors were included as appropriate.

⁸¹ This approach involved assigning values to non-responses by copying responses from demographically similar respondents. To do this, we first grouped respondents by characteristics such as education, age, and income, and we then arranged respondents within groups by the time of their survey completion. Each non-response was matched with the nearest neighbor within their group based on survey completion time, and values were imputed for each non-response by drawing from their nearest neighbor's response.

⁸² The survey data can be downloaded from the Federal Reserve website at https://www.federalreserve.gov/consumerscommunities/shed_data.htm.

Acknowledgements

This survey and report were prepared by the Consumer and Community Research Section of the Federal Reserve Board's Division of Consumer and Community Affairs (DCCA).

DCCA directs consumer- and community-related functions performed by the Board, including conducting research on financial services policies and practices and their implications for consumer financial stability, community development, and neighborhood stabilization.

DCCA staff members Alicia Lloro, Ellen Merry, Kabir Dasgupta, Jeff Larrimore, Zofsha Merchant, Fatimah Shaalan, and Anna Tranfaglia prepared this report.

Federal Reserve staff members Laura Benedict, Andrea Brachtesende, David Buchholz, Ellen Levy, David Newville, Madelyn Marchessault, Kirk Schwarzbach, and Max Virkus provided valuable feedback and contributions to the report. Additionally, Kenneth Brevoort, Erin Troland, Douglas Webber, and Mike Zabek made valuable contributions to the development of this year's survey questionnaire. The authors would also like to thank Kelly Bell, Elisa Chan, Leticia Maciel, Poom Nukulkij, and Dina Rezk for their assistance fielding the survey.

If you have questions about the survey or this report, please email SHED@frb.gov.

Please cite this report as: Board of Governors of the Federal Reserve System, Economic Well-Being of U.S. Households in 2023 (Washington: Board of Governors, 2024), https://doi.org/10.17016/8960.

Please cite the use of SHED data as: Board of Governors of the Federal Reserve System, Survey of Household Economics and Decisionmaking [dataset] (Washington: Board of Governors, 2024), https://doi.org/10.17016/datasets.002.

Find other Federal Reserve Board publications at www.federalreserve.gov/publications/default.htm, or visit our website to learn more about the Board and how to connect with us on social media.



www.federalreserve.gov 0524

Exhibit 2

Press Release

January 13, 2023

Federal Reserve Board announces Reserve Bank income and expense data and transfers to the Treasury for 2022

For release at 11:00 a.m. EST



The Federal Reserve Board on Friday announced preliminary financial information indicating that the Federal Reserve Banks had estimated net income of \$58.4 billion in 2022. The 2022 audited Reserve Bank financial statements are expected to be published in coming months and may include adjustments to these preliminary unaudited results.

The Federal Reserve Act requires the Reserve Banks to remit excess earnings to the U.S. Treasury after providing for operating costs, payments of dividends, and any amount necessary to maintain surplus. During a period when earnings are not sufficient to provide for those costs, a deferred asset is recorded. The deferred asset is the amount of net earnings the Reserve Banks will need to realize before their remittances to the U.S. Treasury resume.

During 2022, Reserve Banks transferred \$76.0 billion from weekly earnings to the U.S. Treasury, and, in September 2022, most Reserve Banks suspended weekly remittances to the Treasury and started accumulating a deferred asset, which totaled \$18.8 billion by the end of the year. A deferred asset has no implications for the Federal Reserve's conduct of monetary policy or its ability to meet its financial obligations.

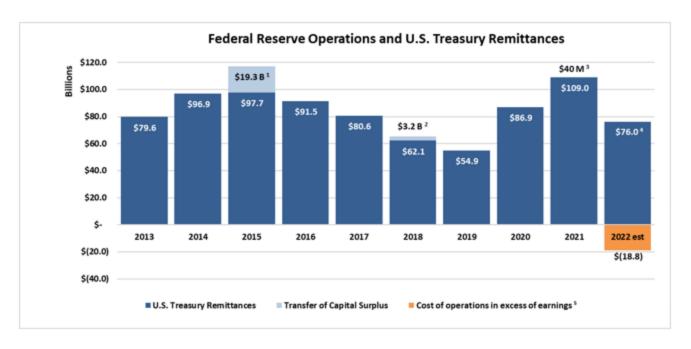
Additional information related to 2022 preliminary financial results for the Reserve Banks include:

- The Reserve Banks' 2022 estimated net income of \$58.4 billion decreased \$49.5 billion from 2021 earnings of \$107.9 billion, primarily driven by increased interest expense;
- Interest income on securities acquired through open market operations totaled \$170.0 billion in 2022, an increase of \$47.6 billion from 2021 interest income of \$122.4 billion;
- Total interest expense of \$102.4 billion increased \$96.6 billion from 2021 total interest expense of \$5.7 billion; of the increase in interest expense, \$55.1 billion pertained to interest expense on Reserve Balances held by depository institutions and \$41.5 billion related to interest on securities sold under agreements to repurchase;
- Operating expenses of the Reserve Banks, net of amounts reimbursed by the U.S.
 Treasury and other entities for services the Reserve Banks provided as fiscal agents, totaled \$5.6 billion in 2022;

- In addition, the Reserve Banks were assessed \$1.0 billion for the costs related to producing, issuing, and retiring currency, \$1.0 billion for Board expenditures, and \$0.7 billion to fund the operations of the Consumer Financial Protection Bureau.
- The Federal Reserve Banks realized net income of \$108 million from facilities established in response to the COVID-19 pandemic;
- Losses from the daily revaluation of foreign currency denominated investments was \$1.8 billion:
- Additional earnings were derived from income from services of \$0.5 billion;
- Statutory dividends totaled \$1.2 billion in 2022.

The attached chart illustrates the amount the Reserve Banks distributed to the U.S. Treasury from 2013 through 2022 (estimated).

For media inquiries, please email media@frb.gov or call 202-452-2955.



^{1.} The Reserve Banks transferred to the Treasury \$19.3 billion from their capital surplus on December 28, 2015, which was the amount necessary to reduce aggregate Reserve Bank surplus to the \$10 billion surplus limitation in the Fixing America's Surface Transportation Act.

Last Update: January 13, 2023

^{2.} The Reserve Banks transferred to the Treasury \$3.175 billion from their capital surplus in 2018, of which \$2.5 billion was the amount necessary to reduce aggregate Reserve Bank surplus to the \$7.5 billion surplus limitation in the Bipartisan Budget Act of 2018 and \$675 million was the amount necessary to further reduce aggregate Reserve Bank surplus to the \$6.825 billion surplus limitation in the Economic Growth, Regulatory Relief. and Consumer Protection Act.

The Reserve Banks transferred to the Treasury \$40 million from their capital surplus in 2021, which was the amount necessary to reduce aggregate Reserve Bank surplus to the \$6.785 billion surplus limitation in the National Defense Authorization Act for 2021.

^{4.} Most Reserve Banks suspended weekly remittances to the Treasury in September 2022 and began to accumulate a deferred asset. Before suspending remittances, the Reserve Banks transferred \$76.0 billion from weekly earnings during 2022. As of December 31, 2022, the Reserve Banks reported a deferred asset of \$18.8 billion. From September 2022 through December 2022, certain Reserve Banks, after providing for their cost of operations, payment of dividends, and maintaining aggregate surplus, continued to remit excess earnings to the U.S. Treasury either weekly or intermittently.

^{5.} The Reserve Banks reported the cost of operations in excess of earnings which occurs during a period when earnings are not sufficient to provide for the operating costs, payment of dividends and maintaining surplus. This amount is a reported as a deferred asset and is the amount of net earnings these Reserve Banks will need to realize before their remittances to the U.S. Treasury resume.

Exhibit 3



Federal Reserve Banks Combined Financial Statements

As of and for the Years Ended December 31, 2023 and 2022 and Independent Auditors' Report





The Federal Reserve System is the central bank of the United States. It performs five key functions to promote the effective operation of the U.S. economy and, more generally, the public interest.

The Federal Reserve

- **conducts the nation's monetary policy** to promote maximum employment, stable prices, and moderate long-term interest rates in the U.S. economy;
- promotes the stability of the financial system and seeks to minimize and contain systemic risks through active monitoring and engagement in the U.S. and abroad;
- promotes the safety and soundness of individual financial institutions and monitors their impact on the financial system as a whole;
- **fosters payment and settlement system safety and efficiency** through services to the banking industry and U.S. government that facilitate U.S.-dollar transactions and payments; and
- promotes consumer protection and community development through consumer-focused supervision and examination, research and analysis of emerging consumer issues and trends, community economic development activities, and administration of consumer laws and regulations.

To learn more about us, visit www.federalreserve.gov/aboutthefed.htm.

Contents

Independent Auditors' Report	1
Abbreviations	2
Combined Financial Statements	3
Combined Statements of Condition as of December 31, 2023 and December 31, 2022	3
Combined Statements of Operations for the years ended December 31, 2023 and December 31, 2022	4
Combined Statements of Changes in Capital for the years ended December 31, 2023 and December 31, 2022	5
Notes to Combined Financial Statements	6



KPMG LLP Suite 12000 1801 K Street, NW Washington, DC 20006

Report of Independent Registered Public Accounting Firm

To the Board of Governors of the Federal Reserve System and the Boards of Directors of the Federal Reserve Banks:

We have audited the accompanying combined statements of condition of the Federal Reserve Banks (the "Reserve Banks") as of December 31, 2023 and 2022, and the related combined statements of operations and changes in capital for the years then ended, and the related notes (collectively, the financial statements). These combined financial statements are the responsibility of the Division of Reserve Bank Operations and Payment Systems' management. Our responsibility is to express an opinion on these combined financial statements based on our audits.

We conducted our audits in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States) and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the combined financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence regarding the amounts and disclosures in the combined financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall combined presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

As described in Note 3 to the combined financial statements, the Division of Reserve Bank Operations and Payment Systems has prepared these combined financial statements in conformity with the accounting principles established by the Board of Governors of the Federal Reserve System, as set forth in the *Financial Accounting Manual for Federal Reserve Banks*, which is a basis of accounting other than U.S. generally accepted accounting principles.

In our opinion, the combined financial statements referred to above present fairly, in all material respects, the financial position of the Reserve Banks as of December 31, 2023 and 2022, and the results of its operations and changes in capital for the years then ended, on the basis of accounting described in Note 3.



Washington, DC March 18, 2024

Abbreviations

ABS Asset-Backed Securities
ACH Automated clearinghouse

ASC Accounting Standards Codification
ASU Accounting Standards Update

BEP Benefit Equalization Retirement Plan

BTFP Bank Term Funding Program

Bureau of Consumer Financial Protection

CARES Coronavirus Aid, Relief, and Economic Security

CECL Current Expected Credit Losses

CMBS Agency commercial mortgage-backed securities

DFMU Designated financial market utility

ESF Exchange Stabilization Fund

FAM Financial Accounting Manual for Federal Reserve Banks

FASB Financial Accounting Standards Board

FIMA Foreign and International Monetary Authorities

FOMC Federal Open Market Committee

FRA Federal Reserve Act

FRBA Federal Reserve Bank of Atlanta
FRBB Federal Reserve Bank of Boston
FRBNY Federal Reserve Bank of New York

GAAP Accounting principles generally accepted in the United States of America

GSE Government-sponsored enterprise
IMF International Monetary Fund
LLC Limited Liability Company

Main Street MS Facilities LLC

MBS Mortgage-backed securities
MLF Municipal Liquidity Facility LLC

OEB Office of Employee Benefits of the Federal Reserve System

PPP Paycheck Protection Program

PPPLF Paycheck Protection Program Liquidity Facility
RMBS Agency residential mortgage-backed securities

SBA Small Business Administration

SDR Special drawing rights

SERP Supplemental Retirement Plan for Select Officers of the Federal Reserve Banks

SOMA System Open Market Account

STRIPS Separate Trading of Registered Interest and Principal of Securities

TALF II Term Asset-Backed Securities Loan Facility II LLC

TBA To be announced

TIPS Treasury Inflation-Protected Securities

VIE Variable interest entity

		2023	2022
ASSETS			
Gold certificates		\$ 11,037	\$ 11,03
Special drawing rights certificates		5,200	5,20
Coin		1,423	1,20
Loans:	Note 4		
Loans to depository institutions		3,473	5,27
Other loans		132,628	11,45
System Open Market Account:	Note 5		
Treasury securities, net (of which \$47,388 and \$51,590 is lent as of December 31, 2023 and 2022, respectively)		4,988,327	5,729,24
Federal agency and government-sponsored enterprise mortgage-backed securities, net		2,481,336	2,697,58
Government-sponsored enterprise debt securities, net (of which \$0 and \$23 is lent as of December 31, 2023 and 2022, respectively)		2,557	2,58
Foreign currency denominated investments, net		18,587	18,56
Central bank liquidity swaps		1,357	4:
Accrued interest receivable		32,357	34,27
Other assets		1	
Consolidated variable interest entities: Assets held, net (including \$1,006 and \$547 measured at fair value as of December 31, 2023 and 2022, respectively)	Note 6	16,098	30,43
Prepaid pension benefit costs	Note 9	998	1,3
Other accrued interest receivable	11010 0	2,544	1,0
Bank premises and equipment, net	Note 7	2,897	2,70
Items in process of collection		69	
Deferred asset—remittances to the Treasury	Note 12	133,318	16,58
Other assets		1,352	1,31
Total assets		\$ 7,835,559	\$ 8,569,35
LIABILITIES AND CAPITAL			
Federal Reserve notes outstanding, net		\$ 2,297,050	\$ 2,258,96
System Open Market Account:	Note 5		
Securities sold under agreements to repurchase		1,390,671	2,889,5
Other liabilities		614	69
Deposits:			
Depository institutions		3,134,759	2,684,8
Treasury, general account		768,590	446,6
Other deposits		187,222	227,1
Interest payable to depository institutions and others		2,020	1,0
Consolidated variable interest entities: Other liabilities	Note 6	52	4.0
Accrued benefit costs	Notes 9, 10	2,035	1,9
Deferred credit items		624	6
Other liabilities		 7 704 100	 8,511,9
Total liabilities Reserve Bank capital		 7,784,180	 0,311,9
Capital paid-in		\$ 36,065	\$ 35,0
Surplus (including accumulated other comprehensive loss of \$1,236 and \$960 at December 31, 2023 and 2022, respectively)		 6,785	6,7
Total Reserve Bank capital		 42,850	41,7
Consolidated variable interest entities formed to administer credit and liquidity facilities: Non-controlling interest	Note 6	 8,529	15,59
Total Reserve Bank capital and consolidated variable interest entities non-controlling interest		51,379	57,39 8,569,39
Total liabilities and capital		\$ 7,835,559	\$

The accompanying notes are an integral part of these combined financial statements.

Combined Statements of Operations for the years ended December 31, 2023 and Dec (in millions)					
			2023		2022
INTEREST INCOME					
Loans:	Note 4		0.004		0.7
Loans to depository institutions		\$	6,284	\$	87
Other loans			4,154		67
System Open Market Account:	Note 5		405		
Securities purchased under agreements to resell			195		-
Treasury securities, net			106,479		115,872
Federal agency and government-sponsored enterprise mortgage-backed securities, net			57,017		53,959
Government-sponsored enterprise debt securities, net			131		133
Foreign currency denominated investments, net			246		(3)
Central bank liquidity swaps			19		18
Total interest income			174,525	_	170,133
INTEREST EXPENSE					
System Open Market Account:	Note 5				
Securities sold under agreements to repurchase		\$	104,341	\$	41,967
Other			_		5
Depository institutions and others			176,755		60,405
Total interest expense			281,096		102,377
Net interest (expense) income			(106,571)		67,756
OTHER ITEMS OF INCOME (LOSS)					
System Open Market Account:	Note 5				
Treasury securities losses, net	Note 3	\$	(32)	\$	(5)
Federal agency and government-sponsored enterprise mortgage-backed securities losses, net		Ψ	(56)	Ψ	(234)
Foreign currency translation losses, net			(67)		(1,762)
Other			(20)		(1,702)
Income from services			505		466
			812		846
Reimbursable services to government agencies Other components of not benefit costs.	Notes 9, 10		171		787
Other components of net benefit costs	Notes 9, 10				
Other Total other items of income			1,354	_	40 220
Total other items of income			1,334	_	220
OPERATING EXPENSES					
Salaries and benefits		\$	4,129	\$	3,943
System pension service cost	Note 9		548		946
Occupancy			318		319
Equipment			250		250
Other			1,012		932
Assessments:					
Board of Governors operating expenses and currency costs			2,191		2,069
Bureau of Consumer Financial Protection			721		722
Total operating expenses			9,169		9,181
Reserve Bank net (loss) income from operations		· ·	(114,386)		58,795
Consolidated variable interest entities: Income, net	Note 6		1,124		1,742
Consolidated variable interest entities: Non-controlling (income), net	Note 6		(1,038)		(1,701)
Reserve Bank and consolidated variable interest entities net (loss) income before providing remittances to the Treasury			(114,300)		58,836
Earnings remittances to the Treasury, net	Note 12		(114,063)		59,446
Net income (loss) after providing for remittances to the Treasury	NOIG 12		1,763	_	(610)
•	Notes 0 10 11		1,763	_	
Change in prior service costs related to benefit plans Change in actuarial (losses) gains related to benefit plans	Notes 9, 10, 11				(29)
Change in actuarial (losses) gains related to benefit plans	Notes 9, 10, 11		(379)	_	1,848
Total other comprehensive (loss) income		_	(276)	_	1,819
Comprehensive income		\$	1,487	\$	1,209

			ı	Reserve Bank Capita	I				Total Reserve Bank
				Surplus	Surplus Consolida		Consolidated	capital and	
	Capital paid-in		Net income retained	Accumulated other comprehensive income (loss)		Total surplus	Total Reserve Bank capital	variable interest entities: Non-controlling interest	consolidated variable interest entities non- controlling interest
Balance at December 31, 2021	¢ 22.077	, ,	0.504	¢ (0.770)	•	C 70E	¢ 40.000	¢ 10.001	¢ 60.46
(677,534,103 shares of Reserve Bank capital stock)	\$ 33,877		9,564	\$ (2,779)	\$	6,785	\$ 40,662	\$ 19,801	\$ 60,46
Net change in capital stock issued (22,747,439 shares)	1,137		_	_		_	1,137	_	1,13
Comprehensive income: Reserve Bank net loss after providing for remittances									
to the Treasury	_		(651)	_		(651)	(651)	_	(65
Consolidated variable interest entities: Income, net	_		41	_		41	41	1,701	1,74
Other comprehensive income	_	-	_	1,819		1,819	1,819	_	1,81
Dividends on capital stock	_	-	(1,209)	_		(1,209)	(1,209)	_	(1,20
Consolidated variable interest entities: Non-controlling interest—capital (distribution)	_	-	_	_		_	_	(5,911)	(5,91
Consolidated variable interest entities: Non-controlling interest—(earnings distribution)	_	-	_	_		_	_	-	
Net change in Reserve Bank capital and non-controlling interest	1,137	,	(1,819)	1,819		_	1,137	(4,210)	(3,07
Balance at December 31, 2022 (700,281,542 shares of Reserve Bank capital stock)	35,014		7,745	(960)		6,785	41,799	15,591	57,39
Net change in capital stock issued (21,010,397 shares)	\$ 1,051	. \$	-	\$ -	\$	_	\$ 1,051	\$ -	\$ 1,05
Comprehensive income:									
Reserve Bank net income after providing for remittances to the Treasury	_	-	1,677	-		1,677	1,677	-	1,67
Consolidated variable interest entities: Income, net	_	-	86	-		86	86	1,038	1,12
Other comprehensive loss	_	-	_	(276)		(276)	(276)	-	(27
Dividends on capital stock	_	-	(1,487)	-		(1,487)	(1,487)	-	(1,48
Consolidated variable interest entities: Non-controlling interest—capital (distribution)	-		_	_		_	_	(7,908)	(7,90
Consolidated variable interest entities: Non-controlling interest—(earnings distribution)	=							(192)	(19
Net change in Reserve Bank capital and non-controlling interest	1,051		276	(276)			1,051	(7,062)	(6,01
Balance at December 31, 2023 (721,291,939 shares of Reserve Bank capital stock)	\$ 36,065	 i \$	8,021	\$ (1,236)	\$	6,785	\$ 42,850	\$ 8,529	\$ 51,37

The accompanying notes are an integral part of these combined financial statements.

Notes to Combined Financial Statements

(1) STRUCTURE

6

The Federal Reserve Banks are part of the Federal Reserve System (System) created by Congress under the Federal Reserve Act of 1913 (FRA), which established the central bank of the United States. The Reserve Banks are chartered by the federal government and possess a unique set of governmental, corporate, and central bank characteristics.

In accordance with the FRA, supervision and control of each Reserve Bank is exercised by a board of directors. The FRA specifies the composition of the board of directors for each of the Reserve Banks. Each board is composed of nine members serving three-year terms: three directors, including those designated as chairman and deputy chairman, are appointed by the Board of Governors of the Federal Reserve System (Board of Governors) to represent the public, and six directors are elected by member banks. Banks that are members of the System include all national banks and state-chartered banks that apply and are approved for membership. Member banks are divided into three classes according to size. Member banks in each class elect one director representing member banks and one director representing the public. In any election of directors, each member bank receives one vote, regardless of the number of shares of Reserve Bank stock it holds.

In addition to the Reserve Banks, the System also consists, in part, of the Board of Governors and the Federal Open Market Committee (FOMC). The Board of Governors, an independent federal agency, is charged by the FRA with a number of specific duties, including general supervision over the Reserve Banks. The FOMC is composed of members of the Board of Governors, the president of the Federal Reserve Bank of New York (FRBNY), and, on a rotating basis, four other Reserve Bank presidents.

(2) OPERATIONS AND SERVICES

The Reserve Banks perform a variety of services and operations. These functions include participating in formulating and conducting monetary policy; participating in the payment system, including transfers of funds, automated clearinghouse (ACH) operations, check collection, and a nationwide instant payments settlement service, named the FedNow Service; distributing coin and currency; performing fiscal agency functions for the U.S. Department of the Treasury (Treasury), certain federal agencies, and other entities; serving as the federal government's bank; providing short-term loans to depository institutions; providing loans to participants in programs or facilities with broad-based eligibility in unusual and exigent circumstances; serving consumers and communities by providing educational materials and information regarding financial consumer protection rights and laws and information on community development programs and activities; and supervising bank holding companies, state member banks, savings and loan holding companies, U.S. offices of foreign banking organizations, Edge Act and agreement corporations, and certain financial market utilities that have been designated as systemically important. Certain services are provided to foreign official and international account holders, primarily by the FRBNY.

The FOMC, in conducting monetary policy, establishes policy regarding domestic open market operations and oversees these operations. The FOMC has selected the FRBNY to execute open market transactions on behalf of the Reserve Banks as provided in its annual authorization. As such, the FRBNY holds the resulting securities and agreements in a portfolio known as the System Open Market Account (SOMA). The FOMC authorizes and directs the FRBNY to conduct operations in domestic markets, including the direct purchase and sale of Treasury securities, federal agency and government-sponsored enterprise (GSE) residential mortgage-backed securities (RMBS), federal agency and GSE commercial mortgage-backed securities (CMBS), and GSE debt securities; the purchase of these securities under agreements to resell; the sale of these securities under agreements to repurchase; and the exchange, at market prices, of these securities that are maturing. The FRBNY is authorized and directed to lend the Treasury securities and GSE debt securities that are held in the SOMA.

To be prepared to meet the needs specified by the FOMC to carry out the System's central bank responsibilities, the FOMC authorized and directed the FRBNY to execute standalone spot and forward foreign exchange transactions in certain foreign currencies, to hold balances in those currencies, and to invest such foreign currency holdings, while maintaining adequate liquidity. The FRBNY holds these securities and agreements in the SOMA.

Because of the global character of bank funding markets, the System has, at times, coordinated with other central banks to provide liquidity. The FOMC authorized and directed the FRBNY to maintain standing and temporary U.S. dollar liquidity swap arrangements and standing foreign currency liquidity swap arrangements with various foreign banks. The FRBNY holds amounts outstanding under these liquidity swap lines in the SOMA.

The FOMC has authorized and directed the FRBNY to conduct small-value exercises periodically for the purpose of testing operational readiness.

On March 12, 2023, each Federal Reserve Bank established and commenced operation of the Bank Term Funding Program (BTFP), pursuant to section 13(3) of the FRA. The BTFP was established to support American businesses and households by making additional funding available to eligible depository institutions to help assure banks have the ability to meet the needs of all their depositors. The BTFP's authority to extend new loans ended March 11, 2024, and the facility will continue to operate until all loans are paid off and operations cease.

In response to the coronavirus pandemic that began in 2020, the Board of Governors authorized the operation of several lending facilities under section 13(3) of the FRA. The authority granted to these lending facilities to extend loans or purchase eligible assets has ended.

On April 8, 2020, each Federal Reserve Bank established and commenced operation of the Paycheck Protection Program Liquidity Facility (PPPLF). The PPPLF offered a source of liquidity to financial institution lenders that lend to small businesses through the Small Business Administration's (SBA) Paycheck Protection Program (PPP). The PPPLF's authority to extend new loans ended July 30, 2021, and the facility will continue to operate until all loans are paid off and operations cease.

The Board of Governors authorized the Federal Reserve Bank of Boston (FRBB) to operate the following lending facility:

On April 9, 2020, the Main Street Lending Program (MSLP) was established to support lending to small and medium-sized businesses and non-profit organizations that were in sound financial condition before the onset of the coronavirus pandemic. The MSLP lending program involved the purchase of participations in loans originated by eligible lenders. The MSLP includes five facilities: Main Street New Loan Facility, Main Street Expanded Loan Facility, Main Street Priority Loan Facility, Non-profit Organization New Loan Facility, and Non-profit Organization Expanded Loan Facility. The MS Facilities LLC (Main Street) was established to administer the facilities. The Treasury, using funds appropriated to the Exchange Stabilization Fund (ESF) through the Coronavirus Aid, Relief, and Economic Security (CARES) Act, made an equity investment in Main Street. The facilities' authority to purchase loan participations ended January 8, 2021, and the FRBB will continue to manage operations until the closure of Main Street.

The Board of Governors authorized the FRBNY to operate the following lending facilities:

On March 22, 2020, the Term Asset-Backed Securities Loan Facility (TALF) was established to provide
loans to U.S. companies secured by certain AAA-rated asset-backed securities (ABS) backed by consumer
and business loans. Term Asset-Backed Securities Loan Facility II Limited Liability Company (LLC) (TALF II)

was established to administer the facility. The Treasury, using funds appropriated to the ESF through the CARES Act, made an equity investment in TALF II. The TALF's authority to extend loans ended December 31, 2020, and TALF II was terminated in March 2024.

On April 8, 2020, the Municipal Liquidity Facility was established to support lending to state, city, and county governments, certain multistate entities, and other issuers of municipal securities. Municipal Liquidity Facility LLC (MLF) was established to administer the facility. The Treasury, using funds appropriated to the ESF through the CARES Act, made an equity investment in MLF. The facility's authority to purchase eligible assets ended December 31, 2020, and MLF was terminated in March 2024.

Additional information related to the lending facilities that the Reserve Banks participate in is provided in Notes 4, 6, and 13.

Although the Reserve Banks are separate legal entities, they collaborate on the delivery of certain services to achieve greater efficiency and effectiveness. This collaboration takes the form of centralized operations and product or function offices that have responsibility for the delivery of certain services on behalf of the Reserve Banks. Various operational and management models are used and are supported by service agreements among the Reserve Banks. In some cases, costs incurred by a Reserve Bank for services provided to other Reserve Banks are not shared; in other cases, the Reserve Banks are reimbursed for costs incurred in providing services to other Reserve Banks.

(3) SIGNIFICANT ACCOUNTING POLICIES

Accounting principles for entities with the unique powers and responsibilities of the nation's central bank have not been formulated by accounting standard-setting bodies. The Board of Governors has developed specialized accounting principles and practices that it considers to be appropriate for the nature and function of a central bank. These accounting principles and practices are documented in the Financial Accounting Manual for Federal Reserve Banks (FAM), which is issued by the Board of Governors. The Reserve Banks are required to adopt and apply accounting policies and practices that are consistent with the FAM. The combined financial statements and associated disclosures have been prepared in accordance with the FAM.

Due to the unique nature of the Reserve Banks' powers and responsibilities as part of the nation's central bank and given the System's unique responsibility to conduct monetary policy, the Board of Governors has adopted accounting principles and practices in the FAM that differ from accounting principles generally accepted in the United States of America (GAAP). The more significant differences are the presentation of all SOMA securities holdings at amortized cost, adjusted for credit impairment, if any, and the recording of all SOMA securities on a settlement-date basis. Amortized cost, rather than the fair value presentation, more appropriately reflects the financial position associated with the Reserve Banks' securities holdings given the System's unique responsibility

to conduct monetary policy. Although the application of fair value measurements to the securities holdings may result in values substantially greater or less than their carrying values, these unrealized changes in value have no direct effect on the quantity of reserves available to the banking system or on the ability of the Reserve Banks, as the central bank, to meet their financial obligations and responsibilities. Both the domestic and foreign components of the SOMA portfolio may involve transactions that result in gains or losses when holdings are sold before maturity. Decisions regarding securities and foreign currency transactions, including their purchase and sale, are primarily motivated by monetary policy and financial stability objectives rather than profit. Accordingly, fair values, earnings, and gains or losses resulting from the sale of such securities and currencies are incidental to open market operations and do not motivate decisions related to policy or open market activities. Accounting for these securities on a settlement-date basis, rather than the trade-date basis required by GAAP, better reflects the timing of the transaction's effect on the quantity of reserves in the banking system.

In addition, the Reserve Banks do not present a Combined Statement of Cash Flows as required by GAAP because the liquidity and cash position of the Reserve Banks are not a primary concern given the Reserve Banks' unique powers and responsibilities as a central bank. Other information regarding the Reserve Banks' activities is provided in, or may be derived from, the Combined Statements of Condition, Operations, and Changes in Capital, and the accompanying notes to the combined financial statements. Other than those described above, the accounting policies described in FAM are generally consistent with those in GAAP and the references to GAAP in the notes to the combined financial statements highlight those areas where FAM is consistent with GAAP.

Preparing the combined financial statements in conformity with the FAM requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the combined financial statements, and the reported amounts of income and expenses during the reporting period. Actual results could differ from those estimates.

Significant accounts and accounting policies are explained below.

a. Consolidation

The combined financial statements include the accounts and results of operations of the Reserve Banks as well as several variable interest entities (VIEs), which include the following LLCs, Main Street, MLF, and TALF II. The consolidation of the VIEs were assessed in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 810 (ASC 810), Consolidation, which requires VIEs to be consolidated by its controlling financial interest holder. The Reserve Banks are the managing member and the Treasury is the preferred equity member of the LLCs. Intercompany balances and transactions have been eliminated in consolidation. See Note 6 for additional information on the VIEs. The assets and liabilities of each LLC have been accounted for and consolidated with the assets and liabilities of the Reserve Banks. The consolidated financial statements of the Reserve Banks include accounts and results of operations of Maiden &

Nassau LLC, a Delaware LLC wholly owned by the FRBNY, which was formed to own and operate the 33 Maiden Lane building.

The Reserve Banks consolidate a VIE if the Reserve Banks have a controlling financial interest, which is defined as the power to direct the significant economic activities of the entity and the obligation to absorb losses or the right to receive benefits of the entity that could potentially be significant to the VIE. To determine whether it is the controlling financial interest holder of a VIE, the Reserve Banks evaluate the VIEs' design, capital structure, and relationships with the variable interest holders. The Reserve Banks reconsider whether it has a controlling financial interest in a VIE, as required by FASB ASC 810, Consolidation, at each reporting date or if there is an event that requires consideration.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) established the Bureau of Consumer Financial Protection (Bureau) as an independent bureau within the System that has supervisory authority over some institutions previously supervised by the Reserve Banks in connection with those institutions' compliance with consumer protection statutes. Section 1017 of the Dodd-Frank Act provides that the financial statements of the Bureau are not to be consolidated with those of the Board of Governors or the System. The Board of Governors funds the Bureau through assessments on the Reserve Banks as required by the Dodd-Frank Act. The Reserve Banks reviewed the law and evaluated the design of and their relationship to the Bureau and determined that it should not be consolidated in the Reserve Banks' combined financial statements.

b. Gold and Special Drawing Rights Certificates

The Secretary of the Treasury is authorized to issue gold certificates to the Reserve Banks. Upon authorization, the Reserve Banks acquire gold certificates by crediting equivalent amounts in dollars to the account established for the Treasury. The gold certificates held by the Reserve Banks are required to be backed by the gold owned by the Treasury. The Treasury may reacquire the gold certificates at any time, and the Reserve Banks must deliver them to the Treasury. At such time, the Treasury's account is charged, and the Reserve Banks' gold certificate accounts are reduced. The value of gold for purposes of backing the gold certificates is set by law at \$42 2/9 per fine troy ounce. Gold certificates are recorded by the Reserve Banks at original cost. The Board of Governors allocates the gold certificates among the Reserve Banks once a year based on each Reserve Bank's average Federal Reserve notes outstanding during the preceding 12 months.

Special drawing rights (SDR) are issued by the International Monetary Fund (IMF) to its members in proportion to each member's quota in the IMF at the time of issuance. SDRs serve as a supplement to international monetary reserves and may be transferred from one national monetary authority to another. Under the law providing for U.S. participation in the SDR system, the Secretary of the Treasury is authorized to issue SDR certificates to the Reserve Banks. When SDR certificates are issued to the Reserve Banks, equivalent amounts in U.S. dollars are credited to the account established for the Treasury and the Reserve Banks' SDR certificate accounts are

increased. The Reserve Banks are required to purchase SDR certificates, at the direction of the Treasury, for the purpose of financing SDR acquisitions or for financing exchange-stabilization operations. At the time SDR certificate transactions occur, the Board of Governors allocates the SDR certificates among the Reserve Banks based upon each Reserve Bank's Federal Reserve notes outstanding at the end of the preceding calendar year. SDR certificates are recorded by the Reserve Banks at original cost.

c. Coin

The amount reported as coin in the Combined Statements of Condition represents the face value of all United States coin held by the Reserve Banks. The Reserve Banks buy coin at face value from the U.S. Mint in order to fill depository institution orders.

d. Loans

Loans to depository institutions and other loans, consisting of loans issued by PPPLF and BTFP, are reported at their outstanding principal balances and interest income is recognized on an accrual basis. Accrued interest on loans to depository institutions and other loans is reported as a component of "Other accrued interest receivable" in the Combined Statements of Condition.

If receipt of income on a loan becomes doubtful, the loan is reclassified to non-accrual status. The Reserve Banks would discontinue recognizing interest income on non-accrual status loans until the borrower's repayment performance demonstrates principal and interest would be received in accordance with the terms of the loan agreement. If the Reserve Banks discontinue recording interest on a non-accrual status loan, cash payments are first applied to principal until the loan balance is reduced to zero, subsequent payments are applied as recoveries of interest income previously deemed uncollectible and then any remaining amounts as interest income.

e. Securities Purchased Under Agreements to Resell, Securities Sold Under Agreements to Repurchase, and Securities Lending

The FRBNY may engage in purchases of securities under agreements to resell (repurchase agreements) under the standard monetary policy repurchase agreement operations and domestic standing repurchase agreement facility with primary dealers and eligible counterparties (repo operations) and foreign official and international account holders under the Foreign and International Monetary Authorities (FIMA) Repo Facility. Repo operations transactions are settled through a tri-party arrangement, in which a commercial custodial bank manages the collateral clearing, settlement, pricing, and pledging, and provides cash and securities custodial services for and on behalf of the FRBNY and the counterparty. The collateral pledged must exceed the principal amount of the transaction by a margin determined by the FRBNY for each class and maturity of acceptable collateral. Collateral designated by the FRBNY as acceptable under repo operations primarily include Treasury securities (including Treasury Inflation-Protected Securities (TIPS), Separate Trading of Registered Interest and Principal of Securities

(STRIPS), and Treasury Floating Rate Notes); direct obligations of several federal agencies and GSEs, including Federal National Mortgage Association, Federal Home Loan Mortgage Corporation, and Federal Home Loan Banks; and pass-through federal agency and GSE mortgage-backed securities (MBS). The FIMA Repo Facility is managed by the FRBNY, and acceptable collateral includes Treasury securities only. The repurchase agreements are accounted for as financing transactions with the associated interest income recognized over the life of the transaction. These repurchase agreements are reported at their contractual amounts as "System Open Market Account: Securities purchased under agreements to resell" and the related accrued interest receivable is reported as a component of "System Open Market Account: Accrued interest receivable" in the Combined Statements of Condition. Interest income is reported as "System Open Market Account: Securities purchased under agreements to resell" in the Combined Statements of Operations.

The FRBNY may engage in sales of securities under agreements to repurchase (reverse repurchase agreements) with primary dealers and with a set of expanded counterparties that includes banks, savings associations, GSEs, and domestic money market funds. Transactions under these reverse repurchase agreements are designed to have a margin of zero and are settled through a tri-party arrangement, similar to repo operations. Reverse repurchase agreements may also be executed with foreign official and international account holders as part of a service offering. Reverse repurchase agreements are collateralized by a pledge of an amount of Treasury securities, federal agency and GSE MBS, or GSE debt securities that are held in the SOMA. Reverse repurchase agreements are accounted for as financing transactions, and the associated interest expense is recognized over the life of the transaction. These reverse repurchase agreements are reported at their contractual amounts as "System Open Market Account: Securities sold under agreements to repurchase" and the related accrued interest payable is reported as a component of "System Open Market Account: Other liabilities" in the Combined Statements of Condition. Interest expense is reported as "System Open Market Account: Securities sold under agreements to repurchase" in the Combined Statements to repurchase" in the Combined Statements of Operations.

Treasury securities and GSE debt securities held in the SOMA may be lent to primary dealers, typically overnight, to facilitate the effective conduct of open market operations. The amortized cost basis of securities lent continues to be reported as "System Open Market Account: Treasury securities, net" and "System Open Market Account: Government-sponsored enterprise debt securities, net," as appropriate, in the Combined Statements of Condition. Securities lending transactions are fully collateralized by Treasury securities based on the fair values of the securities lent increased by a margin determined by the FRBNY. The FRBNY charges the primary dealer a fee for borrowing securities, and these fees are reported as a component of "Other items of income (loss): System Open Market Account: Other" in the Combined Statements of Operations.

Activity related to repurchase agreements, reverse repurchase agreements, and securities lending is allocated to each of the Reserve Banks on a percentage basis derived from an annual settlement of the interdistrict settlement account that occurs in the second quarter of each year.

f. Treasury Securities, Federal Agency and Government-Sponsored Enterprise Residential and Commercial Mortgage-Backed Securities, Government-Sponsored Enterprise Debt Securities, and Foreign Currency Denominated Investments

Interest income on Treasury securities, federal agency and GSE MBS, GSE debt securities, and foreign currency denominated investments included in the SOMA is recorded when earned and includes inflation compensation on TIPS and amortization of premiums and accretion of discounts using the effective interest method. Interest income on federal agency and GSE MBS also includes gains or losses associated with principal paydowns. Premiums and discounts related to federal agency and GSE MBS are amortized or accreted over the term of the security to stated maturity, and the amortization of premiums and accretion of discounts are accelerated when principal payments are received. Gains and losses resulting from sales of securities are determined by specific issue based on average cost. Treasury securities, federal agency and GSE MBS, and GSE debt securities are reported net of premiums and discounts in the Combined Statements of Condition and interest income on those securities is reported net of the amortization of premiums and accretion of discounts in the Combined Statements of Operations.

In addition to outright purchases of federal agency and GSE MBS that are held in the SOMA, the FRBNY enters into RMBS dollar roll transactions (dollar rolls), which primarily involve an initial transaction to purchase or sell "to be announced" (TBA) MBS for delivery in the current month combined with a simultaneous agreement to sell or purchase TBA MBS on a specified future date. During the years ended December 31, 2023 and 2022, the FRBNY executed dollar rolls to facilitate settlement of outstanding purchases of federal agency and GSE MBS. The FRBNY accounts for dollar rolls as individual purchases and sales, on a settlement-date basis. Accounting for these transactions as purchases and sales, rather than as financing transactions, is appropriate because the purchase or sale component of the TBA MBS dollar roll is paired off or assigned prior to settlement and, as a result, there is no transfer and return of securities. Net gains (losses) resulting from MBS transactions are reported as a component of "Other items of income (loss): System Open Market Account: Federal agency and government-sponsored enterprise mortgage-backed securities losses, net" in the Combined Statements of Operations.

Foreign currency denominated investments, which can include foreign currency deposits, repurchase agreements, and government debt instruments, are revalued daily at current foreign currency market exchange rates in order to report these assets in U.S. dollars. Any negative interest associated with these foreign currency denominated investments is included as a component of "Interest income: System Open Market Account: Foreign currency denominated investments, net" in the Combined Statements of Operations. Foreign currency translation gains and losses that result from the daily revaluation of foreign currency denominated investments are reported as "Other items of income (loss): System Open Market Account: Foreign currency translation losses, net" in the Combined Statements of Operations.

Because the FRBNY enters into commitments to buy Treasury securities, federal agency and GSE MBS, and foreign government debt instruments and records the related securities on a settlement-date basis in accordance with the FAM, the related outstanding commitments are not reflected in the Combined Statements of Condition.

Activity related to Treasury securities, federal agency and GSE MBS, and GSE debt securities including the premiums, discounts, and realized gains and losses, is allocated to each Reserve Bank on a percentage basis derived from an annual settlement of the interdistrict settlement account that occurs in the second quarter of each year. Activity related to foreign currency denominated investments, including the premiums, discounts, and realized and unrealized gains and losses, is allocated to each Reserve Bank on a percentage basis, adjusted annually in the second quarter of each year, calculated as the ratio of each Reserve Bank's capital and surplus to the Reserve Banks' aggregate capital and surplus at the preceding December 31.

The Reserve Banks are authorized to hold foreign currency working balances and execute foreign exchange transactions to facilitate international payments and currency transactions it makes with or on behalf of foreign central bank and U.S. official institution customers. These foreign currency working balances and transactions are not related to the Reserve Banks' monetary policy operations. Foreign currency working balances are reported as a component of "Other assets" in the Combined Statements of Condition and the related foreign currency translation gains and losses that result from the daily revaluation of the foreign currency working balances and contracts are reported as a component of "Other items of income (loss): Other" in the Combined Statements of Operations.

g. Central Bank Liquidity Swaps

Central bank liquidity swaps, which are transacted between the FRBNY and a foreign central bank, can be structured as either U.S. dollar or foreign currency liquidity swap arrangements.

Central bank liquidity swaps activity, including the related income and expense, is allocated to each Reserve Bank based on a percentage basis, adjusted annually in the second quarter of each year, calculated as the ratio of each Reserve Bank's capital and surplus to the Reserve Banks' aggregate capital and surplus at the preceding December 31.

U.S. dollar liquidity swaps

At the initiation of each U.S. dollar liquidity swap transaction, the foreign central bank transfers a specified amount of its currency to a restricted account for the FRBNY in exchange for U.S. dollars at the prevailing market exchange rate. Concurrent with this transaction, the FRBNY and the foreign central bank agree to a second transaction that obligates the foreign central bank to return the U.S. dollars and the FRBNY to return the foreign currency on a specified future date at the same exchange rate as the initial transaction. The foreign currency amounts that the

FRBNY acquires are reported as "System Open Market Account: Central bank liquidity swaps" in the Combined Statements of Condition. Because the swap transaction will be unwound at the same U.S. dollar amount and exchange rate that were used in the initial transaction, the recorded value of the foreign currency amounts is not affected by changes in the market exchange rate.

The foreign central bank compensates the FRBNY based on the amount outstanding and the interest rate under the swap agreement. The amount of compensation received during the term of the swap transaction is reported as "Interest income: System Open Market Account: Central bank liquidity swaps" in the Combined Statements of Operations.

Foreign currency liquidity swaps

Foreign currency liquidity swap transactions involve the transfer by the FRBNY at the prevailing market exchange rate, of a specified amount of U.S. dollars to an account for the foreign central bank in exchange for its currency. The foreign currency liquidity swap is recorded as "System Open Market Account: Other liabilities" in the Combined Statements of Condition in the amount of foreign currency that the FRBNY receives.

h. Consolidated Variable Interest Entities: Assets Held, Net

The consolidated VIEs hold assets that result from the associated purchase and lending activities and from the Treasury's preferred equity contributions. In addition to loans and securities directly related to program activities, assets may include cash and cash equivalents, short-term investments, and short-term investments in non-marketable securities. Cash equivalents and short-term investments are recorded at fair value in accordance with FASB ASC 825, Financial Instruments, while short-term investments in non-marketable securities are accounted for at amortized cost in accordance with FASB ASC 320, Investments – Debt Securities.

Main Street holds loan participations through the various programs that are classified as held-for-investment and measured at principal amount outstanding, including capitalized interest, net of allowance, charge-offs, and recoveries and including interest receivable, in accordance with FASB ASC 310, Receivables and FASB ASC 326, Financial Instruments – Credit Losses.

MLF held municipal notes designated as held-to-maturity and accounted for at amortized cost in accordance with FASB ASC 320, Investments – Debt Securities. TALF II made loans to borrowers that are designated as held-for-investment and accounted for at the loan's principal balance in accordance with FASB ASC 310, Receivables.

Additional information related to the assets held by consolidated VIEs is provided in Note 6.

i. Allowance for Credit Losses

FASB ASC 326, Financial Instruments – Credit Losses provides the updated methodology for measuring credit losses on loans and SOMA assets measured at amortized cost. Beginning in 2023, the Reserve Banks estimated the allowance for credit losses using the current expected credit loss (CECL) methodology. CECL uses historical loss information, adjusted to reflect current economic conditions, asset specific considerations, and forward-looking assumptions to estimate lifetime expected credit losses. Specific considerations for the Reserve Banks' assets include:

- Loans include loans to depository institutions and other loans, which consist of the PPPLF and the BTFP. When evaluating the risk of credit loss, the Reserve Banks consider the term of the loan, the depository institution's and other financial institution's commitment and ability to repay, the underlying collateral type and coverage of the loans, and any repayment guarantees. See Note 4.
- SOMA assets include repurchase agreements, Treasury securities, GSE debt, federal agency and GSE
 MBS, and foreign currency denominated investments. When evaluating the risk of credit loss on
 repurchase agreements, the Reserve Banks consider collateral maintenance provisions and the short term
 nature of the agreements. The risk of credit loss on the remaining SOMA assets are evaluated considering
 historical loss experience, assessment of ongoing credit condition of the security issuer or counterparty,
 and the existence of third-party guarantees. See Note 5.
- Main Street holdings include loan participations. When evaluating the risk of credit loss, the Reserve
 Banks consider portfolio credit quality and loan participation repayment expectations, which are based on
 historical loss considerations, adjusted for current economic conditions. See Note 6.

The recognition of an allowance for credit losses is evaluated and reviewed at least annually. When the risk of non-payment is zero, an estimate for credit losses is not required to be recognized. Loans to depository institutions, other loans, and SOMA assets including repurchase agreements, Treasury securities, GSE debt, federal agency and GSE MBS, and foreign currency denominated investments are within the scope of the zero-loss assumption under CECL. Therefore, there was no allowance for credit losses as of December 31, 2023. An allowance for credit losses was recognized on loan participations held by Main Street.

The prior methodology, applied by the Reserve Banks in 2022, required incurred losses to be probable before they were recognized.

j. Bank Premises, Equipment, and Software

Bank premises and equipment are stated at cost less accumulated depreciation. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, which range from 2 to 50 years. Major alterations, renovations, and improvements are capitalized and depreciated over the remaining useful life of the asset or, if appropriate, over the unique useful life of the alteration, renovation, or improvement. Maintenance, repairs, and minor replacements are charged to operating expense in the year incurred. Reserve Banks may transfer assets to other Reserve Banks or may lease property of other Reserve Banks.

Costs incurred to acquire software are capitalized based on the purchase price. Costs incurred during the application development stage to develop internal-use software are capitalized based on the cost of direct services and materials associated with designing, coding, installing, and testing the software. Capitalized software costs are amortized on a straight-line basis over the estimated useful lives of the software applications, which generally range from two to five years. Maintenance costs and minor replacements related to software are charged to operating expense in the year incurred.

Capitalized assets, including land improvements, buildings, construction, furniture and equipment, and software, are impaired and an adjustment is recorded when events or changes in circumstances indicate that the carrying amount of assets or asset groups is not recoverable and significantly exceeds the assets' fair value.

k. Leases

18

Leases are identified in accordance with FASB ASC 842, Leases. The Reserve Banks' material leases involve lessor and lessee arrangements for premises that are classified as operating leases and lessee arrangements for equipment that are classified as finance leases. When the Reserve Banks are a lessee, the discount rate is based on a risk-free Treasury borrowing rate at lease commencement using a period comparable to the lease term. Upon adoption of ASC 842, the Reserve Banks elected the short-term lease recognition exemption and did not separate lease components from non-lease components for all leases.

I. Federal Reserve Notes

Federal Reserve notes are the circulating currency of the United States. These notes, which are identified as issued to a specific Reserve Bank, must be fully collateralized. All of the Reserve Banks' assets are eligible to be pledged as collateral. The collateral value is equal to the book value of the collateral tendered with the exception of securities, for which the collateral value is equal to the par value of the securities tendered. The par value of securities pledged as collateral under reverse repurchase agreements is deducted from the eligible collateral value.

The Board of Governors may, at any time, call upon a Reserve Bank for additional security to adequately collateralize outstanding Federal Reserve notes. To satisfy the obligation to provide sufficient collateral for outstanding Federal Reserve notes, the Reserve Banks have entered into an agreement that provides for certain assets of the Reserve Banks to be jointly pledged as collateral for the Federal Reserve notes issued to all Reserve Banks. In the event that this collateral is insufficient, the FRA provides that Federal Reserve notes become a first and paramount lien on all the assets of the Reserve Banks. Finally, Federal Reserve notes are obligations of the United States government.

"Federal Reserve notes outstanding, net" in the Combined Statements of Condition represents the Reserve Banks' Federal Reserve notes outstanding, reduced by the Reserve Banks' currency holdings of \$410 billion and \$360 billion at December 31, 2023 and 2022, respectively.

At December 31, 2023 and 2022, all Federal Reserve notes outstanding, net, were fully collateralized. At December 31, 2023 and 2022, all gold certificates, all SDR certificates, and \$2,281 billion and \$2,243 billion, respectively, of domestic securities held in the SOMA were pledged as collateral. At December 31, 2023 and 2022, no investments denominated in foreign currencies were pledged as collateral.

m. Deposits

Depository Institutions

Depository institutions' deposits represent balances maintained in master accounts and excess balance accounts held by the depository institutions at the Reserve Banks.

Depository institutions earn interest at the interest on reserve balance (IORB) rate. The Board of Governors sets the IORB rate at a rate not to exceed the general level of short-term interest rates and has the discretion to change the IORB rate at any time. Interest on depository institutions' balances is calculated and accrued daily at the specified rate. Interest payable on deposits of depository institutions at Reserve Banks is reported as a component of "Interest payable to depository institutions and others" in the Combined Statements of Condition. Interest expense on deposits of depository institutions at Reserve Banks is reported as a component of "Depository institutions and others" in the Combined Statements of Operations.

Treasury General Account

The Treasury general account is the primary operational account of the Treasury and is maintained at the FRBNY.

Other Deposits

20

Other deposits include foreign central bank and foreign government deposits held at the FRBNY. Other deposits also include cash collateral, deposits of designated financial market utilities (DFMUs), and GSE deposits held by the Reserve Banks. The Reserve Banks pay interest on deposits held by DFMUs at a rate currently set equal to the interest rate paid on reserve balances maintained by depository institutions. The Board of Governors sets, and can change at its discretion, the rate paid to DFMUs. Interest payable on other deposits is reported as a component of "Interest payable to depository institutions and others" in the Combined Statements of Condition. Interest expense on other deposits is reported as a component of "Depository institutions and others" in the Combined Statements of Operations.

n. Items in Process of Collection and Deferred Credit Items

Items in process of collection primarily represent amounts attributable to checks that have been deposited for collection and that, as of the balance sheet date, have not yet been presented to the paying bank. Deferred credit items represent the counterpart liability to items in process of collection. The amounts in this account arise from deferring credit for deposited items until the amounts are collected.

o. Reserve Bank Capital Paid-in

The FRA requires that each member bank subscribe to the capital stock of the Reserve Bank in an amount equal to 6 percent of the capital and surplus of the member bank. These shares have a par value of \$100 and may not be transferred or hypothecated. As a member bank's capital and surplus changes, its holdings of Reserve Bank stock must be adjusted. Currently, only one-half of the subscription is paid in, and the remainder is subject to call. A member bank is liable for Reserve Bank liabilities up to twice the par value of stock subscribed by it.

The FRA requires each Reserve Bank to pay each member bank an annual dividend based on the amount of the member bank's paid-in capital stock and a rate determined by the member bank's total consolidated assets. Member banks with total consolidated assets in excess of a threshold established in the FRA receive a dividend equal to the smaller of 6 percent or the rate equal to the high yield of the 10-year Treasury note auctioned at the last auction held prior to the payment of the dividend. Member banks with total consolidated assets equal to or less than the threshold receive a dividend of 6 percent. The threshold for total consolidated assets was \$12.1 billion and \$11.2 billion for the years ended December 31, 2023 and 2022, respectively. This threshold is adjusted annually based on the Gross Domestic Product Price Index, which is published by the Bureau of Economic Analysis. The dividend is paid semiannually and is cumulative.

p. Consolidated Variable Interest Entities Formed to Administer Credit and Liquidity Facilities: Non-Controlling Interest

The Treasury's preferred equity contribution to the consolidated VIEs are reported as a component of "Consolidated variable interest entities formed to administer credit and liquidity facilities: Non-controlling interest" in the Combined Statements of Condition.

The reported amount also includes Treasury's allocated portion of undistributed net VIEs assets, determined in accordance with LLC agreements and accounting policies adopted by the VIEs. The Treasury's non-controlling interest is reported as "Consolidated variable interest entities: Non-controlling interest" in the Combined Statements of Changes in Capital. Treasury's allocated portion of undistributed net assets is determined in accordance with the hypothetical liquidation at book value methodology. A calculation is prepared to determine the amounts that would be received if the VIE liquidated all of its assets, measured as of the balance sheet date, and distributed the proceeds to the members based on the contractually defined liquidation priorities. The difference between the calculated liquidation distribution amounts at the beginning and the end of the reporting period is the Reserve Banks' share of the earnings or losses from the VIEs investments for the period.

q. Surplus

The FRA limits aggregate Reserve Bank surplus to \$6.785 billion. Reserve Bank surplus is allocated among the Reserve Banks based on the ratio of each Bank's capital paid-in to total Reserve Bank capital paid-in as of December 31 of each year.

Accumulated other comprehensive loss is reported as a component of "Surplus" in the Combined Statements of Condition and the Combined Statements of Changes in Capital. Additional information regarding the classifications of accumulated other comprehensive income is provided in Notes 9, 10, and 11.

r. Earnings Remittances to the Treasury

The FRA requires that any amounts of the surplus funds of the Reserve Banks that exceed, or would exceed, the aggregate surplus limitation shall be transferred to the Board of Governors for transfer to the Treasury. The Reserve Banks remit excess earnings to the Treasury after providing for the cost of operations, payment of dividends, and reservation of an amount necessary to maintain surplus at the aggregate surplus limitation. Remittances to the Treasury are made on a weekly basis, and prior to payment, amounts due to the Treasury are reported as "Accrued remittances to the Treasury" in the Combined Statements of Condition. See Note 12 for additional information on earnings remittances to the Treasury.

On a weekly basis, if earnings become less than the costs of operations, payment of dividends, and reservation of an amount necessary to maintain the Reserve Banks' allocated portion of the aggregate surplus limitation, the Reserve Banks suspend weekly remittances to the Treasury and record a deferred asset, which is reported as "Deferred asset – remittances to the Treasury" in the Combined Statements of Condition. A deferred asset represents the shortfall in earnings from the most recent point that remittances to the Treasury were suspended. The deferred asset is the amount of net excess earnings the Reserve Banks will need to realize in the future before remittances to the Treasury resume, and the deferred asset is reviewed for impairment periodically. The net amount of the excess earnings and costs in excess of earnings recognized for the full year is reported as "Earnings remittances to the Treasury, net" in the Combined Statements of Operations.

s. Income and Costs Related to Treasury Services

When directed by the Secretary of the Treasury, the Reserve Banks are required by the FRA to serve as fiscal agent and depositary of the United States Government. By statute, the Treasury has appropriations to pay for these services. Revenue generated by the Reserve Banks in performing fiscal agent activities is recognized when the Reserve Banks' performance obligations are satisfied. During the years ended December 31, 2023 and 2022, the Reserve Banks were reimbursed for substantially all services provided to the Treasury as its fiscal agent.

t. Assessments

The Board of Governors assesses the Reserve Banks to fund its operations and the operations of the Bureau. These assessments are allocated to each Reserve Bank based on each Reserve Bank's capital and surplus balances. The Board of Governors also assesses each Reserve Bank for expenses related to producing, issuing, and retiring Federal Reserve notes based on each Reserve Bank's share of the number of notes comprising the System's net liability for Federal Reserve notes on December 31 of the prior year.

The Dodd-Frank Act requires that, after the transfer of its responsibilities to the Bureau on July 21, 2011, the Board of Governors fund the Bureau in an amount not to exceed a fixed percentage of the total operating expenses of the System as reported in the Board of Governors' 2009 annual report, which totaled \$4.98 billion. After 2013, the amount is adjusted annually in accordance with the provisions of the Dodd-Frank Act. The percentage of total operating expenses of the System for the years ended December 31, 2023 and 2022 was 15.08 percent (\$750.9 million) and 14.74 percent (\$734.0 million), respectively. The Reserve Banks' assessment for Bureau funding is reported as "Operating expenses: Assessments: Bureau of Consumer Financial Protection" in the Combined Statements of Operations.

u. Fair Value

Assets of the Retirement Plan for Employees of the Federal Reserve System (System Plan) and certain assets of the credit facilities, discussed in Note 6, are measured at fair value in accordance with FASB ASC Topic 820 (ASC 820), Fair Value Measurement. ASC 820 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC

820 establishes a three-level fair value hierarchy that distinguishes between assumptions developed using market data obtained from independent sources (observable inputs) and the Reserve Banks' assumptions developed using the best information available in the circumstances (unobservable inputs). The three levels established by ASC 820 are described as follows:

Level 1 – Valuation is based on quoted prices for identical instruments traded in active markets.

Level 2 – Valuation is based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant assumptions are observable in the market.

Level 3 – Valuation is based on model-based techniques that use significant inputs and assumptions not observable in the market. These unobservable inputs and assumptions reflect the Reserve Banks' estimates of inputs and assumptions that market participants would use in pricing the assets and liabilities. Valuation techniques include the use of option pricing models, discounted cash flow models, and similar techniques.

The inputs or methodology used for valuing assets and liabilities are not necessarily an indication of the risk associated with those assets and liabilities.

v. Taxes

The Reserve Banks are exempt from federal, state, and local taxes, except for taxes on real property. The Reserve Banks' real property taxes were \$56 million and \$56 million for the years ended December 31, 2023 and 2022, respectively, and are reported as a component of "Operating expenses: Occupancy" in the Combined Statements of Operations.

w. Restructuring Charges

The Reserve Banks had no significant restructuring activities in 2023 and 2022.

x. Recently Issued Accounting Standards

Other than the significant differences described in Note 3, the accounting policies described in FAM are generally consistent with those in GAAP. The following items represent recent accounting standards and describe how the FAM was or will be revised to be consistent with these GAAP standards.

In June 2016, the FASB issued Accounting Standards Update (ASU) 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, amended in subsequent related ASUs. ASU 2016-13 introduces the CECL methodology which replaced the previous GAAP method of calculating

credit losses. While the prior methodology required incurred losses to be probable before they were recognized, ASU 2016-13 requires the use of a lifetime expected loss methodology, which requires earlier recognition of credit losses on financial assets measured at amortized cost. The Board of Governors adopted this standard using the modified retrospective method to report results under ASU 2016-13 for reporting periods after January 1, 2023. The prior balance at December 31, 2022 was reported under the previous GAAP methodology, and an immaterial amount was recorded to increase credit losses under the CECL methodology upon adoption at January 1, 2023.

In April 2022, the FASB issued ASU 2022-02, Financial Instruments - Credit Losses (Topic 326) Troubled Debt Restructurings and Vintage Disclosures. This update addresses issues related to troubled debt restructurings and gross write-offs within ASU 2016-13. The Board of Governors adopted these updates using a prospective method upon implementation of ASU 2016-13 for reporting periods after January 1, 2023. The Main Street LLC did have loan modifications as a result of this new standard, but it did not have a material impact on the Reserve Banks' combined financial statements.

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting; and in January 2021, ASU 2021-01, Reference Rate Reform (Topic 848): Scope. This update provides optional expedients to apply to contract modifications and hedging relationships that reference the London Inter-Bank Offered Rate (LIBOR) or another reference rate expected to be discontinued. The Board of Governors decided to elect these expedients through the transition to Secure Overnight Financing Rate (SOFR) and other comparable reference rates. The Board of Governors adopted this standard and did not have a material impact on the Reserve Banks' combined financial statements.

(4) **LOANS**

Loans to Depository Institutions

The Reserve Banks offer primary, secondary, and seasonal loans to eligible borrowers. Each program has its own interest rate and interest is accrued using the applicable interest rate established at least every 14 days by the Reserve Banks' board of directors, subject to review and determination by the Board of Governors. Primary loans provide discount window credit for periods up to 90 days, secondary loans are extended on a short-term basis, typically overnight, and seasonal loans may be extended for a period of up to nine months. Other credit extensions included outstanding loans to depository institutions that were subsequently placed into Federal Deposit Insurance Corporation (FDIC) receivership, including depository institutions established by the FDIC and were fully repaid prior to December 31, 2023. Interest income earned on other credit extensions was accrued at 100 basis points above the primary credit rate.

Primary, secondary, and seasonal loans are collateralized to the satisfaction of the Reserve Banks to reduce credit risk. Assets eligible to collateralize these loans include consumer, business, and real estate loans; Treasury

securities; GSE debt securities; foreign sovereign debt; municipal, corporate, and state and local government obligations; asset-backed securities; corporate bonds; commercial paper; and bank-issued assets, such as certificates of deposit, bank notes, and deposit notes. Collateral is assigned a lending value that is deemed appropriate by the Reserve Banks, which is typically fair value reduced by a margin. Loans to depository institutions are monitored daily to ensure that borrowers continue to meet eligibility requirements for these programs. If a borrower no longer qualifies for these programs, the Reserve Banks will generally request full repayment of the outstanding loan or, for primary or seasonal loans, may convert the loan to a secondary credit loan. Collateral levels are reviewed daily against outstanding obligations, and borrowers that no longer have sufficient collateral to support outstanding loans are required to provide additional collateral or to make partial or full repayment.

Other Loans

Bank Term Funding Program

The BTFP offers advances up to one year in length to banks, savings associations, credit unions, and other eligible depository institutions pledging any collateral eligible for purchase in open market operations, such as Treasuries, agency securities, and agency MBS. These assets are valued at par. Advances are limited to the value of eligible collateral pledged by the eligible borrower. The Department of the Treasury, using the ESF, made available \$25 billion as credit protection to the Reserve Banks in connection with the program. Interest income on advances made under the BTFP is accrued using the applicable rate as outlined by the term sheet. At December 31, 2023, no BTFP loans were 90 days past due or on non-accrual status.

Paycheck Protection Program Liquidity Facility

PPPLF loans are non-recourse loans and only PPP loans guaranteed by the SBA are eligible to serve as collateral for the PPPLF. An eligible borrower may pledge SBA-guaranteed PPP loans that it has originated or purchased. Each PPPLF loan is equal to the maturity of the PPP loan pledged and has a term of five years based on the PPP loan origination date. In an event of default, PPP covered loans are guaranteed as to principal and accrued interest by the SBA. The Reserve Banks have the rights to any such loan forgiveness reimbursement by the SBA to the eligible borrower. The eligible borrower shall pay fully collected funds to the Reserve Banks. In unusual cases, the Reserve Banks may be exposed to credit risk should collateral supporting PPPLF loans become inadequate. At December 31, 2023 and 2022, the Reserve Banks did not have any PPPLF loans that were over 90 days past due and determined to be non-performing, or on non-accrual status.

The remaining maturity distribution and the total amount of loans outstanding at December 31, 2023 and 2022 were as follows (in millions):

	Performing and past due		Within 15 days		16 days to 90 days	91 days to 1 year	Over 1 year to 5 years	Total
December 31, 2023								
Loans to depository institutions								
Primary, secondary, and seasonal credit	\$ -	- \$	1,821	\$	1,652	\$ _	\$ _	\$ 3,473
Other loans								
BTFP	-	_	269		41,593	87,316	_	129,178
PPPLF		4	_		_	_	3,446	3,450
Total loans	\$	4 \$	2,090	\$	43,245	\$ 87,316	\$ 3,446	\$ 136,101
December 31, 2022				_				
Loans to depository institutions								
Primary, secondary, and seasonal credit	\$ -	- \$	3,783	\$	1,493	\$ _	\$ _	\$ 5,276
Other loans								
PPPLF ¹		7	_		-	_	11,443	11,450
Total loans	\$	7 \$	3,783	\$	1,493	\$ _	\$ 11,443	\$ 16,726

¹ PPPLF balances have been reclassified from the "Within 15 days" category to the performing and past due category as of December 31, 2022 to conform to current year presentation.

Interest income attributable to loans outstanding during the years ended December 31, 2023 and 2022 was as follows (in millions):

		2023	20	22
Interest income				
Loans to depository institutions				
Primary, secondary, seasonal, and other credit	\$	6,284	\$	87
Other loans				
BTFP		4,128		-
PPPLF		26		67
Total loans	\$	10,438	\$	154
1				

At December 31, 2023, the Reserve Banks had no loans that were past due and determined to be non-performing, or on non-accrual status. No allowance for credit losses was required. At December 31, 2022, prior to the adoption of CECL, the Reserve Banks had no loans that were impaired, restructured, past due and determined to be non-performing, or on non-accrual status. No allowance for loan losses was required.

(5) SYSTEM OPEN MARKET ACCOUNT

a. Domestic Securities Holdings

The FRBNY executes domestic open market operations and, on behalf of the Reserve Banks, holds the resulting securities in the SOMA.

In response to the continued risks to economic activity posed by the coronavirus, effective December 2020, the FOMC directed the FRBNY to increase the SOMA portfolio by purchasing Treasury securities at a pace of \$80

billion per month and RMBS at a pace of \$40 billion per month and to increase the SOMA portfolio by purchasing Treasury securities, RMBS, and CMBS as needed to sustain smooth functioning of markets for these securities.

Pursuant to the FOMC directives, the FRBNY reduced the monthly pace of its net asset purchases for Treasury securities and RMBS as follows:

- Effective November 4, 2021, began reducing net asset purchases for Treasury securities to \$70 billion per month and began reducing net asset purchases for agency MBS to \$35 billion per month. The FRBNY ceased purchases of CMBS.
- Effective December 16, 2021, further reduced net asset purchases for Treasury securities to \$60 billion per month and further reduced net asset purchases for RMBS to \$30 billion per month.
- Effective mid-January 2022, reduced net asset purchases for Treasury securities to \$40 billion per month and reduced net asset purchases for RMBS to \$20 billion per month.
- Effective mid-February 2022, further reduced net asset purchases for Treasury securities to \$20 billion per month and further reduced net asset purchases for RMBS to \$10 billion per month.

The FOMC directed the FRBNY, effective March 17, 2022, to roll over all principal payments of Treasury securities and to reinvest payments of agency debt and RMBS into RMBS.

Pursuant to the FOMC directives, the FRBNY reinvested principal payments from Treasury securities and RMBS to the extent that they exceed monthly caps as follows:

- Effective June 2022 through August 2022, rolled over at auction Treasury securities maturing in the calendar month that exceed a cap of \$30 billion and reinvested agency MBS maturities in the calendar month that exceed a cap of \$17.5 billion.
- Effective September 2022 through December 2023, rolled over at auction Treasury securities maturing in the calendar month that exceed a cap of \$60 billion and reinvested agency MBS maturities in the calendar month that exceed a cap of \$35 billion.

The total Treasury securities, federal agency and GSE MBS, and GSE debt securities, net, excluding accrued interest, held in the SOMA at December 31, 2023 and 2022 was as follows (in millions):

								Total	SON	ЛΑ						
				20	23							20	22			
		Par		amortized remiums		naccreted iscounts	á	Total amortized cost		Par		amortized emiums		accreted iscounts	â	Total mortized cost
Treasury securities																
Bills	\$	216,969	\$	_	\$	(2,738)	\$	214,231	\$	289,525	\$	-	\$	(2,940)	\$	286,585
Notes		2,863,795		33,304		(5,762)		2,891,337		3,521,904		49,573		(6,614)		3,564,863
Bonds		1,704,374		192,963		(14,578)		1,882,759		1,687,925		204,431		(14,557)		1,877,799
Total Treasury securities	=	4,785,138		226,267	_	(23,078)		4,988,327		5,499,354		254,004	_	(24,111)	_	5,729,247
Federal agency and GSE MBS																
Residential	\$	2,423,545	\$	51,694	\$	(2,820)	\$	2,472,419	\$	2,632,909	\$	58,862	\$	(3,491)	\$	2,688,280
Commercial		8,228		691		(2)		8,917		8,494		812		(3)		9,303
Total federal agency and GSE MBS	=	2,431,773	_	52,385	_	(2,822)	_	2,481,336	_	2,641,403	_	59,674		(3,494)	_	2,697,583
GSE debt securities	\$	2,347	\$	210	\$		\$	2,557	\$	2,347	\$	237	\$		\$	2,584

During the years ended December 31, 2023 and 2022, the FRBNY entered into repurchase agreements and reverse repurchase agreements as part of its monetary policy activities. These operations have been undertaken as necessary to maintain the federal funds rate in a target range. In addition, reverse repurchase agreements are entered into as part of a service offering to foreign official and international account holders.

The FIMA Repo Facility allows FIMA account holders to temporarily exchange their U.S. Treasury securities for U.S. dollars, which can then be available to institutions in their jurisdictions.

Financial information related to repurchase agreements held in the SOMA for the years ended December 31, 2023 and 2022 was as follows (in millions):

			Total :	SOMA	
		2	023	2	2022
Repo operations:					
Contract amount outstanding, end of year		\$	_	\$	-
Average daily amount outstanding, during the year			3		
Maximum balance outstanding, during the year			203		6
FIMA Repo Facility:					
Contract amount outstanding, end of year		\$	-	\$	-
Average daily amount outstanding, during the year			3,922		-
Maximum balance outstanding, during the year			70,000		:
Total repurchase agreement contract amount outstanding, end of year	=	\$		\$	
Supplemental information—interest income:					
Repo operations		\$	-	\$	-
FIMA Repo Facility			195		-
Total interest income—securities purchased under agreements to resell		\$	195	\$	

There were no outstanding repurchase agreement contracts that were transacted with primary dealers, eligible counterparties, and foreign official and international account holders as of December 31, 2023.

Financial information related to reverse repurchase agreements held in the SOMA for the years ended December 31, 2023 and 2022 was as follows (in millions):

	Total :	SOMA	
	2023		2022
Primary dealers and expanded counterparties:			
Contract amount outstanding, end of year	\$ 1,018,483	\$	2,553,716
Average daily amount outstanding, during the year	1,747,804		1,997,187
Maximum balance outstanding, during the year	2,553,716		2,553,716
Securities pledged (par value), end of year	1,098,844		2,749,747
Securities pledged (fair value), end of year	1,008,344		2,508,194
Foreign official and international accounts:			
Contract amount outstanding, end of year	\$ 372,188	\$	335,839
Average daily amount outstanding, during the year	336,897		290,552
Maximum balance outstanding, during the year	399,588		380,593
Securities pledged (par value), end of year	451,042		390,529
Securities pledged (fair value), end of year	372,278		335,886
Total reverse repurchase agreement contract amount outstanding, end of year	\$ 1,390,671	\$	2,889,555
Supplemental information—interest expense:			
Primary dealers and expanded counterparties	\$ 87,341	\$	36,655
Foreign official and international accounts	17,000		5,312
Total interest expense—securities sold under agreements to repurchase	\$ 104,341	\$	41,967

Securities pledged as collateral, at December 31, 2023 and 2022, consisted solely of Treasury securities. The contract amount outstanding as of December 31, 2023 of reverse repurchase agreements that were transacted with primary dealers and expanded counterparties had a remaining term of one business day and matured on January 2, 2024. The contract amount outstanding as of December 31, 2023 of reverse repurchase agreements that were transacted with foreign official and international account holders had a remaining term of one business day and matured on January 2, 2024.

The remaining maturity distribution of Treasury securities, federal agency and GSE MBS, GSE debt securities, repurchase agreements, and reverse repurchase agreements at December 31, 2023 and 2022 was as follows (in millions):

	١	Vithin 15 days	16	6 days to 90 days	9	1 days to 1 year	0	ver 1 year to 5 years	ver 5 years o 10 years	Over 10 years	Total
December 31, 2023:						,			, ,,,,,	,	
Treasury securities (par value)	\$	79,323	\$	219,514	\$	594,436	\$	1,614,977	\$ 771,726	\$ 1,505,162	\$ 4,785,138
Federal agency and GSE residential MBS (par value) ¹		_		-		23		2,920	28,909	2,391,693	2,423,545
Federal agency and GSE commercial MBS (par value) ¹		_		_		_		1,975	3,441	2,812	8,228
GSE debt securities (par value)		_		-		_		_	2,347	-	2,347
Securities sold under agreements to repurchase (contract amount)		1,390,671		_		-		-	-	_	1,390,671
December 31, 2022:											
Treasury securities (par value)	\$	91,280	\$	369,443	\$	721,298	\$	1,915,468	\$ 937,231	\$ 1,464,634	\$ 5,499,354
Federal agency and GSE residential MBS (par value) ¹		_		2		36		3,557	45,302	2,584,012	2,632,909
Federal agency and GSE commercial MBS (par value) ¹		_		_		_		463	4,677	3,354	8,494
GSE debt securities (par value)		_		-		_		_	2,347	-	2,347
Securities sold under agreements to repurchase (contract amount)		2,889,555		-		-		_	-	-	2,889,555

¹ The par amount shown for federal agency and GSE residential MBS and commercial MBS is the remaining principal balance of the securities.

Federal agency and GSE MBS are reported at stated maturity in the table above. The estimated weighted-average life of these securities differs from the stated maturity primarily because it factors in scheduled payments and prepayment assumptions. The estimated weighted-average lives of RMBS and CMBS as of December 31, 2023 and 2022 were as follows (in years):

	2023	2022
Estimated weighted-average life of		
RMBS	8.7	9.0
CMBS	6.6	7.4

The amortized cost and par value of Treasury securities and GSE debt securities that were loaned from the SOMA under securities lending agreements held in the SOMA at December 31, 2023 and 2022 were as follows (in millions):

		Total	SOMA	
	202	3		2022
Treasury securities (amortized cost)	\$	47,388	\$	51,590
Treasury securities (par value)		46,744		51,366
GSE debt securities (amortized cost)		_		23
GSE debt securities (par value)		_		21

Securities pledged as collateral by the counterparties in the securities lending arrangements at December 31, 2023 and 2022 consisted solely of Treasury securities. The securities lending agreements outstanding as of December 31, 2023 had a term of one business day and matured on January 2, 2024.

The FRBNY enters into commitments to buy and sell Treasury securities and federal agency and GSE MBS and records the related securities on a settlement-date basis. As of December 31, 2023, total purchases and sales under outstanding commitments were as follows (in millions):

	То	tal SOMA	Contractual settlement dates through
Purchases under outstanding commitments	•		
Treasury securities	\$	1,109	January 2, 2024
TBA RMBS		_	
CMBS		_	
Sales under outstanding commitments			
RMBS	\$	_	
CMBS		-	

RMBS and CMBS commitments are subject to varying degrees of off-balance-sheet market risk and counterparty credit risk that result from their future settlement. The FRBNY requires the posting of cash margin for RMBS commitments as part of its risk management practices used to mitigate the counterparty credit risk.

Other assets held in the SOMA consist primarily of cash and short-term investments related to the federal agency and GSE MBS portfolio and were immaterial at December 31, 2023 and 2022. Other liabilities include the FRBNY's accrued interest payable related to repurchase agreements transactions, obligations to return cash margin posted by counterparties as collateral under commitments to purchase and sell RMBS, and obligations that arise from the failure of a seller to deliver Treasury securities and RMBS and CMBS to the FRBNY on the settlement date and were immaterial at December 31, 2023 and 2022. Although the FRBNY has ownership of and records its investments in Treasury securities and RMBS and CMBS as of the contractual settlement date, it is not obligated to make payment until the securities are delivered, and the amount included in other liabilities represents the FRBNY's obligation to pay for the securities when delivered.

Accrued interest receivable on domestic securities held in the SOMA was \$32,275 million and \$34,228 million as of December 31, 2023 and 2022, respectively. These amounts are reported as a component of "System Open Market Account: Accrued interest receivable" in the Combined Statements of Condition.

Information about transactions related to Treasury securities, federal agency and GSE MBS, and GSE debt securities held in the SOMA during the years ended December 31, 2023 and 2022, is summarized as follows (in millions):

		Total	SOM	Α		
	Bills	Notes		Bonds	To	otal Treasury securities
Balance at December 31, 2021	\$ 325,956	\$ 3,812,476	\$	1,778,994	\$	5,917,426
Purchases ¹	958,843	514,065		105,271		1,578,179
Sales ¹	_	_		(21)		(21
Realized gains (losses), net ²	_	_		(5)		(5
Principal payments and maturities	(1,002,507)	(762,463)		(11,460)		(1,776,430
Amortization of premiums and accretion of discounts, net	4,293	(18,981)		(10,156)		(24,844
Inflation adjustment on inflation-indexed securities	_	19,766		15,176		34,942
Subtotal of activity	 (39,371)	(247,613)		98,805		(188,179
Balance at December 31, 2022	\$ 286,585	\$ 3,564,863	\$	1,877,799	\$	5,729,247
Purchases ¹	644,351	167,315		35,904		847,570
Sales ¹	_	(175)		(76)		(251
Realized gains (losses), net ²	_	(9)		(22)		(31
Principal payments and maturities	(729,215)	(834,160)		(26,907)		(1,590,282
Amortization of premiums and accretion of discounts, net	12,510	(14,708)		(10,907)		(13,105
Inflation adjustment on inflation-indexed securities	_	8,211		6,968		15,179
Subtotal of activity	 (72,354)	(673,526)		4,960		(740,920
Balance at December 31, 2023	\$ 214,231	\$ 2,891,337	\$	1,882,759	\$	4,988,327
Year-ended December 31, 2022						
Supplemental information—par value of transactions:						
Purchases ³	\$ 965,988	\$ 515,609	\$	106,728	\$	1,588,325
Sales	-	-		(25)		(25
Year-ended December 31, 2023						
Supplemental information—par value of transactions:						
Purchases ³	\$ 656,660	\$ 168,024	\$	36,482	\$	861,166
Sales ³	_	(184)		(94)		(278

¹ Purchases and sales may include payments and receipts related to principal, premiums, discounts, and inflation compensation adjustments to the basis of inflation-indexed securities. The amount reported as sales includes the realized gains and losses on such transactions.

² Realized gains (losses), net is the offset of the amount of realized gains and losses included in the reported sales amount.

³ Includes inflation compensation.

				Total			
	Re	esidential MBS	Com	mercial MBS	federal agency d GSE MBS	GSE debt secu	urities
Balance at December 31, 2021	\$	2,675,057	\$	10,211	\$ 2,685,268	\$	2,610
Purchases ¹		402,649		_	402,649		-
Sales ¹		(345)		_	(345)		-
Realized gains (losses), net ²		(28)		_	(28)		-
Principal payments and maturities		(376,705)		(744)	(377,449)		-
Amortization of premiums and accretion of discounts, net		(12,348)		(164)	(12,512)		(26
Subtotal of activity		13,223		(908)	12,315		(26
Balance at December 31, 2022	\$	2,688,280	\$	9,303	\$ 2,697,583	\$	2,584
Purchases ¹		600		_	600		-
Sales ¹		(359)		_	(359)		-
Realized gains (losses), net ²		(56)		_	(56)		-
Principal payments and maturities		(209,687)		(266)	(209,953)		-
Amortization of premiums and accretion of discounts, net		(6,359)		(120)	(6,479)		(27
Subtotal of activity		(215,861)		(386)	(216,247)		(27
Balance at December 31, 2023	\$	2,472,419	\$	8,917	\$ 2,481,336	\$	2,557
Year-ended December 31, 2022							
Supplemental information—par value of transactions:							
Purchases	\$	403,669	\$	_	\$ 403,669	\$	_
Sales		(365)		-	(365)		-
Year-ended December 31, 2023							
Supplemental information—par value of transactions:							
Purchases	\$	600	\$	_	\$ 600	\$	-
Sales		(276)		_	(276)		_

¹ Purchases and sales may include payments and receipts related to principal, premiums, and discounts. The amount reported as sales includes the realized gains and losses on such transactions. Purchases and sales exclude TBA MBS transactions that are settled on a net basis.

b. Foreign Currency Denominated Investments

The FRBNY conducts foreign currency operations and, on behalf of the Reserve Banks, holds the resulting three types of foreign currency denominated investments in the SOMA.

The FRBNY holds foreign currency deposits with foreign central banks and with the Bank for International Settlements (BIS). The FRBNY also invests in foreign government debt instruments of France, Germany, the Netherlands, and Japan. These foreign government debt instruments are backed by the full faith and credit of the issuing foreign governments. In addition, the FRBNY enters into repurchase agreements to purchase government debt securities for which the accepted collateral is the debt instruments issued by a foreign government.

Information about foreign currency denominated investments recorded at amortized cost and valued at foreign currency market exchange rates held in the SOMA at December 31, 2023 and 2022 was as follows (in millions):

² Realized gains (losses), net is the offset of the amount of realized gains and losses included in the reported sales amount.

		Total	SOMA	
	:	2023		2022
Euro:				
Foreign currency deposits	\$	8,388	\$	7,092
Dutch government debt instruments		1,070		1,103
French government debt instruments		1,829		2,591
German government debt instruments		668		688
Japanese yen:				
Foreign currency deposits	\$	6,333	\$	7,088
Japanese government debt instruments		299		3
Total	\$	18,587	\$	18,565

At December 31, 2023 and 2022, there were no repurchase agreements outstanding and, consequently, no related foreign securities held as collateral.

As of December 31, 2023 and 2022, total net interest income earned on foreign currency denominated investments held in the SOMA were as follows (in millions):

		Total	SOMA	
		2023	2022	
Net interest income: 1	'			
Euro	\$	247	\$	(2)
Japanese yen		(1)		(1)
Total	\$	246	\$	(3)

¹As a result of negative interest rates in certain foreign currency denominated investments held in the SOMA, interest income on foreign currency denominated investments, net contains negative interest of \$8 million and \$34 million for the years ended December 31, 2023 and 2022, respectively.

Accrued interest receivable on foreign currency denominated investments, net was \$80 million and \$48 million as of December 31, 2023 and 2022, respectively. These amounts are reported as a component of "System Open Market Account: Accrued interest receivable" in the Combined Statements of Condition.

The remaining maturity distribution of foreign currency denominated investments at December 31, 2023 and 2022 was as follows (in millions):

	Within 15 days	16 days to 90 days	91 days to 1 year	Ove	er 1 year to 5 years	(Over 5 years to 10 years	Total
December 31, 2023:								
Euro	\$ 8,624	\$ 113	\$ 61	\$	2,935	\$	222	\$ 11,955
Japanese yen	6,333	_	297		2		_	6,632
Total	\$ 14,957	\$ 113	\$ 358	\$	2,937	\$	222	\$ 18,587
December 31, 2022:								
Euro	\$ 7,158	\$ _	\$ 193	\$	2,965	\$	1,158	\$ 11,474
Japanese yen	7,088	_	_		3		_	7,091
Total	\$ 14,246	\$ _	\$ 193	\$	2,968	\$	1,158	\$ 18,565

There were no foreign exchange contracts related to foreign currency operations outstanding as of December 31, 2023.

The FRBNY enters into commitments to buy foreign government debt instruments and records the related securities on a settlement-date basis. As of December 31, 2023, there were no outstanding commitments to purchase foreign government debt instruments. During 2023, there were purchases, sales, and maturities of foreign government debt instruments of \$889 million, \$561 million, and \$779 million, respectively. Sales of \$561 million includes realized losses of \$125 million.

In connection with its foreign currency activities, the FRBNY may enter into transactions that are subject to varying degrees of off-balance-sheet market risk and counterparty credit risk that result from their future settlement. The FRBNY controls these risks by obtaining credit approvals, establishing transaction limits, receiving collateral in some cases, and performing monitoring procedures.

Foreign currency working balances held and foreign exchange contracts executed by the Reserve Banks to facilitate international payments and currency transactions made on behalf of foreign central banks and U.S. official institution customers were immaterial as of December 31, 2023 and 2022.

c. Central Bank Liquidity Swaps

U.S. Dollar Liquidity Swaps

The FOMC authorized and directed the FRBNY to maintain standing U.S. dollar liquidity swap arrangements with the Bank of Canada, the Bank of England, the Bank of Japan, the European Central Bank, and the Swiss National Bank.

Euros held in the SOMA under U.S. dollar liquidity swaps at December 31, 2023 and 2022 was \$1,357 million and \$412 million, respectively, and matured within 15 days of year-end. Accrued interest receivable on U.S. dollar liquidity swaps held in the SOMA was immaterial as of December 31, 2023 and 2022.

Net income earned on U.S. dollar liquidity swaps is reported as "System Open Market Account: Central bank liquidity swaps" in the Combined Statements of Operations.

Foreign Currency Liquidity Swaps

At December 31, 2023 and 2022, there was no balance outstanding related to foreign currency liquidity swaps.

d. Fair Value of SOMA Assets and Liabilities

The fair value amounts below are presented solely for informational purposes and are not intended to comply with the fair value disclosures required by FASB ASC 820, Fair Value Measurement. Although the fair value of SOMA security holdings can be substantially greater than or less than the recorded value at any point in time, these unrealized gains or losses have no effect on the ability of the Reserve Banks, as the central bank, to meet their financial obligations and responsibilities. Because SOMA securities are recorded at amortized cost, cumulative unrealized gains (losses) are not recognized in the Combined Statements of Condition and the changes in cumulative unrealized gains (losses) are not recognized in the Combined Statements of Operations.

The fair value of the Treasury securities, federal agency and GSE MBS, GSE debt securities, and foreign government debt instruments held in the SOMA is subject to market risk, arising from movements in market variables such as interest rates and credit risk. The fair value of federal agency and GSE MBS is also affected by the expected rate of prepayments of mortgage loans underlying the securities. The fair value of foreign government debt instruments is also affected by currency risk. Based on evaluations performed as of December 31, 2023 and 2022, there are no credit impairments of SOMA securities holdings.

The following table presents the amortized cost, fair value, and cumulative unrealized gains (losses) on the Treasury securities, federal agency and GSE MBS, and GSE debt securities held in the SOMA at December 31, 2023 and 2022 (in millions):

						Total S	SOMA	4																												
				2023						2022																										
	Amortized cost			Fair value		Cumulative unrealized gains (losses), net		Amortized cost		Fair value		Fair value		Fair value		Fair value		Fair value		Fair value		Fair value		Fair value		Fair value		Fair value		Fair value		Fair value		Fair value		Cumulative nrealized gains (losses), net
Treasury securities																																				
Bills	\$	214,231	\$	214,361	\$	130	\$	286,585	\$	286,373	\$	(212)																								
Notes		2,891,337		2,695,476		(195,861)		3,564,863		3,285,274		(279,589)																								
Bonds		1,882,759		1,493,246		(389,513)		1,877,799		1,484,758		(393,041)																								
Total Treasury securities		4,988,327		4,403,083		(585,244)		5,729,247		5,056,405		(672,842)																								
Federal agency and GSE MBS																																				
Residential	\$	2,472,419	\$	2,110,439	\$	(361,980)	\$	2,688,280	\$	2,282,190	\$	(406,090)																								
Commercial		8,917		7,552		(1,365)		9,303		7,729		(1,574)																								
Total federal agency and GSE MBS		2,481,336		2,117,991		(363,345)		2,697,583		2,289,919		(407,664)																								
GSE debt securities		2,557		2,703		146		2,584		2,736		152																								
Total domestic SOMA portfolio securities holdings	\$	7,472,220	\$	6,523,777	\$	(948,443)	\$	8,429,414	\$	7,349,060	\$	(1,080,354)																								
Memorandum—Commitments for purchases of:																																				
Treasury securities ¹	\$	1,109	\$	1,109	\$	_	\$	2,560	\$	2,560	\$	-																								
Federal agency and GSE MBS ¹		_		_		-		_		_		-																								
Memorandum–Commitments for sales of:																																				
Treasury securities ²	\$	-	\$	_	\$	_	\$	_	\$	_	\$	-																								
Federal agency and GSE MBS ²		_		_		_		_		_		_																								

¹The amortized cost column presents unsettled purchase costs.

The fair value of Treasury securities and GSE debt securities was determined using pricing services that provide market consensus prices based on indicative quotes from various market participants. The fair value of federal agency and GSE MBS were determined using pricing services that utilize a model-based approach that considers observable inputs for similar securities.

The cost bases of repurchase agreements, reverse repurchase agreements, central bank liquidity swaps, and other investments held in the SOMA portfolio approximate fair value. Due to the short-term nature of these agreements and the defined amount that will be received upon settlement, the cost basis approximates fair value.

At December 31, 2023 and 2022, the fair value of foreign currency denominated investments held in the SOMA was \$18,389 million and \$18,112 million, respectively. The fair value of foreign government debt instruments was determined using pricing services that provide market consensus prices based on indicative quotes from various market participants. Due to the short-term nature of foreign currency deposits, the cost basis is estimated to approximate fair value.

The following tables provide additional information on the amortized cost and fair value of the federal agency and GSE MBS portfolios held in the SOMA at December 31, 2023 and 2022 (in millions):

²The amortized cost column presents unsettled sales proceeds.

Total SOMA 2023 2022 Distribution of MBS holdings by coupon rate Amortized cost Fair value Amortized cost Fair value Residential 1.5% \$ 154,792 \$ 128,765 \$ 168,762 \$ 139,602 962,071 846,233 2.0% 790,360 1,034,220 2.5% 628,922 689,649 580,166 750,796 3.0% 290,035 258,706 321,270 283,344 191,813 3.5% 190,382 175,155 210,290 4.0% 118,593 111,917 130,284 121,691 52,350 4.5% 49,673 48,326 54,176 16,143 5.0% 14,741 14,552 15,883 5.5% 1,990 1,994 2,007 2,020 6.0% 372 375 290 290 123 42 42 6.5% 121 2,472,419 \$ 2,110,439 2,688,280 2,282,190 \$ \$ \$ Total Commercial 1.00%-1.50% \$ 91 72 91 \$ 71 1.51%-2.00% 432 340 445 346 2.01%-2.50% 995 814 1,027 838 1,171 2.51%-3.00% 1,350 1,135 1,413 3.01%-3.50% 2,842 2,412 2,928 2,428 3.51%-4.00% 2,953 2,564 3,127 2,651 4.01%-4.50% 254 215 272 224 \$ 8,917 7,552 9,303 7,729 Total \$ \$ \$ \$ **Total MBS** 2,481,336 \$ 2,117,991 2,697,583 2,289,919 The following tables present the realized gains (losses) and the change in the cumulative unrealized gains (losses) related to SOMA domestic securities holdings held in the SOMA during the years ended December 31, 2023 and 2022 (in millions):

	Total SOMA										
	20:	23	20	22							
	red gains s), net ^{1, 2}	Change in cumulative unrealized gains (losses) ³	Realized gains (losses), net ^{1, 2}	Change in cumulative unrealized gains (losses) ³							
Treasury securities	\$ (32)	\$ 87,598	\$ (5)	\$ (807,471)							
Federal agency and GSE MBS											
Residential	(56)	44,110	(234)	(398,785)							
Commercial	_	209	_	(1,431)							
Total federal agency and GSE MBS	(56)	44,319	(234)	(400,216)							
GSE debt securities	_	(6)	_	(536)							
Total	\$ (88)	\$ 131,911	\$ (239)	\$ (1,208,223)							

¹ Realized gains (losses), net for Treasury securities are reported in "Other items of income (loss): System Open Market Account: Treasury securities losses, net" in the Combined Statements of Operations.

The amount of change in cumulative unrealized gains (losses) position, net related to foreign currency denominated investments was a gain of \$254 million and a loss of \$520 million for the years ended December 31, 2023 and 2022, respectively. Realized losses, net related to foreign currency denominated investments were \$125 million for the year ended December 31, 2023 and were immaterial for the year ended December 31, 2022.

Treasury securities, federal agency and GSE MBS, GSE debt securities, and foreign government debt instruments are classified as Level 2 within the ASC 820 hierarchy because the fair values are based on indicative quotes and other observable inputs obtained from independent pricing services. The fair value hierarchy level of SOMA financial assets is not necessarily an indication of the risk associated with those assets.

(6) CONSOLIDATED VARIABLE INTEREST ENTITIES

a. Summary Information for Consolidated Variable Interest Entities

The combined financial statements include the accounts and operations of Main Street, MLF, and TALF II. The Reserve Banks purchase assets or extend loans to the LLC in order to fund the VIEs. Intercompany balances and transactions are eliminated in consolidation. The assets and liabilities held by the LLCs are reported as "Consolidated variable interest entities: Assets held, net" and "Consolidated variable interest entities: Other liabilities," respectively, in the Consolidated Statements of Condition.

² Realized gains (losses), net for federal agency and GSE MBS are reported in "Other items of income (loss): System Open Market Account: Federal agency and government-sponsored enterprise mortgage-backed securities losses, net" in the Combined Statements of Operations.

³ Because SOMA securities are recorded at amortized cost, the change in the cumulative unrealized gains (losses) is not reported in the Combined Statements of Operations.

The classification of assets and liabilities of the consolidated VIEs as of December 31, 2023 and 2022 are as follows (in millions):

				20	23		
		Mai	n Street	MLF		TALF II	Total
Assets							
Cash and cash equivalents ¹	;	\$	1,981	\$ 213	\$	46	\$ 2,240
Short-term investments in non-marketable securities ²			6,791	_		_	6,791
Loan participations ³			7,067	_		-	7,067
Total assets, net		\$	15,839	\$ 213	\$	46	\$ 16,098
Liabilities	=		52				52
Net assets and liabilities	3	\$	15,787	\$ 213	\$	46	\$ 16,046
	_						

 $^{^{\}rm 1}$ Includes \$1,006 million of cash equivalents and \$1,234 million of cash.

³ Reported at principal amount outstanding, net of allowance, charge-offs, and recoveries and including interest receivable.

			2022									
	М	ain Street	MLF		TALF II		Total					
Assets	'											
Cash and cash equivalents ¹	\$	2,240	\$ 101	\$	54	\$	2,395					
Short-term investments in non-marketable securities ²		9,907	2,482		887		13,276					
Loan participations ³		10,763	_		_		10,763					
Municipal notes ⁴		_	2,907		_		2,907					
Loans ⁵		_	_		996		996					
Other assets		_	80		19		99					
Total assets, net	\$	22,910	\$ 5,570	\$	1,956	\$	30,436					
Liabilities		94	1	_	1		96					
Net assets and liabilities	\$	22,816	\$ 5,569	\$	1,955	\$	30,340					

¹ Includes \$547 million of cash equivalents and \$1,848 million of cash.

² Represents the portion of the Treasury preferred equity contribution to the credit facilities, which are held as short-term investments in non-marketable securities at amortized cost and the related earnings on those investments.

² Represents the portion of the Treasury preferred equity contribution to the credit facilities, which are held as short-term investments in non-marketable securities at amortized cost and the related earnings on those investments.

³ Reported at principal amount outstanding, net of allowance and charge-offs and including interest receivable.

⁴ Reported at amortized cost.

⁵ Reported at principal amount outstanding.

The following tables present the components of the LLCs' net operating income (loss) recorded for the years ended December 31, 2023 and 2022 (in millions):

			20	23		
	Ma	in Street	MLF		TALF II	Total
Interest income	\$	1,167	\$ 138	\$	71	\$ 1,376
Other items of income (loss):						
Fees		38	1		_	39
Provision for credit losses		(218)	_		_	(218)
Realized loss on sale of portfolio investments		(25)	_		_	(25)
Total other items of (loss) income		(205)	1	_	-	(204)
Less: expenses ¹		48	_		_	48
Net income attributable to consolidated VIEs	\$	914	\$ 139	\$	71	\$ 1,124
Allocated to non-controlling Treasury interest	\$	870	\$ 132	\$	36	\$ 1,038
Allocated to Reserve Banks	\$	44	\$ 7	\$	35	\$ 86
Memorandum—Cumulative earnings distribution: ²	\$	_	\$ 144	\$	48	\$ 192
Non-controlling Treasury interest		_	144		48	192
Reserve Banks		_	-		-	-

¹ Includes fees, loan participations servicing costs, and other expenses.

² Represents distribution of cumulative LLC earnings upon dissolution in accordance with the LLC's legal agreements.

			20	22		
	Ma	in Street	MLF		TALF II	Total
Interest income ¹	\$	731	\$ 83	\$	43	\$ 857
Other items of income (loss):						
Fees		53	2		1	56
Provision for loan losses		885	_		_	885
Total other items of income		938	2		1	941
Less: expenses ²		54	1		1	56
Net income attributable to consolidated VIEs	\$	1,615	\$ 84	\$	43	\$ 1,742
Allocated to non-controlling Treasury interest	\$	1,602	\$ 77	\$	22	\$ 1,701
Allocated to Reserve Banks	\$	13	\$ 7	\$	21	\$ 41
Memorandum—Cumulative earnings distribution: ³	\$	_	\$ _	\$	_	\$ -
Non-controlling Treasury interest		_	-		-	_
Reserve Banks		_	-		-	-

¹ Recorded when earned and includes amortization of premiums and accretion of discounts.

 $^{^{\}rm 2}$ Includes fees, loan participations servicing costs, and other expenses.

³ Represents distribution of cumulative LLC earnings upon dissolution in accordance with the LLC's legal agreements.

At December 31, 2023 and 2022, the maturity distribution of the LLCs' holdings are as follows (in millions):

2023									
			•		•		-		Total
\$	1,006	\$	_	\$	_	\$	_	\$	1,006
	6,791		_		_		_		6,791
	_		-		-		7,067		7,067
\$	7,797	\$	_	\$	_	\$	7,067	\$	14,864
		6,791	days to 90 \$ 1,006 \$ 6,791	days to 90 days 1,006	Within 15 days 16 days to 90 days 91 to 10 days \$ 1,006 \$ - \$ \$ 6,791	Within 15 days 16 days to 90 days 91 days to 1 year \$ 1,006 \$ - \$ - 6,791	Within 15 days 16 days to 90 days 91 days to 1 year Over to 1 year \$ 1,006 \$ - \$ - \$ - \$ 6,791	Within 15 days 16 days to 90 days 91 days to 1 year Over 1 year to 5 years \$ 1,006 \$ - \$ - \$ - 6,791 7,067 - 7,067	Within 15 days 16 days to 90 days 91 days to 1 year Over 1 year to 5 years \$ 1,006 \$ - \$ - \$ - \$ - \$ 6,791 7,067 - 7,067

		2022									
			thin 15 days		6 days 90 days		1 days 1 year		er 1 year 5 years		Total
Cash equivalents		\$	447	\$	100	\$	_	\$	-	\$	547
Short-term investments in non-marketable securities			13,276		_		_		_		13,276
Loan participations			_		_		_		10,763		10,763
Municipal notes			_		_		2,907		_		2,907
Loans			_		_		996		_		996
Total		\$	13,723	\$	100	\$	3,903	\$	10,763	\$	28,489
	=			_						_	

Allowance for Credit Losses and Charge-Offs

The allowance for credit losses is established in accordance with Main Street's credit loss policies and the adequacy of the allowance is reviewed at least annually. When the lifetime expected loss methodology was adopted January 1, 2023, an immaterial adjustment was recorded to increase credit losses under CECL.

Under the lifetime expected credit loss methodology, loan participations with similar risks are collectively assessed for expected credit losses whereas loan participations with different risks are individually assessed. To estimate an expected credit loss on an individual loan participation, Main Street considers credit indicators and the size of the loan participation. Main Street's allowance for credit loss evaluation includes both quantitative and qualitative components.

To calculate expected credit loss for the remaining life of the loan participations, the allowance considers relevant estimates of probability of default (PD) and loss given default (LGD) factors in light of credit ratings, and other loan characteristics (e.g., collateral positions), which are applied to exposure at default (principal amount outstanding). This formula-based credit evaluation approach is applied primarily by loss factors, which includes estimates of expected losses over the remaining life of the loan participations assigned to each risk rating segment. Qualitative factors, including changes in economic and business conditions over the remaining life of the loan participations, are assessed so that loss rates (product of PD and LGD) appropriately reflect risks within the current environment.

The evaluation of the adequacy of the allowance is primarily based upon internal risk rating models that assess probability of default, loss given default and exposure at default for each loan. The models are primarily driven by individual borrower financial characteristics, such as measures of profitability, leverage, and interest coverage. The

models are validated against historical industry experience. Participations are grouped using North American Industry Classification System (NAICS) codes into Services and Non-services segments for rating purposes. The Services segment includes and is not limited to industries such as accommodation and food services, retail, health care, information, and professional scientific and technical services. The Non-services segment includes and is not limited to manufacturing, construction, and agriculture, forestry, fishing, and hunting. Given significant differences in historical and expected performance, models differ for service and non-service industry loans. Loan participations are segmented into internal risk rating categories.

The principal exposure of loan participations on non-accrual status as of December 31, 2023 and 2022, was \$1.3 billion and \$2.0 billion, respectively. The evaluation of loan participations purchased by Main Street resulted in recording a credit loss allowance of \$0.8 billion as of December 31, 2023 and a loan loss allowance of \$1.1 billion as of December 31, 2022.

When a loan participation is charged off, any accrued but uncollected interest from both current and prior periods are charged against the allowance for credit losses as remaining interest receivable is specifically considered in the determination of the allowance for credit loss. Main Street realized principal and interest losses of \$452.5 million and \$79.9 million for charge-offs during the years ended December 31, 2023 and 2022, respectively.

In 2022, prior to the adoption of the CECL accounting guidance, Main Street's allowance for loan losses represented management's estimate of probable losses inherent in Main Street's loan participation portfolio. For MLF and TALF II, there were no assets for which the FRBNY determined there were expected credit losses and no allowance for credit impairment was required as of December 31, 2023 and 2022.

Loan Modifications

In certain cases, when a borrower experiences significant financial difficulties and is unable to meet its financial obligations, modifications to contractual terms may be approved that would not otherwise have been approved if the loan were performing. Modifications may include changes in payment structure and timing such as principal or interest payment deferral and other actions intended to minimize economic loss and avoid foreclosure or repossession of collateral. Previously, in 2022, modifications to contractual terms that would not otherwise have been approved if the loan were performing were classified and accounted for as a troubled debt restructuring loan. With the adoption of CECL accounting guidance in 2023, loan modifications are evaluated to determine whether a modification made to the borrower results in a new loan or a continuation of the existing loan. Loan participations are evaluated based on the revised contractual terms when determining credit loss allowance. Loan participations totaling \$460 million and \$80 million were modified as of December 31, 2023 and 2022, respectively. Main Street evaluated all loan modifications for impairment on an individual basis.

The following table presents the outstanding principal balances for loan participations that were modified at December 31, 2023, by type of modification (in millions):

			December 31	l, 2023		
	Servic	es	Non-serv	ices	Number of loan	
Loan participations modifications	Principal balance	% of segment	Principal balance	% of segment	participations	Deferral period
Interest payment deferral	\$ 5	-%	\$ _	-%	1	12 months
Principal payment deferral	310	6%	78	3%	26	3 to 24 months
Principal and interest payment deferral	28	1%	27	1%	2	7 to 27 months
Maturity extension and principal payment deferral ¹	12	-%	_	-%	1	24 to 36 months
Total loan participations modified	\$ 355		\$ 105		30	

 $^{^{\}rm 1}$ The loan participations maturity was extended by one year.

The following table presents the changes in modified loan participation balances for the years ended December 31, 2023 and 2022 (in millions):

	20)23	2022	
Balance at beginning of year	\$	80	\$	-
Additions ¹		434		80
Net charge-offs		(25)		_
Repayments		(29)		-
Balance at end of year	\$	460	\$	80

 $^{^{\}rm 1}$ Based on principal amount outstanding as beginning of year, plus capitalization during the year.

b. Fair Value

There was no material difference between the cost and fair value of \$1.0 billion of cash equivalents and \$6.8 billion of short-term investments in non-marketable securities at December 31, 2023 and \$0.5 billion of cash equivalents at December 31, 2022.

At December 31, 2023, there were no municipal notes holdings in MLF. The following table presents the LLCs' holdings at December 31, 2022, reported at amortized cost (in millions). Fair value is provided as supplemental information.

2022									
Amo	ortized cost						Fair value		
\$	13,276	\$	-	\$	_	\$	13,276		
	2,907		_		(41)		2,866		
\$	16,183	\$	_	\$	(41)	\$	16,142		
	\$ \$	2,907	\$ 13,276 \$ 2,907	\$ 13,276 \$ - 2,907 -	Amortized cost unrealized gains 1 unrealized gains 2	Amortized cost unrealized gains ¹ unrealized losses ¹ \$ 13,276 \$ - - 2,907 - (41)	Amortized cost unrealized gains ¹ unrealized losses ¹ \$ 13,276 \$ - \$ - \$ 2,907 - (41)		

¹ Because the LLCs' holdings were recorded at amortized cost, unrealized gains (losses) are not reported in the Combined Statements of Operations.

Collateral associated with loans were assigned a lending value, reduced by a margin, upon initial extension of credit to determine the maximum amount TALF II could lend. At December 31, 2023, all TALF II loans were repaid, and there was no outstanding collateral. The following table presents the loan principal and collateral fair value on TALF II's loans at December 31, 2022 (in millions):

	20	22
	Loan principal	Collateral fair value ¹
Loans ²	\$ 996	\$ 1,099

 $^{^{}m 1}$ Collateral fair value reflects the market value of collateral including accrued interest.

The following table presents the financial instruments recorded at fair value as of December 31, 2023 and 2022 by the FASB ASC 820, Fair Value Measurement, hierarchy (in millions):

	2023							
	Level 1	Level 2	Level 3	Total ¹				
Cash equivalents	\$ 1,006	\$ -	\$ -	\$ 1,006				

¹ There were no transfers between levels during the year ended December 31, 2023.

	2022							
	Level 1			Level 2		Level 3	1	Total ¹
Cash equivalents	\$	447	\$	100	\$	_	\$	547

¹ There were no transfers between levels during the year ended December 31, 2022.

At December 31, 2023 and 2022, the ratings breakdown of LLC holdings are as follows (in millions):

			2023	
	Government	/ agency	Not rated	Total
Cash equivalents	\$	259	\$ 747	\$ 1,006
Short-term investments in non-marketable securities		6,791	_	6,791

Note: Lowest of all ratings is used for the purpose of this table if rated by two or more nationally recognized statistical rating organizations.

			2022	
	Government/	agency	Not rated ¹	Total
Cash equivalents	\$	155	\$ 392	\$ 547
Short-term investments in non-marketable securities		13,276	_	13,276
Municipal notes		-	2,907	2,907

¹ Not rated categorization includes municipal notes with private ratings.

Note: Lowest of all ratings is used for the purpose of this table if rated by two or more nationally recognized statistical rating organizations.

² All loans are fully collateralized.

At December 31, 2022, the ratings breakdown of the fair value of collateral securing TALF II's loans are as follows (in millions):

		2022						
Collateral sector			AAA	Government/ agenc	y	Total		
SBA loans		\$	_	\$ 89	9	\$ 899		
Commercial mortgages			19	-	-	19		
Leveraged loans			181	-	-	181		
Total		\$	200	\$ 89	9	\$ 1,099		
	•		·	-	_ =			

Note: Lowest of all ratings was used for the purpose of this table if rated by two or more nationally recognized statistical rating organizations.

The estimated fair value for loan participations, which are recorded at the cost of purchase, plus capitalized interest, less any principal paydowns, is approximately \$7.4 billion and \$10.8 billion at December 31, 2023 and 2022, respectively. Because external observable pricing information is not available, a market based discounted cash flow model is used to value loan participations classified within level 3. Key inputs to the model include market spread data for each credit rating, collateral type, and other relevant contractual features.

c. Risk Profile

Short-term investments are subject to minimal interest rate and credit risk as these are principally short-term government-guaranteed investments. The average internal risk rating for loan participations at principal amount outstanding held as of December 31, 2023 and 2022 was equivalent to a Moody's rating of B2.

The following table shows rating distribution using internally derived risk ratings on a scale comparable to a Moody's rating scale as of December 31, 2023 and 2022:

		Percentage of loan participations					
Rating		2023	2022				
Ba or higher		37 %	37 %				
В		33 %	38 %				
Caa		17 %	14 %				
Ca		13 %	11 %				
Total		100 %	100 %				
	•						

d. Contributions and Distributions of Treasury Equity

The following table presents the Treasury's contributions and distributions of capital, distributions of LLC earnings, and current year undistributed LLC earnings as of December 31, 2023 and 2022 (in millions), which are reported as "Consolidated variable interest entities: Non-controlling interest—capital contribution (distribution)," "Consolidated variable interest entities: Non-controlling interest—(earnings distribution)," and "Consolidated variable interest entities: Income (loss), net," respectively, in the Combined Statements of Changes in Capital.

	N	lain Street		MLF		TALF II		Total
Treasury's equity, January 1, 2022	\$	14,060	\$	4,346	\$	1,395	\$	19,801
Capital contribution, during the year		-		-		_		-
Capital (distribution)		(4,222)		(1,349)		(340)		(5,911)
Current year undistributed LLC earnings		1,602		77		22		1,701
Earnings distribution ¹		_		-		_		-
Treasury's equity, December 31, 2022	\$	11,440	\$	3,074	\$	1,077	\$	15,591
Capital contribution, during the year				_				_
Capital (distribution)		(4,014)		(2,870)		(1,024)		(7,908)
Current year undistributed LLC earnings		870		132		36		1,038
Earnings distribution ¹		_		(144)		(48)		(192)
Treasury's equity, December 31, 2023	\$	8,296	\$	192	\$	41	\$	8,529
			_		_		_	

¹ Represents distribution of cumulative earnings upon dissolution in accordance with the LLC's legal agreements.

The following tables present the Treasury's cumulative capital contributions and undistributed LLC earnings (loss) as of December 31, 2023 and 2022 (in millions):

	ľ	Main Street	MLF	TALF II		Total
Capital contributions	\$	11,452	\$ 2,870	\$ 1,024	\$	15,346
Undistributed LLC (loss) earnings		(12)	204	53		245
Treasury's equity, December 31, 2022	\$	11,440	\$ 3,074	\$ 1,077	\$	15,591
	_					
Capital contributions	\$	7,438	\$ _	\$ _	\$	7,438
Undistributed LLC earnings		858	192	41		1,091
Treasury's equity, December 31, 2023	\$	8,296	\$ 192	\$ 41	\$	8,529
	_				_	

The assets of the VIE and the amounts provided by the Treasury as credit protection are used to secure the loans from the Reserve Banks. Funds provided by the Treasury's preferred equity contribution are invested as mutually agreed upon by each LLC and Treasury and consented to by the Reserve Banks. Additionally, the managing member has contributed a nominal amount to each LLC.

e. Short-Term Investments in Non-Marketable Securities

In accordance with the terms of the Preferred Equity Investment Agreements for Main Street, MLF and TALF II, approximately 85 percent of the Treasury's initial equity contribution was invested in overnight non-marketable securities issued by the Treasury to each LLC. These investments are reported as restricted cash and cash equivalents as there are contractual limitations and restrictions on the use of the funds and ability to withdraw the funds. The remaining equity contribution of approximately 15 percent of the initial equity contribution was held in cash on deposit at FRBNY to support the liquidity needs of each LLC. Due to the short-term nature of cash equivalents and non-marketable securities, the cost basis is estimated to approximate fair value.

Federal Reserve Banks Annual Financial Statements

(7) BANK PREMISES, EQUIPMENT, AND SOFTWARE

Bank premises and equipment at December 31, 2023 and 2022 were as follows (in millions):

	2023		2022
Bank premises and equipment:			
Land and land improvements	\$ 4	46	\$ 429
Buildings	3,3	66	3,246
Construction	1	24	131
Furniture and equipment	2,4	37	2,224
Subtotal	6,3	73	6,030
Accumulated depreciation	(3,4	76)	(3,330)
Bank premises and equipment, net	\$ 2,8	97	\$ 2,700
Depreciation expense, for the years ended December 31	\$ 2	42	\$ 244

Bank premises and equipment at December 31, 2023 and 2022 included the following amounts for finance leases (in millions):

	2023		2	022
Leased premises and equipment under finance leases	\$	54	\$	62
Accumulated depreciation		(34)		(41)
Leased premises and equipment under finance leases, net	\$	20	\$	21
Depreciation expense related to leased premises and equipment under finance leases, for the years ended December 31	\$	12	\$	9

The Reserve Banks lease space to outside tenants with remaining lease terms ranging from 1 to 14 years, which reflect any renewal options the lessee is reasonably certain to exercise or termination options not reasonably certain to exercise. Rental income from such leases was \$34 million and \$37 million for the years ended December 31, 2023 and 2022, respectively, and is reported as a component of "Other items of income (loss): Other" in the Combined Statements of Operations. Future minimum lease payments that the Reserve Banks will receive under non-cancelable lease agreements in existence at December 31, 2023 are as follows (in millions):

2024	\$ 31
2025	27
2026	26
2027	24
2028	21
Thereafter	69
Total	\$ 198

The Reserve Banks had capitalized software assets, net of amortization, of \$518 million and \$445 million at December 31, 2023 and 2022, respectively. Amortization expense was \$138 million and \$108 million for the

years ended December 31, 2023 and 2022, respectively. Capitalized software assets are reported as a component of "Other assets" in the Combined Statements of Condition and the related amortization is reported as a component of "Operating expenses: Other" in the Combined Statements of Operations.

(8) COMMITMENTS AND CONTINGENCIES

In conducting its operations, the Reserve Banks enter into contractual commitments, normally with fixed expiration dates or termination provisions, at specific rates and for specific purposes.

At December 31, 2023, the Reserve Banks were obligated under non-cancelable leases for premises with remaining terms ranging from 1 to approximately 7 years. The lease term and the recorded amount of right-of-use assets and lease liabilities include any renewal options reasonably certain to be exercised or termination options not reasonably certain to be exercised. These leases provide for increased lease payments based upon increases in real estate taxes, operating costs, or selected price indexes.

Rental expense for certain operating facilities, warehouses, and data processing (including taxes, insurance, and maintenance when included in rent) was \$17 million and \$11 million for the years ended December 31, 2023 and 2022, respectively.

Lease right-of-use assets were \$29 million and \$18 million at December 31, 2023 and 2022, respectively, and are reported as a component of "Other assets" in the Combined Statements of Condition, while lease liabilities are disclosed below and are reported as a component of "Other liabilities" in the Combined Statements of Condition. Future minimum lease payments and total lease liabilities under non-cancelable operating leases at December 31, 2023 are as follows (in millions):

	Operating leases
2024	\$ 13
2025	9
2026	3
2027	2
2028	1
Thereafter	2
Future minimum lease payments	\$ 30

At December 31, 2022, the Reserve Banks, acting on their own behalf, had unrecorded unconditional purchase commitments extending through the year 2029 with a remaining fixed commitment of \$230 million. Purchases of \$65 million and \$73 million were made against these commitments during 2023 and 2022, respectively. These commitments represent maintenance of currency processing machines and development of new equipment and

have variable and fixed components. The fixed payments for the next five years under these commitments are as follows (in millions):

2024	\$ 38
2025	46
2026	36
2027	36
2028	38

Under an insurance agreement of the Reserve Banks, each of the Reserve Banks has agreed to bear, on a perincident basis, a share of certain losses in excess of 1 percent of the capital paid-in of the claiming Reserve Bank, up to 50 percent of the total capital paid-in of all Reserve Banks. Losses are borne in the ratio of a Reserve Bank's capital paid-in to the total capital paid-in of all Reserve Banks at the beginning of the calendar year in which the loss is shared. No claims were outstanding under the agreement at December 31, 2023 and 2022.

The Reserve Banks are involved in certain legal actions and claims arising in the ordinary course of business. Although it is difficult to predict the ultimate outcome of these actions, in management's opinion, based on discussions with counsel, the legal actions and claims will be resolved without material adverse effect on the financial position or results of operations of the Reserve Banks.

(9) RETIREMENT AND THRIFT PLANS

Retirement Plans

The Reserve Banks currently offer three defined benefit retirement plans to its employees, based on length of service and level of compensation. Substantially all of the employees of the Reserve Banks, Board of Governors, and Office of Employee Benefits of the Federal Reserve System (OEB) participate in the System Plan. Under the Dodd-Frank Act, eligible Bureau employees may participate in the System Plan and, during the years ended December 31, 2023 and 2022, certain costs associated with the System Plan were reimbursed by the Bureau. In addition, employees at certain compensation levels participate in the Benefit Equalization Retirement Plan (BEP) and certain Reserve Bank officers participate in the Supplemental Retirement Plan for Select Officers of the Federal Reserve Banks (SERP).

On behalf of the System, the FRBNY recognized the net asset or net liability and costs associated with the System Plan in its financial statements during 2022 and January 1, 2023, through July 31, 2023. Previously, the OEB was a separate legal entity that administered the selected System benefit plans, and on August 1, 2023, was integrated into the operations of the Federal Reserve Bank of Atlanta (FRBA). Beginning August 1, 2023, the FRBA began recognizing the net asset or net liability and costs associated with the System Plan in its financial statements. The Reserve Banks report the service cost related to the System Plan as "Operating expenses:

System pension service cost" in its Combined Statements of Operations, and other net benefit costs related to the System Plan as a component of "Other items of income (loss): Other components of net benefit costs" in its Combined Statements of Operations. The Reserve Banks report the service cost related to the BEP and SERP as a component of "Operating expenses: Salaries and benefits" in its Combined Statements of Operations, the net cost related to the BEP and SERP as "Other items of income (loss): Other components of net benefit costs" in its Combined Statements of Operations, and the net liability as a component of "Accrued benefit costs" in its Combined Statements of Condition.

Following is a reconciliation of the beginning and ending balances of the System Plan benefit obligation for the years ended December 31, 2023 and 2022 (in millions):

	2023	2022
Estimated actuarial present value of projected benefit obligation at January 1	\$ 17,559	\$ 24,194
Service cost—benefits earned during the period	548	946
Interest cost on projected benefit obligation	992	775
Actuarial loss (gain)	1,055	(7,745)
Contributions by plan participants	3	6
Special termination benefits	24	7
Benefits paid	(693)	(624)
Estimated actuarial present value of projected benefit obligation at December 31	\$ 19,488	\$ 17,559

Annually, the Society of Actuaries Retirement Plan Experience Committee reviews the most recent mortality experience and can release updated mortality tables and mortality projection scales. This year, the annual review released in October 2023 did not update the mortality tables or mortality projections, however, the System reviewed the System's actual retiree mortality experience as part of an annual review. As a result, the System retained for year-end 2023 the modified MP-2019 projections scales and Pri-2012 mortality tables with updated adjustments to reflect the recent mortality experience of System retirees. These adjustments resulted in an addition to the Retirement Plan projected benefit obligation of approximately \$32 million in 2023.

Following is a reconciliation showing the beginning and ending balance of the System Plan assets, the funded status, and the accrued pension benefit costs for the years ended December 31, 2023 and 2022 (in millions):

	2023	2022
Estimated plan assets at January 1 (of which \$18,897 and \$24,643 is measured at fair value as of January 1, 2023 and 2022, respectively)	\$ 18,892	\$ 24,666
Actual return on plan assets	1,988	(5,338)
Contributions by the employers	296	182
Contributions by plan participants	3	6
Benefits paid	(693)	(624)
Estimated plan assets at December 31 (of which \$20,529 and \$18,897 is measured at fair value as of December 31, 2023 and 2022, respectively)	\$ 20,486	\$ 18,892
Funded status and accrued pension benefit costs	\$ 998	\$ 1,333
Amounts included in accumulated other comprehensive loss are shown below:		
Net actuarial loss	\$ (1,873)	\$ (1,593)
Total accumulated other comprehensive loss	\$ (1,873)	\$ (1,593)

The Reserve Banks, on behalf of the System, funded \$240 million and \$140 million during the years ended December 31, 2023 and 2022, respectively. The Bureau is required by the Dodd-Frank Act to fund the System Plan for each Bureau employee based on an established formula. During the years ended December 31, 2023 and 2022, the Reserve Banks received contributions from the Bureau of \$56 million and \$42 million, respectively.

The accumulated benefit obligation for the System Plan, which differs from the estimated actuarial present value of projected benefit obligation because it is based on current rather than future compensation levels, was \$17,041 million and \$15,430 million at December 31, 2023 and 2022, respectively.

The weighted-average assumptions used in developing the accumulated pension benefit obligation for the System Plan as of December 31 were as follows:

	2023	2022
Discount rate	5.24 %	5.55 %
Rate of compensation increase	4.50 %	4.50 %

Net periodic benefit expenses for the years ended December 31, 2023 and 2022 were actuarially determined using a January 1 measurement date. The weighted-average assumptions used in developing net periodic benefit expenses for the System Plan for the years were as follows:

	2023	2022
Discount rate	5.55 %	3.09 %
Expected asset return	6.50 %	5.25 %
Rate of compensation increase	4.50 %	4.25 %

Discount rates reflect yields available on high-quality corporate and other taxable bonds that would generate the cash flows necessary to pay the System Plan's benefits when due. The expected long-term rate of return on assets is an estimate that is based on a combination of factors, including the System Plan's asset allocation strategy and historical returns; surveys of expected rates of return for various asset classes; and projected returns for equities and fixed income investments based on observable inputs for real interest rates, inflation expectations, and equity risk premiums.

The components of net periodic pension benefit expense for the System Plan for the years ended December 31, 2023 and 2022 are shown below (in millions):

	2023	2022
Service cost—benefits earned during the period	\$ 548	\$ 946
Other components of periodic pension benefit expense:		
Interest cost on projected benefit obligation	\$ 992	\$ 775
Amortization of actuarial loss	_	45
Expected return on plan assets	(1,213)	(1,290)
Special termination benefits	24	7
Bureau of Consumer Financial Protection contributions	(56)	(42)
Other components of periodic pension benefit (credit)	 (253)	(505)
Total periodic pension benefit expense	\$ 295	\$ 441

The service cost component of periodic pension benefit expense is reported as "Operating expenses: System pension service cost" in the Combined Statements of Operations and the other components of periodic pension benefit expense are reported as a component of "Other items of income (loss): Other components of net benefit costs" in the Combined Statements of Operations.

The recognition of special termination benefits is primarily the result of enhanced retirement benefits provided to employees in the normal course of operations. Following is a summary of expected benefit payments, excluding enhanced retirement benefits (in millions):

2029-2033 Total	\$ 5,485 9,676
2028	938
2027	887
2026	836
2025	788
2024	\$ 742

The System's Committee on Plan Administration is responsible for oversight of the operations of the Retirement Plan, which includes the Retirement Plan trust and for determining the amounts necessary to maintain the

54

Retirement Plan on an actuarially sound basis and the amounts that employers must contribute to pay the expenses of OEB and the Retirement Plan.

The System's Committee on Investment Performance (CIP) is responsible for establishing investment policies, selecting investment managers, and monitoring the investment managers' compliance with its policies. At December 31, 2023, the System Plan's assets were held in 52 investment vehicles: 7 actively-managed long-duration fixed income portfolios, a passively-managed long-duration fixed income portfolio, an actively-managed crossover high yield fixed income portfolio, an indexed U.S. equity fund, an indexed non-U.S. developed-markets equity fund, an indexed emerging-markets equity fund, 11 private equity limited partnerships, a private equity separate account, 4 core real estate funds, 23 real estate limited partnerships, and a money market fund.

The diversification of the System Plan's investments is designed to limit concentration of risk and the risk of loss related to an individual asset class. The seven actively-managed long-duration fixed income portfolios are separate accounts benchmarked to a custom benchmark of 55 percent Bloomberg Long Credit Downgrade Protected Index and 45 percent Bloomberg 15+ years Treasury STRIPS Index. This custom benchmark was selected as a proxy to match the liabilities of the System Plan and the guidelines for these portfolios are designed to limit portfolio deviations from the benchmark. The passively-managed long-duration fixed-income portfolio is invested in 2 commingled funds and is benchmarked to 55 percent Bloomberg Long Credit Index and 45 percent Bloomberg 20+ STRIPS Index. The actively-managed crossover high yield fixed income portfolio is benchmarked to a custom benchmark of 75 percent Bloomberg BB High Yield Index and 25 percent Bloomberg BBB Index. The indexed U.S. equity fund is intended to track the overall U.S. equity market across market capitalizations and is benchmarked to the CRSP U.S. Total Market Index. The indexed non-U.S. developed-markets equity fund is intended to track the MSCI to be "developed markets." The indexed emerging-markets equity fund is intended to track the MSCI Emerging Markets IMI Index, which includes stocks from 24 markets deemed by MSCI to be "emerging markets."

The 3 indexed equity funds include stocks from across the market capitalization spectrum (i.e., large-, mid- and small-cap stocks).

The 11 private equity limited partnerships invest globally across various private equity strategies and the private equity separate account invests in various private equity funds (both primary and secondary interests) and coinvestment opportunities globally in private companies and targets returns in excess of public markets over a complete market cycle.

The 4 core real estate funds invest in high quality, well leased, low leverage commercial real estate throughout the U.S.

The 23 real estate limited partnerships invest in core plus, value-add and opportunistic U.S. and international commercial real estate including development and repositioning of assets. Finally, the money market fund, which invests in short term Treasury and agency debt and repurchase agreements backed by Treasury and agency debt, is the repository for cash balances and adheres to a constant dollar methodology.

Permitted and prohibited investments, including the use of certain derivatives, are defined in either the trust agreement (for the passively-managed long-duration fixed income and indexed equity funds portfolio) or the investment guidelines (for the remaining investments). The CIP reviews the trust agreement and approves all investment guidelines as part of the selection of each investment to ensure that they are consistent with the CIP's investment objectives for the System Plan's assets.

The System Plan's policy weight and actual asset allocations at December 31, 2023 and 2022 by asset category, are as follows:

	2023	Actual asset	allocations
	Policy weight	2023	2022
Long-duration fixed income	50.0 %	51.4 %	50.0 %
U.S. equities	20.3 %	17.9 %	18.3 %
International equities	9.1 %	8.2 %	8.5 %
Private equity	7.0 %	7.9 %	8.6 %
High yield fixed income	5.0 %	5.2 %	5.0 %
Real estate	5.0 %	5.3 %	5.9 %
Emerging markets equities	3.6 %	3.1 %	3.2 %
Cash	0.0 %	1.0 %	0.5 %
Total	100.0 %	100.0 %	100.0 %

Employer contributions to the System Plan may be determined using different assumptions than those required for financial reporting. There is no funding anticipated for the System Plan for 2024 and monthly contributions will be reevaluated periodically. The Reserve Banks' projected benefit obligation, funded status, and net pension expenses for the BEP and SERP at December 31, 2023 and 2022, and for the years then ended, were immaterial.

Determination of Fair Value

The System Plan's publicly traded investments are valued on the basis of the last available bid prices or current market quotations provided by dealers or pricing services. To determine the value of a particular investment, pricing services may use information on transactions in such investments, quotations from dealers, pricing metrics, market transactions in comparable investments, relationships observed in the market between investments, and calculated yield measures based on valuation methodologies commonly employed in the market for such investments.

Collective trust funds are valued using the net asset value, calculated daily, based on the fair value of the underlying investments. Private equity and real estate investments are valued using the net asset value, as a practical expedient, which is based on the fair value of the underlying investments. The net asset value is adjusted for contributions, distributions, and both realized and unrealized gains and losses incurred during the period. The realized and unrealized gains and losses are based on reported valuation changes.

Because of the uncertainty inherent in determining the fair value of investments that do not have a readily available fair value, the fair value of these investments may differ significantly from the values that would have been reported if a readily available fair value had existed for these investments and may differ materially from the values that may ultimately be realized.

The following tables present the financial instruments recorded at fair value as of December 31, 2023 and 2022 by FASB ASC 820, Fair Value Measurement, hierarchy (in millions):

	2023							
Description	Level 1		Level 2		Level 3			Total ¹
Short-term investments	\$	441	\$	_	\$	_	\$	441
Treasury and federal agency securities		128		3,417		_		3,545
Corporate bonds		-		4,634		_		4,634
Other fixed income securities		-		445		_		445
Collective trusts	8	750		_		_		8,750
Real estate		-		152		_		152
Investments measured at net asset value ²		-		_		_		2,549
Total investments at fair value ³	\$ 9	319	\$	8,648	\$	_	\$	20,516

¹ There were no transfers between levels during the year ended December 31, 2023.

³ In addition to total investments, the System Plan holds future margin receivable of \$20 million, future margin payable of \$7 million, and foreign exchange forward payable of \$0.2 million at December 31, 2023.

	2022						
Description	Level 1		Level 2		Level 3		Total ¹
Short-term investments	\$ 329	\$	_	\$	-	\$	329
Treasury and federal agency securities	135		3,214		_		3,349
Corporate bonds	_		4,277		_		4,277
Other fixed income securities	_		380		_		380
Collective trusts	7,828		_		_		7,828
Real estate ²	_		182		_		182
Investments measured at net asset value ³	_		_		_		2,556
Total investments at fair value ⁴	\$ 8,292	\$	8,053	\$	_	\$	18,901

¹ There were no transfers between levels during the year ended December 31, 2022.

² Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy.

² Real estate investments of \$567 million that were previously reported using Level 2 inputs have been reclassified to net asset value to conform to current year presentation.

³ Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy.

⁴ In addition to total investments at fair value, the System Plan holds future margin receivable of \$4 million, future margin payables of \$7 million, and foreign exchange forward payable of \$1 million at December 31, 2022.

The System Plan enters into futures contracts, traded on regulated exchanges, to manage certain risks and to maintain appropriate market exposure in meeting the investment objectives of the System Plan. The System Plan bears the market risk that arises from any unfavorable changes in the value of the securities or indexes underlying these futures contracts. The use of futures contracts involves, to varying degrees, elements of market risk in excess of the amount recorded in the Combined Statements of Condition. The guidelines established by the CIP further reduce risk by limiting the net futures positions, for most fund managers, to 15 percent of the market value of the advisor's portfolio.

At December 31, 2023 and 2022, a portion of short-term investments was available for futures trading. There were \$13 million and \$14 million of Treasury securities and cash pledged as collateral for the years ended December 31, 2023 and 2022, respectively.

The System Plan also enters into currency spot and forward transactions as a means of hedging currency exposure for securities denominated in a foreign currency.

Forward currency transactions are non-exchange-traded contracts or agreements for delayed delivery of specific currencies in which the seller agrees to make delivery at a specified future date of specified currencies. Risks associated with forward currency contracts are the inability of counterparties to meet the terms of their respective contracts and movements in fair value and exchange rates. The forward contracts are customized for the specific asset(s) being hedged.

Thrift Plan

Employees of the Reserve Banks participate in the defined contribution Thrift Plan for Employees of the Federal Reserve System (Thrift Plan). The Reserve Banks match 100 percent of the first 6 percent of employee contributions from the date of hire and provides an automatic employer contribution of 1 percent of eligible pay. The Reserve Banks' Thrift Plan contributions totaled \$187 million and \$173 million for the years ended December 31, 2023 and 2022, respectively, and are reported as a component of "Operating expenses: Salaries and benefits" in the Combined Statements of Operations.

(10) POSTRETIREMENT BENEFITS OTHER THAN RETIREMENT PLANS AND POSTEMPLOYMENT BENEFITS

Postretirement Benefits Other Than Retirement Plans

In addition to the Reserve Banks' retirement plans, employees who have met certain age and length-of-service requirements are eligible for both medical and life insurance benefits during retirement.

The Reserve Banks and plan participants fund benefits payable under the medical and life insurance plans as due and the plans have no assets.

Following is a reconciliation of the beginning and ending balances of the benefit obligation for the years ended December 31, 2023 and 2022 (in millions):

	2023	2022
Accumulated postretirement benefit obligation at January 1	\$ 1,338	\$ 1,931
Service cost—benefits earned during the period	61	102
Interest cost on accumulated benefit obligation	73	59
Net actuarial loss (gain) ¹	50	(682)
Special termination benefits loss	1	-
Contributions by plan participants	32	32
Benefits paid	(110)	(105)
Medicare Part D subsidies	2	2
Plan amendments	(125)	(1)
Accumulated postretirement benefit obligation at December 31	\$ 1,322	\$ 1,338

¹ Includes \$6 million of the OEB's accumulated postretirement benefit obligation at August 1, 2023 resulting from integrating operations into the FRBA.

At December 31, 2023 and 2022, the weighted-average discount rate assumptions used in developing the postretirement benefit obligation were 5.11 percent and 5.43 percent, respectively.

Discount rates reflect yields available on high-quality corporate bonds that would generate the cash flows necessary to pay the plan's benefits when due. The System Plan discount rate assumption setting convention uses an unrounded rate.

Following is a reconciliation of the beginning and ending balance of the plan assets, and the unfunded postretirement benefit obligation and accrued postretirement benefit costs for the years ended December 31, 2023 and 2022 (in millions):

		2023		2022
Fair value of plan assets at January 1	\$	-	\$	-
Contributions by the employer		78		73
Contributions by plan participants		32		32
Benefits paid		(110)		(105)
Fair value of plan assets at December 31	\$	_	\$	-
Unfunded obligation and accrued postretirement benefit costs	\$	1,322	\$	1,338
Amounts included in accumulated other comprehensive income are shown below:				
Prior service cost	\$	148	\$	46
Net actuarial gain ¹	Ψ	489	Ψ	587
Total accumulated other comprehensive income	\$	637	\$	633
I ·	_		_	

¹ Includes \$2 million of the OEB's postretirement net actuarial gain resulting from integrating operations into the FRBA.

Accrued postretirement benefit costs are reported as a component of "Accrued benefit costs" in the Combined Statements of Condition.

For measurement purposes, the assumed health-care cost trend rates at December 31, 2023 and 2022 are provided in the table below:

	2023	2022
Health-care cost trend rate assumed for next year	6.25 %	6.50 %
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	4.75 %	4.75 %
Year that the rate reaches the ultimate trend rate	2030	2030

The following is a summary of the components of net periodic postretirement benefit expense for the years ended December 31, 2023 and 2022 (in millions):

	20	023	2	2022
Service cost—benefits earned during the period	\$	61	\$	102
Other components of periodic postretirement benefit expense:				
Interest cost on accumulated benefit obligation	¢	73	¢	59
•	Ψ		\$	
Amortization of prior service credit		(22)		(30)
Amortization of net actuarial (gain) loss		(55)		5
Special termination benefits loss		1		_
Other components of periodic postretirement benefit expense		(3)		34
Total periodic postretirement benefit expense	\$	58	\$	136

The service cost component of periodic postretirement benefit expense is reported as a component of "Operating expenses: Salaries and benefits" in the Combined Statements of Operations and the other components of periodic postretirement benefit expense are reported as a component of "Other items of income (loss): Other components of net benefit costs" in the Combined Statements of Operations.

Net postretirement benefit costs are actuarially determined using a January 1 measurement date. At January 1, 2023 and 2022, the weighted-average discount rate assumptions used to determine net periodic postretirement benefit costs were 5.43 percent and 2.91 percent, respectively.

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 established a prescription drug benefit under Medicare (Medicare Part D) and a federal subsidy to sponsors of retiree health-care benefit plans that provide benefits that are at least actuarially equivalent to Medicare Part D. The benefits provided under the Reserve Banks' plan to certain participants are at least actuarially equivalent to the Medicare Part D prescription drug benefit. The estimated effects of the subsidy are reflected in the actuarial gain in the accumulated postretirement benefit obligation and net periodic postretirement benefit expense.

Federal Medicare Part D subsidy receipts were immaterial in the years ended December 31, 2023 and 2022. Expected receipts in 2024, related to benefits paid in the years ended December 31, 2023 and 2022, are immaterial.

Following is a summary of expected postretirement benefit payments (in millions):

	Without subsidy		With subsidy
2024	\$ 85	\$	84
2025	86		85
2026	90		89
2027	94		92
2028	97		96
2029-2033	534		528
Total	\$ 986	\$	974
		. —	

Postemployment Benefits

The Reserve Banks offers benefits to former qualifying or inactive employees. Postemployment benefit costs are actuarially determined using a December 31 measurement date and include the cost of providing disability; medical, dental, and vision insurance; survivor income benefits, and certain workers' compensation expenses. The accrued postemployment benefit costs recognized by the Reserve Banks at December 31, 2023 and 2022 were \$68 million and \$74 million, respectively. This cost is included as a component of "Accrued benefit costs" in the Combined Statements of Condition. Net periodic postemployment benefit expense (credit) included in 2023 and 2022 operating expenses were \$7 million and \$(7) million, respectively, and are recorded as a component of "Operating expenses: Salaries and benefits" in the Combined Statements of Operations.

(11) ACCUMULATED OTHER COMPREHENSIVE INCOME AND OTHER COMPREHENSIVE INCOME

Following is a reconciliation of beginning and ending balances of accumulated other comprehensive income (loss) as of December 31, 2023 and 2022 (in millions):

	2023					2022				
	to de ber	t related efined nefit ent plan	Amount related to postretirement benefits other than retirement plans	Total accumulated other comprehensive income (loss)		nount related to defined benefit irement plan	Amount related to postretirement benefits other than retirement plans	Total accumulated other comprehensive income (loss)		
Balance at January 1	\$	(1,593)	\$ 633	\$ (960) \$	(2,754)	\$ (25)	\$ (2,779)		
Change in funded status of benefit plans:										
Prior service costs arising during the year		_	125	125		-	1	1		
Amortization of prior service cost (credit) ¹		_	(22)	(22)	-	(30)	(30)		
Change in prior service costs related to benefit plans		_	103	103		_	(29)	(29)		
Net actuarial (loss) gain arising during the year ²		(280)	(44)	(324)	1,116	682	1,798		
Amortization of net actuarial loss (gain) ¹		_	(55)	(55)	45	5	50		
Change in actuarial gain related to benefit plans		(280)	(99)	(379)	1,161	687	1,848		
Change in funded status of benefit plans—other comprehensive (loss) income		(280)	4	(276)	1,161	658	1,819		
Balance at December 31	\$	(1,873)	\$ 637	\$ (1,236) \$	(1,593)	\$ 633	\$ (960)		

¹ Reclassification is reported as a component of "Other items of income (loss): Other components of net benefit costs" in the Combined Statements of Operations.

Additional detail regarding the classification of accumulated other comprehensive loss is included in Notes 9 and 10.

(12) RECONCILIATION OF TOTAL DISTRIBUTION OF COMPREHENSIVE INCOME AND TREASURY REMITTANCES

In accordance with the FRA, the Reserve Banks remits excess earnings to the Treasury after providing for the cost of operations, payment of dividends, and reservation of an amount necessary to maintain the Reserve Banks' allocated portion of the aggregate surplus limitation (see Note 3r).

The Reserve Banks remitted excess earnings to the Treasury on a weekly basis during most of 2022 and periodically during 2023. In the fall of 2022, the Reserve Banks first suspended weekly remittances to the Treasury because earnings shifted from excess to less than the costs of operations, payment of dividends, and reservation of surplus. The Reserve Banks' deferred asset represents the net accumulation of costs in excess of earnings, and is reported as "Deferred asset – remittances to the Treasury" in the Combined Statements of Condition. The deferred asset represents the amount of net excess earnings the Reserve Banks will need to realize in the future before remittances to the Treasury resume. No impairment existed as of December 31, 2023, as net excess earnings of the Reserve Banks in future periods are expected to exceed the balance of the deferred asset.

² Includes \$2 million of the OEB's postretirement net actuarial gain resulting from integrating operations into the FRBA.

The following table presents the distribution of the Reserve Banks' and System's total comprehensive income for the years ended December 31, 2023 and 2022 (in millions):

		System total		
		2023		2022
Reserve Bank and consolidated variable interest entity net (loss) income before providing for remittances to the Treasury	\$	(114,300)	\$	58,836
Other comprehensive (loss) income		(276)		1,819
Total comprehensive (loss) income—available for distribution	\$	(114,576)	\$	60,655
Distribution of comprehensive income (loss):				
Dividends	\$	1,487	\$	1,209
Remittances transferred to the Treasury ¹		670		76,031
Deferred asset increase		(116,733)		(16,585)
Earnings remittances to the Treasury, net	-	(116,063)		59,446
Total distribution of comprehensive (loss) income	\$	(114,576)	\$	60,655

¹ Represents cumulative excess earnings remittances transferred to the Treasury.

(13) SUBSEQUENT EVENTS

As of February 23, 2024, all holdings of MLF and TALF II were liquidated, final obligations were satisfied, and final distributions of proceeds were made to FRBNY and the Treasury. The following table presents the distribution of the Treasury's and FRBNY's cumulative earnings since inception through the March 2024 dissolution in accordance with the LLCs' legal agreements (in millions):

	M	LF	TALF I	l
Cumulative earnings distribution				
Non-controlling interest—Treasury	\$	192	\$	41
Managing member—FRBNY		21		5
Total cumulative earnings distribution	\$	213	\$	46
				\neg

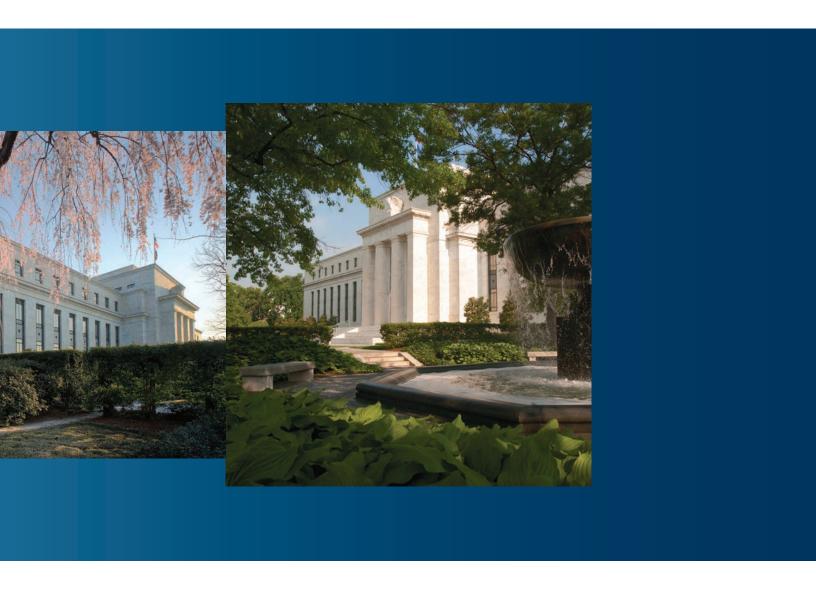
Subsequent events were evaluated through March 18, 2024, which is the date that these financial statements were available to be issued.



Exhibit 4

MONETARY POLICY REPORT

July 5, 2024



Board of Governors of the Federal Reserve System

LETTER OF TRANSMITTAL



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Washington, D.C., July 5, 2024

THE PRESIDENT OF THE SENATE

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

erm H. Pawell

The Board of Governors is pleased to submit its *Monetary Policy Report* pursuant to section 2B of the Federal Reserve Act.

Sincerely,

Jerome H. Powell, Chair

STATEMENT ON LONGER-RUN GOALS AND MONETARY POLICY STRATEGY

Adopted effective January 24, 2012; as reaffirmed effective January 30, 2024

The Federal Open Market Committee (FOMC) is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.

Employment, inflation, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Monetary policy plays an important role in stabilizing the economy in response to these disturbances. The Committee's primary means of adjusting the stance of monetary policy is through changes in the target range for the federal funds rate. The Committee judges that the level of the federal funds rate consistent with maximum employment and price stability over the longer run has declined relative to its historical average. Therefore, the federal funds rate is likely to be constrained by its effective lower bound more frequently than in the past. Owing in part to the proximity of interest rates to the effective lower bound, the Committee judges that downward risks to employment and inflation have increased. The Committee is prepared to use its full range of tools to achieve its maximum employment and price stability goals.

The maximum level of employment is a broad-based and inclusive goal that is not directly measurable and changes over time owing largely to nonmonetary factors that affect the structure and dynamics of the labor market. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the shortfalls of employment from its maximum level, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee reaffirms its judgment that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. The Committee judges that longer-term inflation expectations that are well anchored at 2 percent foster price stability and moderate long-term interest rates and enhance the Committee's ability to promote maximum employment in the face of significant economic disturbances. In order to anchor longer-term inflation expectations at this level, the Committee seeks to achieve inflation that averages 2 percent over time, and therefore judges that, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time.

Monetary policy actions tend to influence economic activity, employment, and prices with a lag. In setting monetary policy, the Committee seeks over time to mitigate shortfalls of employment from the Committee's assessment of its maximum level and deviations of inflation from its longer-run goal. Moreover, sustainably achieving maximum employment and price stability depends on a stable financial system. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The Committee's employment and inflation objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it takes into account the employment shortfalls and inflation deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.

The Committee intends to review these principles and to make adjustments as appropriate at its annual organizational meeting each January, and to undertake roughly every 5 years a thorough public review of its monetary policy strategy, tools, and communication practices.

CONTENTS

I	Recent Economic and Financial Developments
I I	t 1: Recent Economic and Financial Developments Domestic Developments Financial Developments nternational Developments 36
Par	t 2: Monetary Policy41
Par	t 3: Summary of Economic Projections53
Abl	previations71
! ! ! ! !	of BoxesHousing Services Inflation and Market Rent Measures9Employment and Earnings across Demographic Groups16Developments Related to Financial Stability33Monetary Policy Independence, Transparency, and Accountability42Developments in the Federal Reserve's Balance Sheet and Money Markets47Monetary Policy Rules in the Current Environment50Forecast Uncertainty68

Note: This report reflects information that was publicly available as of noon EDT on July 2, 2024. Unless otherwise stated, the time series in the figures extend through, for daily data, June 28, 2024; for monthly data, May 2024; and, for quarterly data, 2024:Q1. In bar charts, except as noted, the change for a given period is measured to its final quarter from the final quarter of the preceding period.

For figures 26, 37, and 43, note that the S&P/Case-Shiller U.S. National Home Price Index, the S&P 500 Index, and the Dow Jones Bank Index are products of S&P Dow Jones Indices LLC and/or its affiliates and have been licensed for use by the Board. Copyright © 2024 S&P Dow Jones Indices LLC, a division of S&P Global, and/or its affiliates. All rights reserved. Redistribution, reproduction, and/or photocopying in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. For more information on any of S&P Dow Jones Indices LLC's indices, please visit www.spdji.com. S&P® is a registered trademark of Standard & Poor's Financial Services LLC, and Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC. Neither S&P Dow Jones Indices LLC, Dow Jones Trademark Holdings LLC, their affiliates, nor their third-party licensors make any representation or warranty, express or implied, as to the ability of any index to accurately represent the asset class or market sector that it purports to represent, and neither S&P Dow Jones Indices LLC, Dow Jones Trademark Holdings LLC, their affiliates, nor their third-party licensors shall have any liability for any errors, omissions, or interruptions of any index or the data included therein.

SUMMARY

Inflation eased notably last year and has shown modest further progress so far this year, but it remains above the Federal Open Market Committee's (FOMC) objective of 2 percent. Job gains have been strong, and the unemployment rate is still low. Meanwhile, as job vacancies continued to decline and labor supply continued to increase, the labor market moved into better balance over the first half of the year. Real gross domestic product (GDP) growth was modest in the first quarter, while growth in private domestic demand remained robust, supported by slower but still-solid increases in consumer spending, moderate growth in capital spending, and a sharp pickup in residential investment.

The FOMC has maintained the target range for the federal funds rate at $5\frac{1}{4}$ to $5\frac{1}{2}$ percent since its July 2023 meeting. In addition, the Committee has continued to reduce its holdings of Treasury securities and agency mortgage-backed securities. The Committee does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent. Reducing policy restraint too soon or too much could result in a reversal of the progress on inflation. At the same time, reducing policy restraint too late or too little could unduly weaken economic activity and employment. In considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks.

The FOMC is strongly committed to returning inflation to its 2 percent objective. The Committee remains highly attentive to inflation risks and is acutely aware that high inflation imposes significant hardship, especially on those least able to meet the higher costs of essentials.

Recent Economic and Financial Developments

1

Inflation. Although personal consumption expenditures (PCE) price inflation slowed notably last year and has shown modest further progress this year, it remains above the FOMC's longer-run objective of 2 percent. The PCE price index rose 2.6 percent over the 12 months ending in May, down from the 4.0 percent pace over the preceding 12 months and a peak of 7.1 percent in June 2022. The core PCE price index—which excludes food and energy prices and is generally considered a better guide to the direction of future inflation—also rose 2.6 percent in the 12 months ending in May, down from 4.7 percent a year ago and slower than the 2.9 percent pace at the end of last year. On a 12-month basis, core goods price inflation and housing services price inflation continued to ease over the first part of the year, while core nonhousing services price inflation flattened out after slowing notably last year. Measures of longer-term inflation expectations are within the range of values seen in the decade before the pandemic and continue to be broadly consistent with the FOMC's longerrun objective of 2 percent.

The labor market. The labor market continued to rebalance over the first half of this year, and it remained strong. Job gains were solid, averaging 248,000 per month over the first five months of the year, and the unemployment rate remained low. Labor demand has eased, as job openings have declined in many sectors of the economy, and labor supply has continued to increase, supported by a strong pace of immigration. With cooling labor demand and rising labor supply, the unemployment rate edged up to 4.0 percent in May. The balance between labor demand and supply appears similar to that in the period immediately

2 SUMMARY

before the pandemic, when the labor market was relatively tight but not overheated. Nominal wage growth continued to slow in the first part of the year but remains above a pace consistent with 2 percent inflation over the longer term, given prevailing trends in productivity growth.

Economic activity. Real GDP growth is reported to have moderated in the first quarter after having increased at a robust pace in the second half of last year. Much of the slowdown was due to sizable drags in the volatile categories of net exports and inventory investment; growth in private domestic final purchases—which includes consumer spending, business fixed investment, and residential investment—also moved a little lower in the first quarter but remained solid. Real consumption growth slowed in the first quarter from a strong pace in the second half of last year, reflecting a decline in goods spending. Real business fixed investment grew at a moderate pace in the first quarter despite high interest rates, supported by strong sales growth and improvements in business sentiment and profit expectations. Activity in the housing sector picked up sharply in the first quarter as a result of a jump in existing home sales and rising construction of singlefamily homes.

Financial conditions. Financial conditions appear somewhat restrictive on balance. Treasury yields and the market-implied expected path of the federal funds rate have moved up, on net, since the beginning of the year, while broad equity prices have increased. Credit remains generally available to most households and businesses but at elevated interest rates, which have weighed on financing activity. The pace of bank lending to households and businesses increased in the first five months of the year but continues to be somewhat tepid. Delinquency rates on small business loans stayed slightly above pre-pandemic levels, and delinquency rates for credit cards, auto loans, and commercial real estate loans continued to increase in the first

quarter of 2024 to levels above their longerrun averages.

Financial stability. The financial system remains sound and resilient. The balance sheets of nonfinancial businesses and households stayed strong, with the combined credit-to-GDP ratio standing near its twodecade low. Business debt continued to decline in real terms, and debt-servicing capacity remained solid for most public firms, in large part due to strong earnings, large cash buffers, and low borrowing costs on existing debt. However, there were also signs of vulnerabilities building in the financial system. In asset markets, corporate bond spreads narrowed, equity prices rose faster than expected earnings, and residential property prices remained high relative to market rents. Moreover, in the banking sector, some banks' fair value losses on fixed-rate assets remained sizable, despite most of them continuing to report solid capital levels. Additionally, parts of banks' commercial real estate portfolios are facing stress. Some banks' reliance on uninsured deposits remained high. Even so, liquidity at most domestic banks remained ample, with limited reliance on short-term wholesale funding. Bond mutual funds' exposure to interest rate risk stayed elevated, and data through the third quarter of 2023 show that hedge fund leverage had grown to historical highs, driven primarily by borrowing by the largest hedge funds. (See the box "Developments Related to Financial Stability" in Part 1.)

International developments. Foreign economic activity appears to have improved in the first quarter after a soft patch in the second half of last year. In advanced foreign economies, growth rates returned to moderate levels despite the effects of restrictive monetary policy as lower inflation improved real household incomes. In emerging market economies, growth was supported by a recovery in exports and rising global demand for high-tech products, with the rise in activity in China in the first quarter being particularly

outsized. Nonetheless, other factors continued to weigh on economic growth: Data indicated ongoing weakness in China's property sector, and in Europe, energy-intensive sectors continue to struggle, reflecting their ongoing adjustment to past increases in energy prices following Russia's 2022 invasion of Ukraine.

Foreign headline inflation has continued to decline since the middle of last year, but the pace of disinflation has been gradual and uneven across countries and economic sectors. Still, many foreign central banks have noted this progress in lowering inflation, and some have begun to cut their policy rates. A notable exception is Japan, which ended its negative interest rate policy and yield curve control in March amid persistently high inflation. The trade-weighted exchange value of the dollar rose significantly, consistent with widening gaps between U.S. and foreign interest rates.

Monetary Policy

Interest rate policy. The FOMC has maintained the target range for the policy rate at 51/4 to 51/2 percent since its July 2023 meeting. The Committee judges that the risks to achieving its employment and inflation goals have moved toward better balance over the past year. The Committee perceives the economic outlook to be uncertain and remains highly attentive to inflation risks. The Committee has indicated that it does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent. Policy is well positioned to deal with the risks and uncertainties the Committee faces in pursuing both sides of its dual mandate. In considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks.

Balance sheet policy. The Federal Reserve has continued the process of significantly reducing its holdings of Treasury and agency securities in a predictable manner. Beginning in June 2022, principal payments from securities held in the System Open Market Account have been reinvested only to the extent that they exceeded monthly caps. Under this policy, the Federal Reserve has reduced its securities holdings about \$1.7 trillion since the start of balance sheet reduction. The FOMC has stated that it intends to maintain securities holdings at amounts consistent with implementing monetary policy efficiently and effectively in its ample-reserves regime. To ensure a smooth transition from abundant to ample reserve balances, the FOMC slowed the pace of decline of its securities holdings at the beginning of June and intends to stop reductions when reserve balances are somewhat above the level that the Committee judges to be consistent with ample reserves.

Special Topics

Housing services inflation. The PCE price index for housing services started accelerating in 2021, notably increasing its contribution to core PCE inflation. Because this index calculates average rent for all tenants—both new tenants and existing tenants—its changes tend to lag changes in market rent measures for new leases. Therefore, measures of market rent growth for new leases can help predict future changes in the PCE price index. Since mid-2022, market rents have decelerated and returned to a growth rate similar to or below their average pre-pandemic pace, while the PCE index continues to show elevated inflation, reflecting the gradual pass-through of market rates to existing tenants. As this process continues, PCE housing services inflation should gradually decline, though much uncertainty remains about the extent

^{1.} See the May 4, 2022, press release regarding the Plans for Reducing the Size of the Federal Reserve's Balance Sheet, available on the Board's website at https:// www.federalreserve.gov/newsevents/pressreleases/ monetary20220504b.htm.

4 summary

and timing. (See the box "Housing Services Inflation and Market Rent Measures" in Part 1.)

Employment and earnings across groups. A strong labor market over the past two years has been especially beneficial for historically disadvantaged groups of workers. As a result, many of the long-standing disparities in employment and wages by sex, race, ethnicity, and education have narrowed, and some gaps reached historical lows in 2023 and the first half of 2024. However, despite this narrowing, significant disparities in absolute levels across groups remain. (See the box "Employment and Earnings across Demographic Groups" in Part 1.)

Monetary policy independence, transparency, and accountability. Congress has established a statutory framework that specifies the long-run objectives of monetary policy maximum employment and stable prices and gives the Federal Reserve operational independence in conducting monetary policy. In this framework, the Federal Reserve makes determinations about the monetary policy actions that are most appropriate for achieving the dual-mandate goals that Congress has assigned to it. The Federal Reserve recognizes that independence is a trust given to it by Congress and the American people and that with independence comes the need to be transparent about, and accountable for, its monetary policy decisions. Transparency also improves monetary policy's effectiveness. The Federal Reserve promotes transparency by providing

information about FOMC decisions through policy communications and a variety of publications. The means by which the Federal Reserve informs the American people about its monetary policy decisions include official FOMC statements, monetary policy reports, and Committee meeting minutes and transcripts, as well as speeches, press conferences, and congressional testimony given by Federal Reserve officials. (See the box "Monetary Policy Independence, Transparency, and Accountability" in Part 2.)

Federal Reserve's balance sheet and money markets. The size of the Federal Reserve's balance sheet has continued to decrease since February as the FOMC has reduced its securities holdings. Reserve balances, the largest liability on the Federal Reserve's balance sheet, and usage of the overnight reverse repurchase agreement facility—another Federal Reserve liability—both declined. (See the box "Developments in the Federal Reserve's Balance Sheet and Money Markets" in Part 2.)

Monetary policy rules. Simple monetary policy rules, which prescribe a setting for the policy interest rate in response to the behavior of a small number of economic variables, can provide useful guidance to policymakers. With inflation easing over the past year, the policy rate prescriptions of most simple monetary policy rules have decreased recently and now call for levels of the federal funds rate that are close to or below the current target range for the federal funds rate. (See the box "Monetary Policy Rules in the Current Environment" in Part 2.)

PART 1 RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

Domestic Developments

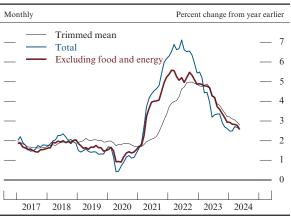
Inflation eased notably last year and has shown modest further progress in recent months

Inflation stepped down markedly last year and has shown modest further progress so far this year. Inflation remains elevated, though, and is still above the Federal Open Market Committee's (FOMC) longer-run objective of 2 percent. The price index for personal consumption expenditures (PCE) rose 2.6 percent over the 12 months ending in May, down from the 4.0 percent pace a year ago but little changed since the end of last year (figure 1). After having slowed markedly in the second half of 2023, monthly core PCE price inflation—which excludes food and energy prices and is generally considered a better guide to the direction of future inflation firmed in the first quarter of this year and then eased somewhat in April and May. As a result, the 12-month change in core PCE prices declined from the 4.7 percent pace in May of last year to 2.9 percent in December and moved down further this year, to 2.6 percent in May (figure 2). A similar message is evident from the trimmed mean measure of PCE prices constructed by the Federal Reserve Bank of Dallas, which provides an alternative approach to reducing the influence of idiosyncratic price movements. The index increased 2.8 percent over the 12 months ending in May, a pace that is somewhat slower than at the end of last year (as shown in figure 1).

Consumer energy prices have increased, while food price inflation has flattened out

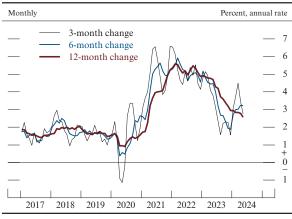
PCE energy prices increased 4.8 percent in the 12 months ending in May after having declined 12.3 percent over the preceding 12 months

1. Personal consumption expenditures price indexes



SOURCE: For trimmed mean, Federal Reserve Bank of Dallas; for all else, Bureau of Economic Analysis; all via Haver Analytics.

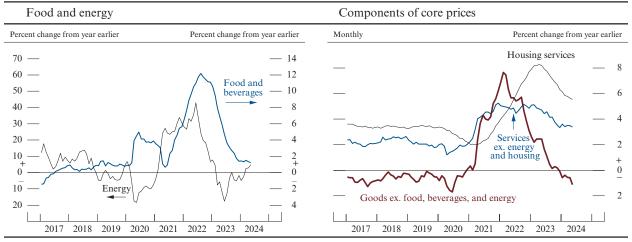
2. Core personal consumption expenditures price index



Source: Bureau of Economic Analysis, personal consumption expenditures via Haver Analytics.

6 PART 1: RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

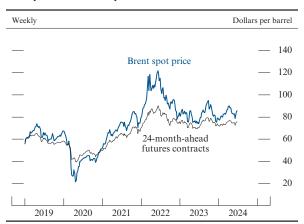
3. Subcomponents of personal consumption expenditures price indexes



Note: The data are monthly.

Source: Bureau of Economic Analysis via Haver Analytics.

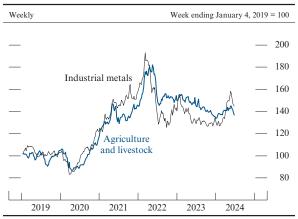
4. Spot and futures prices for crude oil



Note: The data are weekly averages of daily data and extend through June $28,\,2024.$

Source: ICE Brent Futures via Bloomberg.

Spot prices for commodities



Note: The data are weekly averages of daily data and extend through June 28, 2024.

SOURCE: For industrial metals, S&P GSCI Industrial Metals Spot Index; for agriculture and livestock, S&P GSCI Agriculture & Livestock Spot Index; both via Haver Analytics. (figure 3, left panel). Oil prices increased, on net, in the first half of this year (figure 4). Prices rose amid concerns about escalation of the conflict in the Middle East, additional costs of rerouting some oil shipping away from the Red Sea, and ongoing production cuts by OPEC (Organization of the Petroleum Exporting Countries) and its allies. Continuing geopolitical tensions, including tensions emanating from the conflicts in the Middle East and Ukraine, pose an upside risk to energy prices.

Prices of agricultural commodities and livestock edged up, on net, over the first half of this year after having come down markedly in 2022 and 2023 from the highs reached at the start of Russia's war on Ukraine in early 2022 (figure 5). As a result of these movements, the 12-month change in PCE food prices slowed substantially from its peak of 12.2 percent in August 2022 to just 1.2 percent in May (as shown in figure 3, left panel).

Prices of both energy and food products are of particular importance for lower-income households, for which such necessities account for a large share of expenditures. Reflecting the sharp increases seen in 2021 and 2022, these price indexes are 25 percent and 32 percent higher than in 2019, for food and energy, respectively.

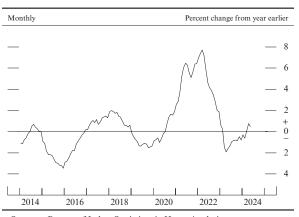
Core goods prices increased modestly this year after having declined sharply in the second half of 2023

In assessing the outlook for inflation, it is helpful to consider three separate components of core prices: core goods, housing services, and core nonhousing services. After posting notable declines in the second half of last year, core goods prices increased modestly, on net, over the first months of this year. This development likely reflects, in part, movements in nonfuel import prices, which turned up in recent months after having declined, on net, over 2023 (figure 6). Smoothing through these monthly movements, prices for core goods over the 12 months ending in May moved down 1.1 percent, similar to their pre-pandemic rate of decline, after having increased 2.5 percent over the previous 12-month period (figure 3, right panel). The progress on inflation for core goods reflects improvements in supplydemand imbalances. Indeed, the supply chain issues and other capacity constraints that had earlier boosted inflation so much continued to ease, though at a more gradual pace this year than over the past two years, and supply demand conditions in goods markets appear to be relatively balanced. For example, the shares of respondents to the Quarterly Survey of Plant Capacity Utilization citing insufficient supply of labor or materials as reasons for producing below capacity, which had increased considerably during the pandemic, have continued to fall and are now near prepandemic levels (figure 7).

Housing services price inflation continued to slow gradually but remains elevated . . .

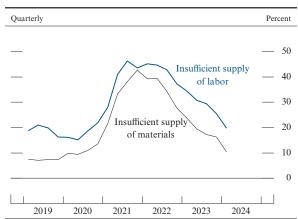
The 12-month change in housing services prices moved down from more than 8 percent in May 2023 to 5.5 percent in May of this year but is still well above its pre-pandemic level (as shown in figure 3, right panel). Market rent inflation, which measures increases in rents for *new* housing leases to *new* tenants, has fallen markedly since late 2022 to near pre-pandemic rates, and this slowdown points to continued easing of housing services inflation over the

6. Nonfuel import price index



Source: Bureau of Labor Statistics via Haver Analytics.

7. Reasons for operating below full capacity



NOTE: The series are the share of firms selecting each reason for operating below full capacity.

SOURCE: U.S. Census Bureau: Quarterly Survey of Plant Capacity Utilization.

year ahead. (The box "Housing Services Inflation and Market Rent Measures" provides further details.)

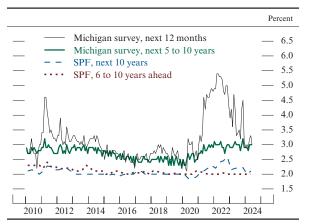
. . . while core nonhousing services price inflation flattened out so far this year

Finally, price inflation for core nonhousing services—a broad group that includes services such as travel and dining, financial services, and car repair—slowed last year but flattened out, on net, in the first five months of this year. Core nonhousing services prices rose 3.4 percent in the 12 months ending in May, down from 4.7 percent a year ago but little changed since the end of last year (as shown in figure 3, right panel). The lack of further progress this year is due in large part to price increases in volatile categories—for example, portfolio management services, which can be influenced by idiosyncratic factors, such as swings in the stock market, more than supply and demand conditions. Because labor is a significant input to these service sectors, the ongoing deceleration in labor costs—supported by softening labor demand and improvements in labor supply—suggests that disinflation will eventually resume for this category.

Measures of longer-term inflation expectations have been stable: shorterterm expectations have been volatile but are generally lower than a year earlier

The generally held view among economists and policymakers is that inflation expectations influence actual inflation by affecting wageand price-setting decisions. Survey-based measures of expected inflation over a longer horizon have generally been moving sideways over the past year, within the range seen during the decade before the pandemic, and they appear broadly consistent with the FOMC's longer-run 2 percent inflation objective. This development is seen for surveys of households, such as the University of Michigan Surveys of Consumers, and for surveys of professional forecasters (figure 8). For example, the median forecaster in the Survey of Professional

8. Measures of inflation expectations



Note: The data for the Michigan survey are monthly and extend through June 2024. The Survey of Professional Forecasters (SPF) data are quarterly and extend through 2024:Q2.

Source: University of Michigan Surveys of Consumers; Federal

Reserve Bank of Philadelphia, SPF.

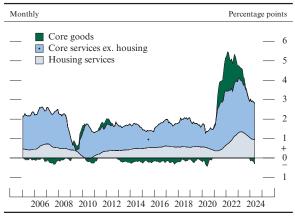
Housing Services Inflation and Market Rent Measures

The price index for housing services includes rents explicitly paid by renters as well as implicit rents that homeowners would have to pay if they were renting their homes known as owners' equivalent rent (OER). This index is an important component of the price index for personal consumption expenditures (PCE), composing about 15.5 percent of the total PCE price index. Housing services prices started accelerating in 2021, and, as figure A illustrates, the contribution of these prices to the 12-month change in the core PCE price index increased notably, reaching a peak of 1.4 percentage points in 2023. In May 2024, the contribution of this component stood at 1.0 percentage point, down from its peak but still well above the 0.5 percentage point that was typical before the COVID-19 pandemic.

The PCE price index for housing services is derived from two components of the consumer price index (CPI): rent of primary residence and OER.¹ The rent of primary residence index measures the average rent paid by tenants. OER estimates the rent that homeowners would pay if they were renting their homes without furnishings or utilities and is derived from rental data for units in the same neighborhood, with an adjustment for structure type.²

Because the price index for housing services measures average rent for all tenants—both new tenants and existing tenants—its changes are more subdued and tend to lag changes in rent measures for new leases, described later. Because rental agreements typically last for 12 months, most renters will not see an immediate increase in their rent even if the rent for new leases increases sharply. Additionally, the Bureau of Labor Statistics, the agency responsible for computing the CPI, reports that when rent increases occur for

A. Contributions to 12-month change in core personal consumption expenditures price index



SOURCE: Bureau of Economic Analysis via Haver Analytics; Federal Reserve Board staff calculations.

units, they are typically smaller for continuing tenants renewing their lease than they are for new tenants.³

This lag implies that measures of rent growth for new leases can help predict future changes in the PCE price index for housing services. Over the past few decades, private firms have started publishing various "market rent" measures that track the average rent for new leases by new tenants. For example, the

(continued on next page)

^{1.} The sum of the weights of these two components in the total CPI is 34.4 percent, considerably higher than their weight in the total PCE price index.

^{2.} The typical structure type varies significantly across owner- and tenant-occupied units: Owner-occupied homes are mostly single-family units, while renter-occupied homes are roughly evenly divided between single-family and multifamily units. Constructing the OER measure involves reweighting the sample of rent quotes for a given area to reflect the relative importance of owner-occupied housing in that area. See slide 13 of Robert Cage (2019), "Measurement of Owner Occupied Housing in the U.S. Consumer Price Index" (Washington: Bureau of Labor Statistics, November 15), https://www.bea.gov/system/files/2019-11/bea_tac_nov2019_cage.pdf.

^{3.} See Ben Houck (2022), "Housing Leases in the U.S. Rental Market," *Spotlight on Statistics* (Washington: Bureau of Labor Statistics, September), https://www.bls.gov/spotlight/2022/housing-leases-in-the-u-s-rental-market/home.htm

^{4.} PCE prices for housing services differ from these market rent measures for reasons beyond the fact that market rent measures are limited to new leases to new tenants. In addition, the discrepancy arises from the methodology used for index construction (for example, the rent measures used in the PCE price index sample a given residence only once every six months), the representativeness of the sample, and the way in which the measure controls for quality adjustments. Moreover, market rent measures capture the "asking" prices posted by landlords, while the rent measures used in the PCE price index gauge the rent that tenants actually pay. Among these factors, whether all leases are used (as opposed to only new leases) appears to be the main contributor to this discrepancy. See Brian Adams, Lara Loewenstein, Hugh Montag, and Randal Verbrugge (2024), "Disentangling Rent Index Differences: Data, Methods, and Scope," American Economic Review: Insights, vol. 6 (June), pp. 230-45.

Housing Services Inflation (continued)

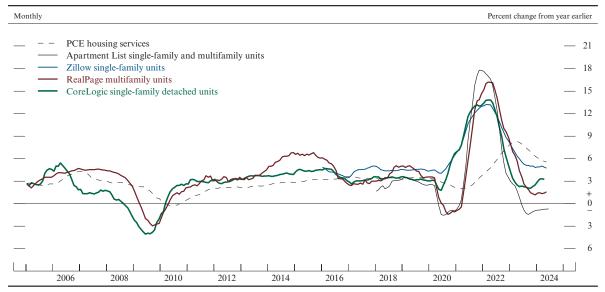
CoreLogic Single-Family Rent Index measures changes in average market rents for single-family homes. Other measures include the Zillow, Apartment List, and RealPage indexes, which vary in terms of the type of unit they cover (single-family versus multifamily), their methodologies, and the representativeness of the national rental market.⁵

5. The Zillow Observed Rent Index for single-family residences, available beginning in 2015, focuses on changes in asking rents for single-family units. The RealPage Rent Index, available beginning in 1996, measures changes in average market rents across professionally managed

Figure B illustrates that, historically, the year-overyear change in market rents is an informative leading indicator for the year-over-year change in PCE housing (continued)

multifamily apartment buildings. The Apartment List National Rent Index, available beginning in 2017, measures changes in median market rents across the entire rental market for both single-family and multifamily units. To calculate unit-level rent growth, all these measures, including the CoreLogic index, use the repeat-rent methodology to control for differences in property characteristics among the units listed for rent in different periods.

B. Housing rents



Note: CoreLogic data extend through April 2024, Zillow data start in January 2016, and Apartment List data start in January 2018 and extend through June 2024. Zillow, CoreLogic, Apartment List, and RealPage measure market-rate rents—that is, rents for a new lease by a new tenant. PCE is personal consumption expenditures.

SOURCE: Bureau of Economic Analysis, PCE, via Haver Analytics; CoreLogic, Inc.; Zillow, Inc.; Apartment List, Inc. via Haver Analytics; RealPage, Inc.; Federal Reserve Board staff calculations.

services prices, with the market rent measure typically leading the PCE measure by one year.⁶ This relationship is particularly evident in the periods following the Great Recession and the COVID-19 pandemic. For example, PCE housing services inflation reached a peak of 8.3 percent in April 2023, exactly one year after the 12-month change for the CoreLogic index reached its peak of 13.8 percent.

Since mid-2022, each of these measures of market rents has decelerated and returned to a growth rate similar to or below its average pre-pandemic pace. While the PCE price index for housing services also began decelerating in mid-2023, its current rate of increase remains well above the average rate seen in the years before the pandemic. As noted earlier, changes in the PCE price index for housing services tend to lag changes in market rents because rental

contracts typically last for a year and rents for existing tenants take some time to catch up to the rents charged to new tenants. In particular, the rise in measures of market rents, including the CoreLogic Single-Family Rent Index and the Zillow Observed Rent Index, from the onset of the pandemic until now has been larger than the corresponding increase in the PCE price index for housing services, suggesting that the PCE price measure has not yet fully caught up with the current state of the rental market.8 However, as long as market rents continue to increase moderately, PCE housing services inflation should gradually decline and eventually return to its pre-pandemic pace as well. However, significant uncertainty remains regarding the timing of this decline and whether market rent inflation will, in fact, remain moderate.

^{6.} Several studies use market rent measures to predict housing services inflation. See, for instance, Marijn A. Bolhuis, Judd N.L. Cramer, and Lawrence H. Summers (2022), "The Coming Rise in Residential Inflation," *Review of Finance*, vol. 26 (September), pp. 1051–72; and Kevin J. Lansing, Luiz E. Oliveira, and Adam Hale Shapiro (2022), "Will Rising Rents Push Up Future Inflation?" FRBSF Economic Letter 2022-03 (San Francisco: Federal Reserve Bank of San Francisco, February), https://www.frbsf.org/wp-content/uploads/sites/4/el2022-03.pdf.

^{7.} In addition, the Bureau of Labor Statistics has recently started publishing a quarterly rent index for new tenants (the New Tenant Rent Index). While the New Tenant Rent Index is subject to revision with each release, the year-over-year growth of this index declined from its peak of 12.9 percent in the second quarter of 2022 to 0.4 percent in the first quarter of 2024, the lowest reading since the second quarter of 2010. See Bureau of Labor Statistics (n.d.), "New Tenant Rent Index," webpage, https://www.bls.gov/pir/new-tenant-rent.htm.

^{8.} Between January 2020 and April 2024, the CoreLogic Single-Family Rent Index and the Zillow Observed Rent Index have increased 32 percent and 38 percent, respectively, while PCE prices for housing services have increased 23 percent. See Christopher D. Cotton (2024), "A Faster Convergence of Shelter Prices and Market Rent: Implications for Inflation," Current Policy Perspectives 2024-4 (Boston: Federal Reserve Bank of Boston, June), https://www.bostonfed.org/-/media/Documents/Workingpapers/PDF/2024/cpp20240617.pdf.

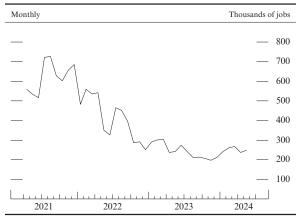
9. Inflation compensation implied by Treasury Inflation-Protected Securities



NOTE: The data are at a business-day frequency and are estimated from smoothed nominal and inflation-indexed Treasury yield curves.

SOURCE: Federal Reserve Bank of New York; Federal Reserve Board staff calculations.

10. Nonfarm payroll employment



NOTE: The data shown are a 3-month moving average of the change in nonfarm payroll employment.

Source: Bureau of Labor Statistics via Haver Analytics.

Forecasters, conducted by the Federal Reserve Bank of Philadelphia, continued to expect PCE price inflation to average 2 percent over the five years beginning five years from now.

Inflation expectations over a shorter horizon—which tend to follow observed inflation more closely and tend to be more volatile—have moved down, on net, since the middle of 2022 to near the range seen during the decade before the pandemic. In recent months, the median value for inflation expectations over the next year as measured in the Michigan survey has been generally lower than readings from a year earlier. Similarly, expected inflation for the next year as measured in the Survey of Consumer Expectations, conducted by the Federal Reserve Bank of New York, has also declined, on average, from a year earlier.

Market-based measures of longer-term inflation compensation, which are based on financial instruments linked to inflation such as Treasury Inflation-Protected Securities, are also broadly in line with readings seen in the years before the pandemic and consistent with PCE inflation returning to 2 percent. These measures have been little changed, on net, since the beginning of the year (figure 9).

The labor market remains strong

Payroll employment gains have been strong, averaging 248,000 per month over the first five months of the year. Job gains slowed from the first half to the second half of last year but appear to have picked up, on net, so far this year (figure 10). Recent job gains have been broad based, with over 60 percent of industries expanding their employment, on net, over the three months ending in May. That said, gains have been particularly strong in health care and in state and local governments, where employment remains below the levels implied by pre-pandemic trends.²

^{2.} Administrative data from the Quarterly Census of Employment and Wages (QCEW) suggest that job growth last year was solid, but not as strong as reported in the Current Employment Statistics (CES). The CES

The unemployment rate has edged up since the middle of 2023 but was still at a historically low level of 4.0 percent in May. Through May, the unemployment rate has remained at or below 4 percent for over two years (figure 11). Unemployment rates among most age, educational attainment, sex, and ethnic

and racial groups remain near their respective

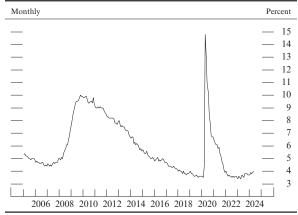
Labor demand has been gradually cooling . . .

historical lows (figure 12).

Demand for labor remained strong in the first half of 2024 but has continued to cool gradually, on net, from its very elevated levels of early 2022. Job openings, as measured in the Job Openings and Labor Turnover Survey (JOLTS), have continued to fall from their all-time high recorded in March 2022 but are

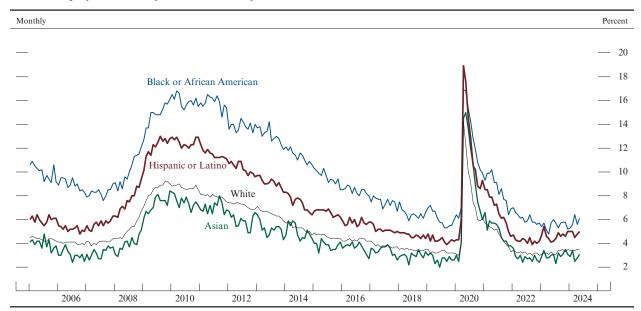
payroll data will be revised in early 2025, when the Bureau of Labor Statistics benchmarks these data to employment counts from the QCEW as part of its annual benchmarking process.

11. Civilian unemployment rate



Source: Bureau of Labor Statistics via Haver Analytics.

12. Unemployment rate, by race and ethnicity



Note: Unemployment rate measures total unemployed as a percentage of the labor force. Persons whose ethnicity is identified as Hispanic or Latino may be of any race. Small sample sizes preclude reliable estimates for Native Americans and other groups for which monthly data are not reported by the Bureau of Labor Statistics.

Source: Bureau of Labor Statistics via Haver Analytics.

still slightly above pre-pandemic levels.³ An alternative measure of job vacancies using job postings data from the large online job board Indeed also shows that while vacancies have proceeded to move gradually lower through the first half of 2024, they have remained above pre-pandemic levels.⁴ Consistent with the decline in job vacancies, the National Federation of Independent Business (NFIB) survey indicated that on net, in May, fewer firms planned to add workers over the next three months than was the case at the end of 2023; firms' hiring plans reported in the NFIB survey have been trending down since the middle of 2021.

The cooling in labor demand has been mostly due to reductions in firm hiring, as indicators of layoffs, such as initial claims for unemployment insurance and the rate of layoffs and discharges in the JOLTS report, have remained at historically low levels.

... and labor supply has increased further . . .

Meanwhile, the supply of labor has continued to increase on net. While labor force participation has leveled off over the past year, the U.S. population increased strongly because of high levels of immigration.

The labor force participation rate (LFPR)—which measures the share of people either working or actively seeking work—increased solidly from the beginning of 2021 through the middle of 2023 but appears to have

^{3.} Some analysts have noted that the vacancy-posting behavior of firms may have changed since 2019 in ways that lift the number of vacancies. For example, multiestablishment firms may be posting vacancies for a single job opening at several or all of its establishments if the new job allows workers to work remotely from any establishment. These multiple job postings may result in overcounting of job vacancies in establishment-level measures, such as those from JOLTS and Indeed. Alternatively, after having experienced an exceptionally strong labor market in 2022, firms may now be more willing to post vacancies for positions that they are unlikely to fill immediately.

^{4.} Indeed job postings data are available on the company's Hiring Lab portal at https://data.indeed.com/#/postings.

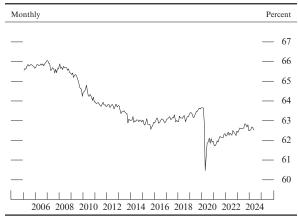
flattened out at a relatively high level since then. The LFPR was 62.5 percent in May, a touch below its average level over the past 12 months (figure 13). Notably, the postpandemic recovery in the LFPR has differed widely across demographic groups, with the participation rate for women aged 25 to 54 reaching all-time highs in recent months and the participation rate for individuals older than 55 exhibiting no signs of recovery. (The box "Employment and Earnings across Demographic Groups" provides further details.)

Labor supply has also been boosted in recent years by relatively strong population growth due to a notable expansion in immigration. Though official estimates by the Census Bureau show a robust increase in population growth in 2022 and 2023, recent estimates by the Congressional Budget Office indicate that actual population growth may have been considerably higher. The most recent data suggest that immigration is somewhat slower than the strong rates seen late last year.⁵

... resulting in a normalization of labor market conditions

With cooling labor demand and rising labor supply, the labor market became gradually less tight over the first half of this year, although it nevertheless remains strong. The balance between demand and supply in the labor market appears similar to that during the period immediately before the pandemic.

13. Labor force participation rate



Note: Data are monthly, and values before January 2024 are estimated by Federal Reserve Board staff in order to eliminate discontinuities in the published history.

Source: Bureau of Labor Statistics via Haver Analytics.

^{5.} A recent report from the Congressional Budget Office (CBO) estimates that immigration in 2022 and 2023 was considerably higher than in the Census Bureau's estimates. See Congressional Budget Office (2024), The Demographic Outlook: 2024 to 2054 (Washington: CBO, January), https://www.cbo.gov/publication/59697. Recent studies have put more weight on the CBO estimates, in part because the Census Bureau is using lagged estimates of immigration from the American Community Survey, while the CBO is using more recent, high-frequency data. See Wendy Edelberg and Tara Watson (2024), "New Immigration Estimates Help Make Sense of the Pace of Employment," Hamilton Project (Washington: Brookings Institution, March), https://www.brookings.edu/ wp-content/uploads/2024/03/20240307_Immigration Employment_Paper.pdf.

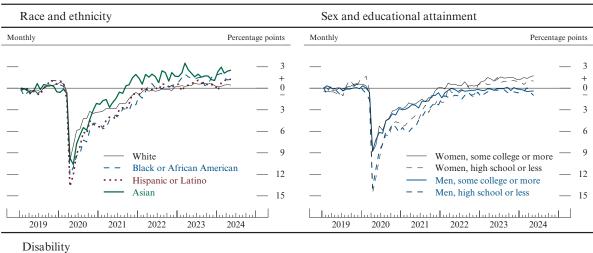
Employment and Earnings across Demographic Groups

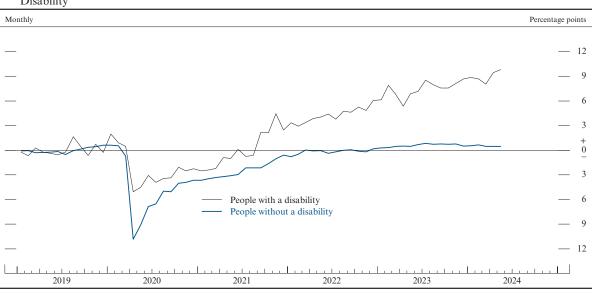
At the aggregate level, solid labor demand and improved labor supply, together with ongoing gains in productivity and falling inflation, have resulted in high rates of employment and rising real wages over the past year. This solid labor market performance has been broadly shared and has been especially beneficial for historically disadvantaged groups of workers. As a result, many of the long-standing disparities in employment and wages by sex, race, ethnicity, and education have narrowed, and some gaps reached historical lows in 2023 and the first half of 2024. However, despite this narrowing, significant disparities in absolute levels across groups remain.

Among prime-age people (aged 25 to 54), the employment-to-population (EPOP) ratio for Black or African American workers remained near its historical peak in the first half of 2024, and the gap in the EPOP ratio between prime-age Black and white workers fell to its lowest point in almost 50 years. Similarly, prime-age Hispanic or Latino workers' EPOP ratio has increased notably over the first part of 2024 and is now more than 1 percentage point above its 2019 level (figure A, top-left panel). That improvement has further reduced the EPOP ratio gap between Hispanic or Latino workers and white workers from already

(continued)

A. Prime-age employment-to-population ratios compared with the 2019 average ratio, by group





Note: Prime age is 25 to 54. All series are seasonally adjusted by the Federal Reserve Board staff.

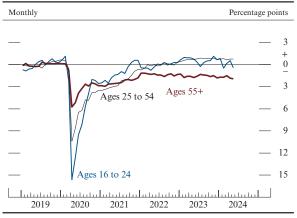
Source: Bureau of Labor Statistics; U.S. Census Bureau, Current Population Survey; Federal Reserve Board staff calculations.

historically low levels. Although the EPOP ratio for prime-age Asian workers has moved somewhat lower over the past year, it remains historically high and above its 2019 level.¹

The EPOP ratio for prime-age women has continued to increase steadily, reaching another record high in the first few months of 2024, whereas the EPOP ratio for prime-age men has been mostly flat over the past year, near its level in the year before the pandemic (figure A, top-right panel). As a result, the EPOP ratio gap between prime-age men and women fell to a record low this year. The increase in the female EPOP ratio relative to the pre-pandemic period is (almost) entirely attributable to rising labor force participation, which had also been increasing briskly before the pandemic, consistent with a growing share of women with a college degree.² Other factors, including strong labor market conditions and greater availability of remotework options, may have also contributed to rising prime-age female labor force participation.3

Among prime-age persons with a disability, the EPOP ratio has surged well above its 2019 level during the past few years (figure A, bottom panel). Some of this increase is likely due to the unique labor market circumstances of the past few years. With tight labor market conditions, employers may have been relatively more likely to hire persons with a disability than in other times. Additionally, the rise of remote work may have enabled persons with a disability to work without the challenges of on-site work. However, some of the increase could stem from a change in the composition of this group, as the number of persons with a disability rose following the pandemic, which may have raised

B. Employment-to-population ratios relative to 2019 average, by age



Note: Data before January 2023 are estimated by Federal Reserve Board staff in order to eliminate discontinuities in the published history. SOURCE: Bureau of Labor Statistics; U.S. Census Bureau, Current Population Survey; Federal Reserve Board staff calculations.

the average employment rate for this group.⁴ For persons without a disability, the EPOP ratio is little changed from its 2019 level.

Although most groups have shown robust employment gains over the past few years, the EPOP ratio for people aged 55 or older remains approximately 2 percentage points below its 2019 level and has changed little since late 2021 (figure B). This shortfall is attributable to a persistent increase in the rate of retirement among this group. Most of the increase in retirement relative to 2019 is due to the continued aging of the baby-boom generation, a trend that was expected to have occurred even without the pandemic.⁵ However, retirements have also been

(continued on next page)

^{1.} As monthly series have greater sampling variability for smaller groups, we do not plot EPOP ratio estimates for American Indians or Alaska Natives.

^{2.} For a discussion of the contribution of educational attainment to prime-age female labor force participation before the pandemic, see Didem Tüzemen and Thao Tran (2019), "The Uneven Recovery in Prime-Age Labor Force Participation," Federal Reserve Bank of Kansas City, *Economic Review*, vol. 104 (Third Quarter), pp. 21–41, https://www.kansascityfed.org/Economic%20Review/documents/652/2019-The%20Uneven%20Recovery%20in%20Prime-Age%20 Labor%20Force%20Participation.pdf.

^{3.} For a discussion on access to remote work and participation rates, see Maria D. Tito (2024), "Does the Ability to Work Remotely Alter Labor Force Attachment? An Analysis of Female Labor Force Participation," FEDS Notes (Washington: Board of Governors of the Federal Reserve System, January 19), https://doi.org/10.17016/2380-7172.3433.

^{4.} The increase in the number of persons with a disability may be linked to cases of long COVID, which, while debilitating, might not limit work as much as other types of disabilities. As a result, an influx of relatively higheremployment individuals into the disabled category could have raised employment rates for this group even if no individual's employment changed.

^{5.} For example, as baby boomers have continued to age, the median age of the population aged 55 or older increased from 66 in 2019 to 67 in the first half of 2024, and the median age of that group is expected to continue increasing into the future. This shift in the composition of the 55-or-older population has naturally lowered the observed EPOP ratio for this group nearly 0.5 percentage point per year, as EPOP ratios are lower at older ages.

Employment and Earnings (continued)

elevated above the level expected from aging alone, mostly for individuals aged 65 or older.6

While employment disparities across many demographic groups are now within historically narrow ranges, substantial gender, racial, and ethnic gaps remain, underscoring long-standing structural factors. Currently, prime-age women are employed at a rate 10 percentage points less than men, while prime-age Black and Hispanic workers are employed at a rate 3 to 4 percentage points less than white workers.

Similar to employment, a continued strong labor market has supported strong nominal wage growth, and as inflation has come down, that strong nominal wage growth has translated into higher real wage growth. Real wage growth has been comparatively robust for historically disadvantaged groups. As shown in the topleft panel of figure C, real wage growth—as measured

by the Federal Reserve Bank of Atlanta's Wage Growth Tracker and deflated by the personal consumption expenditures price index—was consistently stronger for workers in lower wage quartiles compared with the top quartiles during the pandemic and early recovery, but now all quartiles are experiencing similar growth.7

Strong wage growth across the income distribution is reflected in the experiences of different demographic groups. Wage growth for nonwhite workers has been a bit stronger than that for white workers for much of the past year (figure C, top-right panel). Wages for women and men have grown essentially in tandem over the past year (figure C, bottom-left panel).8 Real wage growth for workers with a high school diploma or less remains strong and has been rising a bit faster than for workers with more education, on average, over the past few years (figure C, bottom-right panel).

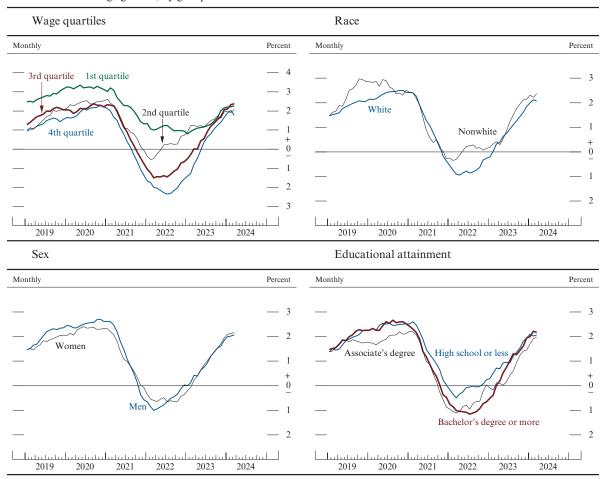
(continued)

^{6.} For an analysis on the increase in retirements following the pandemic, see Joshua Montes, Christopher Smith, and Juliana Dajon (2022), " 'The Great Retirement Boom': The Pandemic-Era Surge in Retirements and Implications for Future Labor Force Participation," Finance and Economics Discussion Series 2022-081 (Washington: Board of Governors of the Federal Reserve System, November), https://doi.org/10.17016/ FEDS.2022.081.

^{7.} To reduce noise due to sampling variation, which can be pronounced when considering disaggregated groups' wage changes, the series shown in figure C are the 12-month moving averages of the groups' median 12-month real wage changes. Thus, by construction, these series lag the actual real wage changes. Wage data extend through March 2024 only to avoid complications stemming from changes in the underlying data source.

^{8.} The measure of real wage growth shown in the figure uses the same price index for all groups, but inflation experiences can differ across demographic groups because of differences in what they purchase or where they shop. See Jacob Orchard (2021), "Cyclical Demand Shifts and Cost of Living Inequality," working paper, February (revised September 2022).

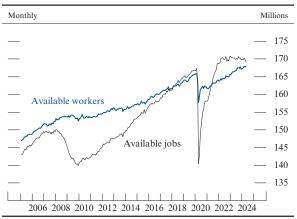
C. Median real wage growth, by group



Note: The data extend through March 2024. Series show 12-month moving averages of the median percent change in the hourly wage of individuals observed 12 months apart, deflated by the 12-month moving average of the 12-month percent change in the personal consumption expenditures price index. In the top-left panel, workers are assigned to wage quartiles based on the average of their wage reports in both Current Population Survey outgoing rotation group interviews; workers in the lowest 25 percent of the average wage distribution are assigned to the 1st quartile, and those in the top 25 percent are assigned to the 4th quartile.

SOURCE: Federal Reserve Bank of Atlanta, Wage Growth Tracker; Bureau of Labor Statistics; U.S. Census Bureau, Current Population Survey.

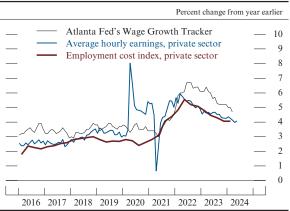
14. Available jobs versus available workers



Note: Available jobs are employment plus job openings as of the end of the previous month. Available workers are the labor force. Data for employment and labor force before January 2024 are estimated by Federal Reserve Board staff in order to eliminate discontinuities in the published history.

SOURCE: Bureau of Labor Statistics via Haver Analytics; U.S. Census Bureau; Federal Reserve Board staff calculations.

15. Measures of change in hourly compensation



Note: For the private-sector employment cost index, change is over the 12 months ending in the last month of each quarter; for private-sector average hourly earnings, the data are 12-month percent changes; for the Atlanta Fed's Wage Growth Tracker, the data are shown as a 3-month moving average of the 12-month percent change and extend through March 2024

SOURCE: Bureau of Labor Statistics; Federal Reserve Bank of Atlanta, Wage Growth Tracker; all via Haver Analytics.

A variety of labor market indicators support this assessment. The ratio of job openings to unemployment has fallen notably from its peak of about 2.0 in spring 2022 to 1.2 in May, the same as its average in 2019. Similarly, the gap between the number of total available jobs (measured by employed workers plus job openings) and the number of available workers (measured by the size of the labor force) has also moved down markedly from its peak of 6.1 million in spring 2022 to 1.4 million in May and is only a bit above its 2019 average of 1.2 million (figure 14). The unemployment rate has continued to edge up this year and reached 4.0 percent in May, modestly higher than in 2019. In addition, the percentage of workers quitting their jobs each month, an indicator of the availability of attractive job prospects, has continued to move down this year and, though still elevated, is now modestly below its pre-pandemic level. Similarly, the share of respondents to the Conference Board Consumer Confidence Survey reporting that jobs are plentiful has continued to move down and is somewhat lower than its level in 2019. Furthermore, the NFIB survey indicates that firms' perceptions of labor market tightness have come down from their recent peaks and returned to their pre-pandemic range. Finally, business contacts surveyed for the Federal Reserve's May 2024 Beige Book reported signs of a cooling labor market—including easing in hiring plans, better labor availability, and modest wage growth—and, similar to 2019, cited some difficulty finding workers in selected industries or areas.6

Wage growth remains elevated but has slowed

Consistent with the easing in labor market tightness, nominal wage growth continued to slow so far this year, though it remains above its pre-pandemic pace and likely too high, given productivity trends, to be consistent with 2 percent inflation over time (figure 15). Total hourly compensation, as measured by the

^{6.} See the May 2024 Beige Book, available on the Board's website at https://www.federalreserve.gov/monetarypolicy/beigebook202405.htm.

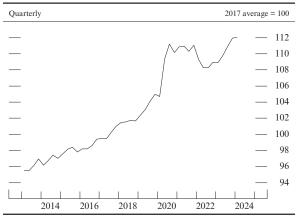
employment cost index, increased 4.1 percent over the 12 months ending in March, a noticeable slowing from the peak increase of 5.5 percent in mid-2022. Other aggregate measures of labor compensation, such as average hourly earnings (a less comprehensive measure of compensation) and the Federal Reserve Bank of Atlanta's Wage Growth Tracker (which reports the median 12-month wage growth of individuals responding to the Current Population Survey), have also continued to slow from their recent peaks in 2022 but remain well above their pre-pandemic growth rates. Wage growth has not normalized to the same extent as the measures of labor market tightness cited earlier, suggesting that there is some persistence in the adjustment process to past shocks. With PCE prices having risen 2.6 percent over the 12 months through May, these nominal wage measures suggest that most workers saw increases in the purchasing power of their wages over the past year.

Labor productivity has increased at a moderate pace with significant volatility

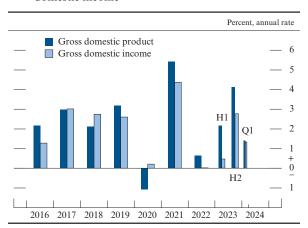
The extent to which nominal wage gains raise firms' costs and act as a source of inflation pressure depends importantly on the pace of productivity growth. Labor productivity in the business sector—the ratio of output to hours worked—has been extremely volatile since the pandemic began. It increased sharply in 2020, moved roughly sideways in 2021, declined strongly in 2022, and then rebounded solidly in 2023 (figure 16). Averaging through these large swings, business-sector productivity has increased at a moderate annual average rate of $1\frac{1}{2}$ percent since the onset of the pandemic, in line with the average rate of growth observed during the previous business cycle (from the fourth quarter of 2007 to the fourth quarter of 2019).

The pace of future productivity growth is highly uncertain. It is possible that productivity growth could remain at around its current moderate pace. However, it is also possible that the rapid adoption of new technologies like artificial intelligence (AI)

16. U.S. labor productivity



NOTE: The data are output per hour in the business sector. Source: Bureau of Labor Statistics via Haver Analytics.



NOTE: The key identifies bars in order from left to right. SOURCE: Bureau of Economic Analysis via Haver Analytics. and robotics, as well as the high rate of new business formation brought about by the pandemic, could boost productivity growth above that pace in coming years.

Growth in gross domestic product moderated in the first quarter, but private domestic demand remained solid

After expanding at a robust pace in the second half of last year despite restrictive financial conditions, real gross domestic product (GDP) decelerated to a moderate annual growth rate of 1.4 percent in the first quarter of this year (figure 17). The step-down was due in large part to sizable drags from net exports and inventory investment; these categories of expenditures tend to be volatile even in normal times and have been even more so since the pandemic. Growth in private domestic final purchases—that is, consumer spending, business fixed investment, and residential investment—also moderated in the first quarter but remained solid.⁷ Among these components of GDP, consumer spending rose strongly in the second half of last year and decelerated in the first quarter as goods spending declined while services spending continued to rise solidly. Business fixed investment increased at a moderate pace in the first quarter as a result of strength in nontransportation equipment spending and intellectual property investment, while nonresidential structures slowed after surging in 2023. Residential investment grew rapidly in the first quarter, reflecting, for the most part, increases in existing home sales and construction of single-family homes.

^{7.} Real gross domestic income (GDI) has been notably weaker than GDP in recent years; both series measure the same economic concept, and any difference between the two figures reflects measurement error in one or both series. GDI is reported to have increased at a pace only slightly slower than GDP in the first quarter but had risen notably less than GDP over the previous three years. As a result, productivity calculated from the income side of the national accounts would be considerably weaker than the published figures over the past three years.

After having returned to pre-pandemic levels in late 2021, manufacturing output has been little changed, on net, since then. While motor vehicle production has continued to rebound from earlier disruptions, factory production outside of motor vehicles has drifted down somewhat. The diffusion indexes of new orders from various national and regional surveys of manufacturers remained mostly soft in June, suggesting continued modest weakness in

Consumer spending growth has been resilient but eased this year

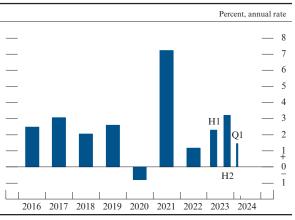
coming months.

Consumer spending adjusted for inflation grew at a solid rate of 2.7 percent in 2023 but slowed in the first quarter to a moderate 1.5 percent pace (figure 18). The resilience in consumer spending last year in the face of high interest rates likely reflected strong job gains and rising real wages. Indeed, real disposable personal income increased at a robust 3.8 percent rate in 2023. In addition, last year's spending was bolstered by households drawing down their liquid assets, such as checking accounts, and relying more on credit.

More recently, the easing in consumer spending growth in the first quarter was accompanied by a softening in some household spending fundamentals along with somewhat restrictive financial conditions. Disposable personal income growth moderated in the first quarter after a robust pace last year. While household finances appear healthy in the aggregate, credit card and auto loan delinquencies continued to rise in the first quarter, suggesting that a growing share of households are experiencing some financial stress.

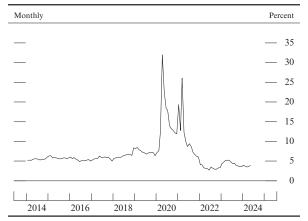
Despite the recent easing in consumer spending growth, households continue to spend more of their income than is typical. The saving rate—the difference between current income and spending, as a share of income—was 3.8 percent in the first quarter and has been well below its pre-pandemic average of over 6 percent for nine consecutive

18. Change in real personal consumption expenditures



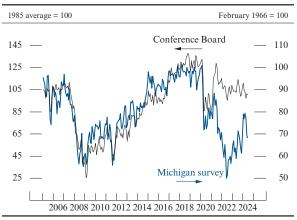
Source: Bureau of Economic Analysis via Haver Analytics.

19. Personal saving rate



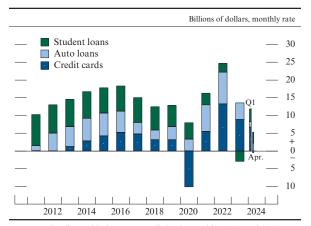
Source: Bureau of Economic Analysis via Haver Analytics.

20. Indexes of consumer sentiment



NOTE: The data are monthly and extend through June 2024. SOURCE: University of Michigan Surveys of Consumers; Conference Board.

21. Consumer credit flows



Note: Credit card balances were little changed in 2011 and 2012. Source: Federal Reserve Board, Statistical Release G.19, "Consumer Credit." quarters (figure 19). This low saving rate likely reflects in large part the effects of high wealth and still-strong balance sheets of higherincome households.

Consumer spending since the pandemic has been more robust than measures of consumer sentiment would suggest. The indexes of consumer sentiment published by both the University of Michigan and the Conference Board remain well below their pre-pandemic levels. Although the Michigan survey index has improved markedly since spring 2022, it is further below its pre-pandemic level than the Conference Board index, which puts more weight on labor market conditions (figure 20).

Consumer financing conditions remain somewhat restrictive

Consumer financing conditions have been somewhat restrictive, reflecting high borrowing costs and tight bank lending standards. Interest rates for consumer credit products such as new credit cards and auto loans edged down in recent months but remained elevated. In the April Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS), conducted by the Federal Reserve Board, banks reported continued tightening of lending standards for consumer loans in the first quarter, likely reflecting increases in delinquency rates. Indeed, credit card and auto loan delinquency rates—measured as the fraction of balances that are at least 30 days past due—have increased from their 2021 lows and are above the levels observed just before the pandemic.

Even so, financing has been generally available to support consumer spending. Consumer credit expanded moderately, on net, during the first four months of the year, driven by still-solid growth in credit card balances and modest growth in auto loans and student loans (figure 21).

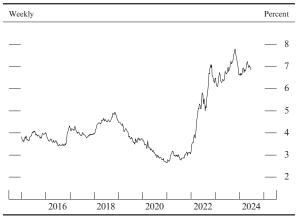
Residential investment turned around and has increased since mid-2023

After rising sharply between early 2022 and late 2023, mortgage interest rates have fallen back some since last fall but, at around 7 percent, remain well above their prepandemic peak in 2018 (figure 22). Following the sharp rise in mortgage rates, residential investment declined steeply in 2022 and fell further in the first half of last year but has picked up since mid-2023. Solid income growth and the declines in interest rates late last year have provided support for residential investment demand so far this year. Indeed, residential investment rose sharply in the first quarter.

Sales of existing homes have moved up a touch this year but remain at very low levels. Relatively high mortgage interest rates and house prices have reduced affordability and depressed homebuying sentiment. Moreover, though new listings of existing homes have increased modestly this year, the supply of existing homes for sale remains quite low, as many homeowners are reportedly "rate locked"—unwilling to move and take out a new mortgage while mortgage rates are relatively high. Many households purchased homes or refinanced when fixed mortgage rates were at historically low levels in 2020 and 2021, and, as a result, the majority of outstanding mortgages have interest rates below 4 percent (figure 23).

In contrast to existing home sales, sales of new homes declined when mortgage rates first increased, but they bounced back fairly quickly and have remained around their prepandemic levels. The new home market has likely been supported by demand from buyers who are unable to find homes in the existing home market and by homebuilder interest rate incentives (figure 24).

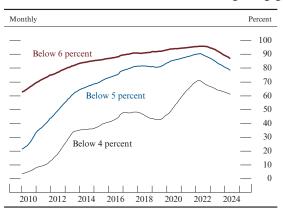
22. Mortgage interest rates



NOTE: The data are contract rates on 30-year, fixed-rate conventional home mortgage commitments and extend through June 27, 2024.

Source: Freddie Mac Primary Mortgage Market Survey via Haver Analytics.

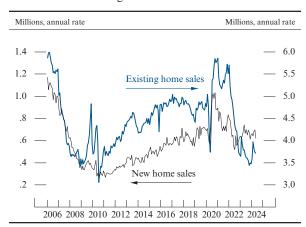
23. Distribution of interest rates on outstanding mortgages



Note: The sample only includes outstanding mortgages current on their payments.

Source: ICE, McDash®.

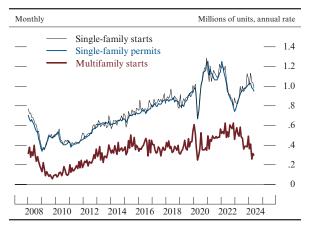
24. New and existing home sales



NOTE: The data are monthly. New and existing home sales include only single-family sales.

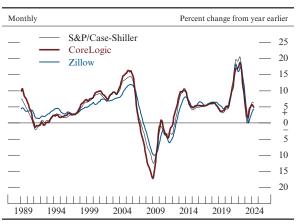
Source: For new home sales, U.S. Census Bureau; for existing home sales, National Association of Realtors; all via Haver Analytics.

25. Private housing starts and permits



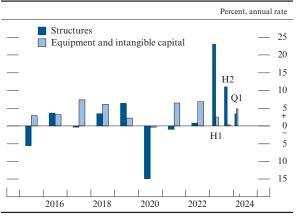
Source: U.S. Census Bureau via Haver Analytics.

26. Growth rate in house prices



Note: S&P/Case-Shiller data extend through April 2024. Source: CoreLogic, Inc., Home Price Index; Zillow, Inc., Real Estate Data; S&P/Case-Shiller U.S. National Home Price Index. The S&P/Case-Shiller index is a product of S&P Dow Jones Indices LLC and/or its affiliates. (For Dow Jones Indices licensing information, see the note on the Contents page.)

27. Change in real business fixed investment



NOTE: Business fixed investment is known as "private nonresidential fixed investment" in the national income and product accounts. The key identifies bars in order from left to right.

Source: Bureau of Economic Analysis via Haver Analytics.

The relative strength in new home demand encouraged builders to increase housing construction last year, boosting starts and permits for single-family housing (figure 25). In recent months, though, single-family housing starts and permits have drifted back down, likely because of high builder inventories and some easing in new home demand. Reflecting these demand and supply factors, house price growth slowed rapidly in 2022 from a historically high pace and has remained moderate since then (figure 26).

The balance of demand and supply in the multifamily housing market is fundamentally different from that in the single-family housing market, as it is dominated by rental units. Sharp increases in rents in 2021 and 2022 encouraged a dramatic increase in multifamily starts in those years, creating large amounts of new supply. With many units still under construction and weak rental growth since 2022, multifamily starts have been declining since last year (as shown in figure 25).8

Capital spending increased at a moderate pace

Business investment spending rose moderately in 2023 and in the first quarter of this year, supported by strong sales growth and improvements in business sentiment and profit expectations—and despite high interest rates (figure 27). However, the sources of strength in business investment shifted recently. Investment in structures—which had surged in early 2023 because of a boom in manufacturing construction, especially for factories that produce semiconductors or electric vehicle batteries—decelerated in the second half of 2023 and has slowed further so far this year, although the level of structures investment remains much higher than in

^{8.} For additional discussion, see the box "Recent Housing Market Developments" in Board of Governors of the Federal Reserve System (2024), *Monetary Policy Report* (Washington: Board of Governors, March), pp. 19–21, https://www.federalreserve.gov/publications/files/20240301_mprfullreport.pdf.

previous years. Starting late last year, growth in business investment in nontransportation equipment and intellectual property stepped up, supported by gains in high-technology equipment spending and software investment.

Business financing conditions are somewhat restrictive, but credit remains generally available

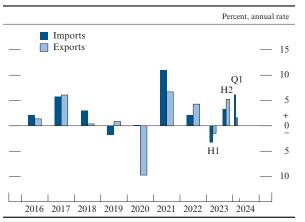
Although businesses face somewhat restrictive financing conditions, as interest rates are still elevated, credit remains generally available to most nonfinancial corporations. Banks continued to tighten lending standards for all business loan types over the first quarter of this year, and even though business loan growth at banks increased in the first five months of the year, it stayed tepid. In contrast, issuance of corporate bonds remained strong so far this year, although well below the levels that prevailed at the beginning of the tightening cycle.

For small businesses, which are more reliant on bank financing than large businesses, credit conditions remained tight but stable over the first half of this year. Surveys indicate that credit supply for small businesses tightened modestly, while interest rates on loans to small businesses were little changed, staying near the top of the range observed since 2008. In addition, while loan default rates have continued to increase, delinquency rates stabilized in the first part of the year at levels that slightly exceeded their pre-pandemic rates. Finally, loan originations have remained stable over the past year and above the range observed before the pandemic, suggesting that credit continues to be available for small businesses.

Net exports were a drag on GDP growth

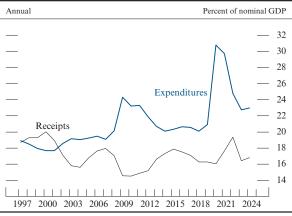
On balance, net exports subtracted 0.7 percentage point from U.S. GDP growth in the first quarter of this year after having contributed about one-tenth to annualized GDP growth in the second half of last year. After moderate growth in the second half of

28. Change in real imports and exports of goods and services



Source: Bureau of Economic Analysis via Haver Analytics.

29. Federal receipts and expenditures



Note: Through 2023, the receipts and expenditures data are on a unified-budget basis and are for fiscal years (October to September); gross domestic product (GDP) is for the 4 quarters ending in Q3. For 2024, receipts and expenditures are for the 12 months ending in May; GDP is the average of 2023:Q4 and 2024:Q1.

SOURCE: Department of the Treasury, Financial Management Service; Office of Management and Budget and Bureau of Economic Analysis via Haver Analytics.

last year, real imports of goods and services have stepped up further this year despite some deceleration in U.S. GDP growth. By contrast, real export growth has slowed significantly, as some categories with especially strong growth in the second half of last year declined this year, particularly industrial supplies and materials (figure 28). The current account deficit as a share of GDP widened slightly in the first quarter of 2024 and remains wider than before the pandemic.

Federal fiscal policy actions were roughly neutral for GDP growth last year and so far this year

Federal purchases grew modestly in 2023 and moved sideways in the first quarter of the year. The overall contribution of discretionary federal fiscal policy to real GDP growth appears to have been roughly neutral last year and in the first quarter of this year, as the unwinding of pandemic-related policies offset the boost to consumption and investment from policies enacted after the pandemic.

The budget deficit and federal debt remain elevated

After surging to about 15 percent of GDP in fiscal year 2020, the budget deficit declined through fiscal 2022 as the imprint of the pandemic faded (figure 29). The budget deficit moved up to 6.3 percent of GDP in fiscal 2023 as net interest outlays increased, while tax receipts declined from their elevated level in 2022. Debt service costs have moved up sharply in recent years—as a result of higher interest rates and a higher level of debt—and are at their highest level in over two decades. The primary deficit—the difference between noninterest outlays and receipts—has moved down, on net, since fiscal 2020 and moved sideways in 2022 to 2023, as the effects of a decline in noninterest outlays as a share of GDP were offset by a decline in receipts as a share of GDP.

As a result of the unprecedented fiscal support enacted early in the pandemic, federal debt held by the public jumped roughly 20 percentage points to close to 100 percent of GDP in 2020—the highest debt-to-GDP ratio since 1947 (figure 30). The debt-to-GDP ratio has moved roughly sideways since then, as upward pressure from large primary deficits has been offset by strong nominal GDP growth.

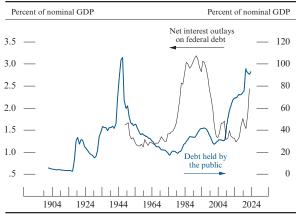
Most state and local government budget positions remained strong . . .

Federal policymakers provided a historically high level of fiscal support to state and local governments during the pandemic; this aid, together with robust state tax collections in 2021 and 2022, left the sector in a strong budget position overall (figure 31). Although state tax revenues weakened in 2023 and early this year—mainly reflecting a normalization of receipts from elevated levels in 2022, as well as the effects of recently enacted tax cuts in some states—taxes as a percentage of GDP remained near recent historical norms. Moreover, states' total balances—that is, including rainy day fund balances and previous-year surplus funds—continued to be near all-time highs. Nevertheless, budget situations varied widely across states, with some states—particularly those that depend heavily on capital gains tax collections—facing tighter budget conditions. At the local level, overall property tax receipts rose briskly in 2023 and continued to increase at an elevated rate in the first quarter.

... contributing to brisk growth in employment and construction spending

Employment in state and local governments rose strongly in 2023 and early this year and has now recovered from the drop during the pandemic, though it is still below the level implied by the pre-pandemic trend (figure 32). This surge in state and local employment reflects the waning of pandemic-related headwinds such as a big increase in retirements early in the pandemic and slower wage growth relative to that in the private sector. Similarly, real construction outlays grew at a historically high rate last year, reflecting easing bottlenecks and support from federal grants, and are now somewhat above their pre-pandemic levels.

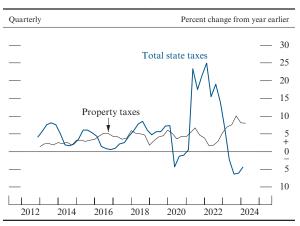
30. Federal government debt and net interest outlays



Note: The data for net interest outlays are annual, begin in 1948, and extend through 2023. Net interest outlays are the cost of servicing the debt held by the public, offset by certain types of interest income the government receives. Federal debt held by the public equals federal debt excluding most intragovernmental debt, evaluated at the end of the quarter. The data for federal debt are annual from 1901 to 1951 and a 4-quarter moving average thereafter. GDP is gross domestic product.

SOURCE: For GDP, Bureau of Economic Analysis via Haver Analytics; for federal debt, Congressional Budget Office and Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States."

31. State and local tax receipts



NOTE: Receipts shown are year-over-year percent changes of 4-quarter moving averages and begin in 2012:Q4. Property taxes are primarily collected by local governments.

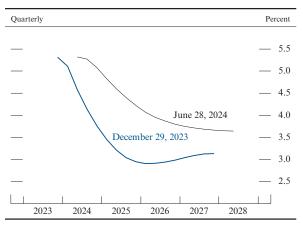
SOURCE: U.S. Čensus Bureau, Quarterly Summary of State and Local Government Tax Revenue.

32. State and local government payroll employment

Monthly — 20.5 — 20.0 — 19.5 — 19.0 — 18.5

Source: Bureau of Labor Statistics via Haver Analytics.

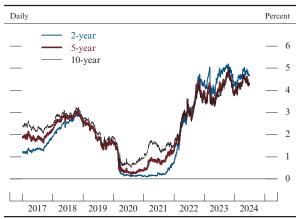
33. Market-implied federal funds rate path



Note: The federal funds rate path is implied by quotes on overnight index swaps—a derivative contract tied to the effective federal funds rate. The implied path as of December 29, 2023, is compared with that as of June 28, 2024. The path is estimated with a spline approach, assuming a term premium of 0 basis points. The December 29, 2023, path extends through 2027:Q4 and the June 28, 2024, path through 2028:Q2.

Source: Bloomberg; Federal Reserve Board staff estimates.

34. Yields on nominal Treasury securities



Source: Department of the Treasury via Haver Analytics.

Financial Developments

The expected level of the federal funds rate over the next few years is higher since the beginning of the year

Over the late winter and early spring, the market-implied federal funds rate path moved up, boosted by above-expectations inflation data that prompted market participants to reassess the monetary policy restraint required to return inflation to 2 percent. The rise in the path was partially reversed since late April amid mixed but generally softer-thanexpected data on real activity and inflation. Since the beginning of the year, on net, the market-implied federal funds rate path rose substantially (figure 33). Financial market prices currently suggest that investors expect the federal funds rate to decline to about 4.9 percent and 4.0 percent by year-ends 2024 and 2025, respectively. Roughly consistent with market-implied measures, respondents to the Blue Chip Financial Forecasts survey have significantly revised upward their expectations for the path of the federal funds rate, with the average respondent in the July survey expecting the federal funds rate to decline to 5.0 percent in the fourth quarter of 2024— 0.6 percentage point higher than anticipated at the end of last year.

Yields on U.S. nominal Treasury securities are higher on net

Consistent with the upward revision in the market-implied federal funds rate path, yields on shorter-term Treasury securities rose notably between mid-February and late April before retracing some of the increase afterward. Yields on longer-term nominal Treasury securities moved similarly with yields on shorter-term nominal Treasury securities. On balance, nominal Treasury yields are moderately higher than at the beginning of the year across the maturity spectrum (figure 34). An increase in real yields—as measured by yields on Treasury Inflation-Protected Securities—accounted for a large portion of the rise in nominal Treasury yields, especially at longer maturities.

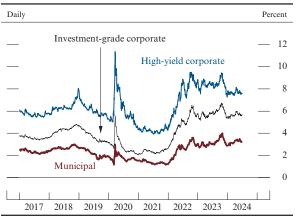
Yields on other long-term debt fluctuated with Treasury yields

Yields on corporate bonds generally followed the movements in longer-term Treasury yields and increased since the beginning of the year for both the investment- and speculative-grade segments of the market (figure 35). Both yield spreads on investment- and speculative-grade corporate bonds over comparable-maturity Treasury securities remain near the low end of their respective historical distributions as corporate bond investors appeared to be pricing in a generally optimistic outlook. Yields on municipal bonds remain at elevated levels relative to rates prevailing before the recent tightening cycle, having increased moderately since January. Meanwhile, spreads of municipal bond yields to yields on comparable-maturity Treasury securities were relatively little changed, on net, and are at compressed levels relative to their historical distribution. Yields on agency mortgagebacked securities (MBS)—an important influence on home mortgage interest rates increased since the start of the year (figure 36). Agency MBS spreads to Treasury securities remain elevated relative to pre-pandemic levels, due in part to elevated interest rate volatility, which increases the risk of holding MBS.

Broad equity price indexes increased

Broad equity price indexes rose substantially since the start of the year, on net, led by large technology firms (figure 37). While equity prices remained sensitive to inflation news, equity investors appeared to be generally sanguine about the prospect of inflation coming down without a sharp downturn in activity. First-quarter corporate earnings releases, which were generally solid, also supported equity valuations. Meanwhile, equity prices for small-cap firms were little changed. Equity prices for large banks increased, on net, while equity prices for regional banks declined, reflecting lingering concerns about the health of these banks related in part to the quality of their commercial real estate loans. One-month option-implied volatility on the S&P 500

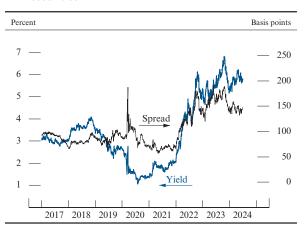
Corporate bond yields, by securities rating, and municipal bond yield



Note: Investment-grade corporate reflects the effective yield of the ICE Bank of America Merrill Lynch (BofAML) triple-B U.S. Corporate Index (C0A4). High-yield corporate reflects the effective yield of the ICE BofAML High Yield Index (H0A0). Municipal reflects the yield to worst of the ICE BofAML U.S. Municipal Securities Index (U0A0).

Source: ICE Data Indices, LLC, used with permission.

36. Yield and spread on agency mortgage-backed securities

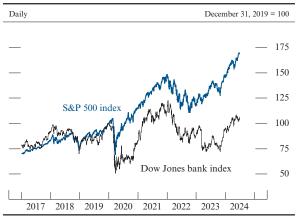


Note: The data are daily. Yield shown is for the uniform mortgage-backed securities 30-year current coupon, the coupon rate at which new mortgage-backed securities would be priced at par, or face, value for dates after May 31, 2019; for earlier dates, the yield shown is for the Fannie Mae 30-year current coupon. Spread shown is to the average of the 5-year and 10-year nominal Treasury yields.

Source: Department of the Treasury; J.P. Morgan. Courtesy of J.P.

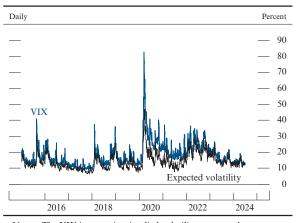
Morgan Chase & Co., Copyright 2024.

37. Equity prices



SOURCE: S&P Dow Jones Indices LLC via Bloomberg. (For Dow Jones Indices licensing information, see the note on the Contents page.)

38. S&P 500 volatility



Note: The VIX is an option-implied volatility measure that represents the expected annualized variability of the S&P 500 index over the following 30 days. The expected volatility series shows a forecast of 1-month realized volatility, using a heterogeneous autoregressive model based on 5-minute S&P 500 returns.

SOURCE: Cboe Volatility Index® (VIX®) via Bloomberg; Refinitiv DataScope; Federal Reserve Board staff estimates.

index—the VIX—fluctuated somewhat, reaching its peak so far this year in early April amid increased inflation concerns and geopolitical tensions, but quickly retraced and ended the period little changed (figure 38). Currently, the VIX stands close to its typical historical level that was observed before the pandemic. (For a discussion of financial stability issues, see the box "Developments Related to Financial Stability.")

Major asset markets functioned in an orderly manner, despite some indicators pointing to low liquidity

Functioning of the Treasury securities market has continued to be orderly. While a number of measures of Treasury market liquidity remain low by historical standards, some of these measures—such as on-the-run securities market depth, a measure of the availability of securities to transact at the best quoted prices—improved modestly since January. Liquidity in the equity market remained low compared with pre-pandemic levels, and liquidity conditions deteriorated slightly since the beginning of the year. The depth of the S&P 500 futures market decreased a bit, and the price impact increased slightly. Corporate and municipal bond markets continued to function well, and trading conditions remained stable; transaction costs in these markets continued to be fairly low by historical standards.

Short-term funding market conditions remained stable

Conditions in overnight money markets remained stable, with spreads of money market rates to the Federal Reserve's administered rates roughly unchanged outside of month-end dates. Since the beginning of the year, the effective federal funds rate has stayed 7 basis points below the interest rate on reserve balances, and other unsecured overnight rates have been around similar levels with limited volatility. The Secured Overnight Financing Rate has remained 1 or 2 basis points above the offering rate on the overnight

Developments Related to Financial Stability

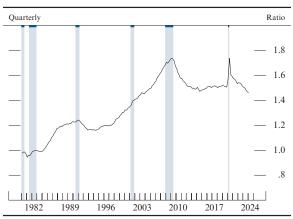
This discussion reviews vulnerabilities in the U.S. financial system. The framework used by the Federal Reserve Board for assessing the resilience of the U.S. financial system focuses on financial vulnerabilities in four broad areas: asset valuations, business and household debt, leverage in the financial sector, and funding risks. All told, the financial system remains sound and resilient. Valuations increased to levels that were high relative to fundamentals across major asset classes, with equity prices growing faster than expected earnings and residential property prices remaining high relative to market rents. Credit to nonfinancial businesses and households relative to gross domestic product (GDP) continued to decline, falling to nearly a two-decade low. Most banks continued to report solid capital levels, but fair value losses on fixed-rate assets remained sizable. In addition, some banks continued to rely significantly on uninsured deposits. Hedge fund leverage grew to historical highs, driven primarily by borrowing by the largest hedge funds.

Valuations rose further to levels that were high relative to fundamentals across major asset classes. Equity prices grew faster than expected earnings, pushing the compensation for equity risk—computed as the difference between the inverse of the forward price-to-earnings ratio and expected real yields on 10-year Treasury securities—to its lowest level since 2007. Corporate bond spreads narrowed and currently stand at levels close to historical lows. Amid limited supply of homes available for sale, residential property prices remained high relative to market rents, standing near their peaks. Conditions in commercial real estate (CRE) markets continued to deteriorate, with declining transaction prices in most segments reflecting weak demand. Nominal long-term Treasury yields increased moderately since the beginning of the year and stayed close to their highest levels over the past decade and a half.

The balance sheets of nonfinancial businesses and households remained strong. The combined debt of both sectors as a share of GDP continued to decline and sat close to its lowest level in two decades (figure A). The decline is due to decreases in both business- and household-sector debt relative to GDP (figure B). Furthermore, business debt continued to decline in real terms, and debt-servicing capacity

(continued on next page)

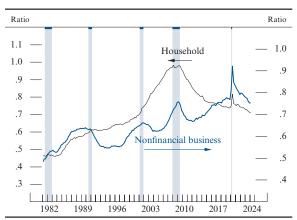
A. Private nonfinancial-sector credit-to-GDP ratio



Note: The shaded bars with top caps indicate periods of business recession as defined by the National Bureau of Economic Research: January 1980 to July 1980, July 1981 to November 1982, July 1990 to March 1991, March 2001 to November 2001, December 2007 to June 2009, and February 2020 to April 2020. GDP is gross domestic product.

SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States"; Bureau of Economic Analysis, national income and product accounts; Federal Reserve Board staff calculations.

B. Nonfinancial business and household debt-to-GDP ratios



Note: The data are quarterly. The shaded bars with top caps indicate periods of business recession as defined by the National Bureau of Economic Research: July 1981 to November 1982, July 1990 to March 1991, March 2001 to November 2001, December 2007 to June 2009, and February 2020 to April 2020. GDP is gross domestic product.

SOURCE: Federal Reserve Board, Statistical Release Z.1, "Financial Accounts of the United States"; Bureau of Economic Analysis, national income and product accounts; Federal Reserve Board staff calculations.

Developments Related to Financial Stability (continued)

stayed solid for most public firms—in large part due to strong earnings, large cash buffers, and low borrowing costs on existing debt. In addition, the pass-through of higher interest rates into debt-servicing costs continues to be muted because the share of long-term, fixed-rate liabilities remained sizable. Corporate bond default rates have returned to their average levels, rising from their low points in 2021 but declining from their peaks in the second half of 2023, suggesting that credit quality is stabilizing with pockets of stress continuing for the riskiest borrowers. Expectations of year-ahead defaults stayed somewhat elevated relative to their history. Household balance sheets are still sound, as most homeowners have ample home equity cushions and strong credit histories. Borrowers with prime credit scores—for whom delinquency rates remained low and stable across credit markets—correspond to more than 60 percent of all borrowers and continued to account for most of household debt outstanding.

Regarding vulnerabilities in the financial sector, most banks continued to report capital levels well above regulatory requirements. However, fair value losses on fixed-rate assets remained sizable for some banks, while parts of banks' CRE portfolios are facing stress. Despite a moderation in deposit outflows, higher funding costs—together with expected increases in loss provisions

for CRE and consumer loans—could put downward pressure on banks' profits and their ability to build capital through retained earnings. Outside the banking sector, hedge fund leverage stayed near historical highs, partly due to funds' substantial positions in the Treasury futures basis trade. Leverage at broker-dealers continued to be near historically low levels, but limited capacity or willingness of broker-dealers to intermediate in Treasury markets during market stress remained a structural vulnerability. Life insurers' leverage increased and stood around its median.

Liquidity at most domestic banks remained ample, with limited reliance on short-term wholesale funding. However, some banks' reliance on uninsured deposits remained high, and bond mutual funds' exposure to interest rate risk continued to be significant. Structural vulnerabilities remained in other short-term funding markets. Prime and tax-exempt money market funds, as well as other cash-investment vehicles and stablecoins, continued to be vulnerable to runs. Bond and loan funds remain susceptible to redemptions during periods of stress, with more severe pressures possible if assets become more illiquid or redemptions become unusually large. In addition, life insurers continued to rely on a higher-than-average share of nontraditional liabilities.

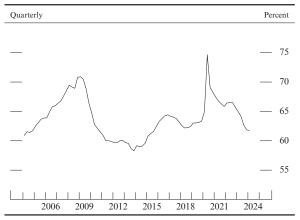
reverse repurchase agreement (ON RRP) facility, except for short-lived upward pressure around month-ends. Take-up at the ON RRP facility declined in the first quarter, reflecting an increase in the net supply of Treasury bills and the associated upward pressure on bill yields relative to the offered rate on ON RRP investments as well as relatively more attractive rates on other short-term investments such as private repurchase agreements. However, the pace of decline in take-up slowed somewhat in the second quarter, primarily because of a decline in net bill supply. (See the box "Developments in the Federal Reserve's Balance Sheet and Money Markets" in Part 2.)

Assets under management of prime and government money market funds (MMFs), the largest investors in the ON RRP facility, trended up as they continued to offer favorable yields relative to most bank deposits. Prime MMFs increased liquid asset holdings and decreased weighted average maturities to satisfy the Securities and Exchange Commission's reform requirements that became effective in April. Several institutional prime funds announced conversions to government funds, while a handful announced closures, citing the reform's liquidity fees starting in October as the main driver behind the decision. However, these announced conversions and closures are unlikely to materially affect the funds' usage of the ON RRP facility, because only minor additional portfolio changes will be required for conversions and because the decline in money fund assets due to funds closing is likely too small relative to total investments in the facility.

Bank credit continued to expand at a slow pace

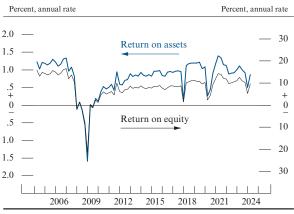
Banks' total loan holdings grew at about a 2 percent annualized rate in the first five months of the year, modestly up from a 1.3 percent rate in the fourth quarter of 2023. The still-tepid loan growth likely reflects the effects of higher interest rates, tighter credit standards, and economic uncertainty

39. Ratio of total commercial bank credit to nominal gross domestic product



Source: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States"; Bureau of Economic Analysis via Haver Analytics.

40. Profitability of bank holding companies



Note: The data are quarterly. Source: Federal Reserve Board, Form FR Y-9C, Consolidated Financial Statements for Holding Companies. (figure 39). Banks in the SLOOS reported generally tighter standards and weaker demand over the first quarter of 2024, extending trends for standards and demand that have been reported since the middle of 2022. Delinquency rates continued to climb to above their longer-run average for commercial real estate and consumer loans in the first quarter of 2024 but remained in ranges observed before the pandemic across most other credit segments. Bank profitability picked up in the first quarter—reversing the dip in the fourth quarter of 2023—mainly driven by recent rising noninterest income and reduced loan loss provisions. Bank profitability levels are still below those that prevailed before the pandemic, reflecting rising funding costs and subdued loan demand (figure 40).

International Developments

Foreign economic growth rose after a soft patch in the second half of 2023

After a soft patch in the second half of 2023, foreign activity appears to have improved in both advanced foreign economies (AFEs) and emerging market economies (EMEs). In AFEs, growth rates returned to moderate levels despite the effects of restrictive monetary policy as lower inflation improved real household incomes. In Europe, energy-intensive sectors continue to struggle amid ongoing structural adjustment to past increases in energy prices following Russia's 2022 invasion of Ukraine.

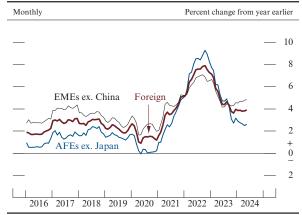
In EMEs, economic growth was supported by a rebound in exports. In addition, industrial production in emerging Asia was supported by rising global demand for high-tech products, driven in part by the AI and electric vehicle sectors. China was a significant contributor to the pickup in foreign aggregate growth, boosted by both strong exports and fiscal policy support, even though household spending expanded only moderately. Notably, activity in China's property sector remained extremely weak and house prices fell sharply,

prompting the authorities to introduce new policy support measures.

Inflation abroad continued to ease but remains above central bank targets in most regions

Foreign headline inflation has continued to stabilize overall since the middle of last year, primarily reflecting disinflation in AFE food and energy prices (figures 41 and 42). That said, the pace of disinflation has proved to be slower than expected and uneven across countries and economic sectors. As in the U.S., the deceleration in goods prices abroad has generally outpaced that in services prices. Inflation remains above target in Europe but has been near zero in China. In many economies, the main risks to continued disinflation include both domestic factors, such as sustained wage pressures, and external geopolitical factors, such as Russia's war against Ukraine and developments in the Middle East, which pose risks for supply chain disruptions, increased trade costs, and higher energy prices.

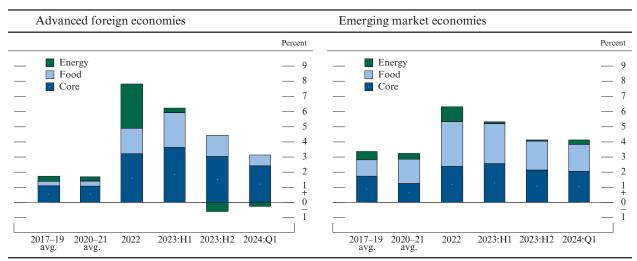
41. Consumer price inflation in foreign economies



Note: The advanced foreign economy (AFE) aggregate is the average of Canada, the euro area, and the U.K., weighted by shares of U.S. non-oil goods imports. The emerging market economy (EME) aggregate is the average of Argentina, Brazil, Chile, Colombia, Hong Kong, India, Indonesia, Israel, Malaysia, Mexico, the Philippines, Russia, Saudi Arabia, Singapore, South Korea, Taiwan, Thailand, and Vietnam, weighted by shares of U.S. non-oil goods imports. The foreign aggregate is the import-weighted average of all aforementioned countries. The inflation measure is the Harmonised Index of Consumer Prices for the euro area and the consumer price index for other economies.

Source: Federal Reserve Board staff calculations; Haver Analytics.

42. Components of foreign consumer price inflation



Note: The advanced foreign economy aggregate is the average of Canada, the euro area, and the U.K., weighted by shares of U.S. non-oil goods imports. The emerging market economy aggregate is the average of Argentina, Brazil, Chile, Colombia, Hong Kong, India, Indonesia, Israel, Malaysia, Mexico, the Philippines, Russia, Saudi Arabia, Singapore, South Korea, Taiwan, Thailand, and Vietnam, weighted by shares of U.S. non-oil goods imports, and begins in 2017:Q2. The inflation measure is the Harmonised Index of Consumer Prices for the euro area and the consumer price index for other economies. The data show percent changes from year-ago levels.

Source: Federal Reserve Board staff calculations; Haver Analytics.

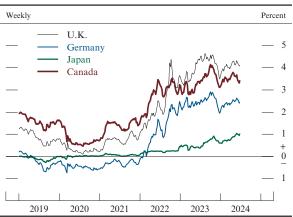
43. Equity indexes for selected foreign economies



Note: The data are weekly averages of daily data and extend through June 28, 2024.

SOURCE: For the euro area, Dow Jones Euro Stoxx Index; for Japan, Tokyo Stock Price Index; for China, Shanghai Composite Index; for the U.K., FTSE 100 Index; all via Bloomberg. (For Dow Jones Indices licensing information, see the note on the Contents page.)

44. Nominal 10-year government bond yields in selected advanced foreign economies



Note: The data are weekly averages of daily benchmark yields and extend through June 28, 2024.

Source: Bloomberg

Foreign central banks cut policy rates but remain cautious

Many foreign central banks have noted progress in lowering inflation and easing resource tightness and have indicated that they expect further progress. Some have begun to cut their policy rates while continuing to stress a data-dependent approach.

In EMEs, several central banks began easing monetary policy late in 2023. AFE central banks began to cut rates in the second quarter. The Swiss National Bank, Sweden's Riksbank, the Bank of Canada, and the European Central Bank all cut their policy rates amid easing inflation. Policy rate paths implied by financial market pricing indicate that markets expect other AFE central banks to begin reducing interest rates later this year. Still, most foreign central bank communications have also emphasized upside risks to inflation from persistent core services inflation, currency depreciation, and geopolitical tensions. Japan has been a notable exception: Amid persistently high Japanese inflation, the Bank of Japan (BOJ) ended its negative interest rate policy and yield curve control in March.

Equity prices rose even as sovereign bond yields in advanced foreign economies increased

Foreign equity indexes rose significantly across AFEs and EMEs, consistent with above-expectations economic data and strong corporate earnings in many economies (figure 43). Nevertheless, investors withdrew from EME-focused investment funds as higher advanced-economy yields weighed on their demand for EME assets. In addition, some recent elections abroad contributed to notable movements in equities and other asset prices.

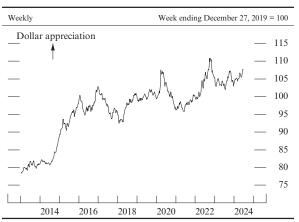
AFE sovereign bond yields increased significantly in early 2024 and are up notably since the start of the year in Germany, Japan, and the U.K. (figure 44). These increases were driven by stronger-than-expected global activity data and spillovers from higher U.S. yields. Relative to late 2023, market-implied

paths for policy rates now indicate a later start to easing and fewer rate cuts by many central banks. In Japan, yields were further supported by three BOJ tightening actions: raising policy rates from negative 0.1 percent to a band of 0 to 0.1 percent, discontinuing the yield curve control framework, and issuing guidance pointing to a potential reduction in sovereign bond purchases.

The exchange value of the dollar rose notably

Since year-end 2023, the broad dollar index—a measure of the exchange value of the dollar against a trade-weighted basket of foreign currencies—increased significantly, on net, reflecting dollar appreciation against both AFE and EME currencies (figure 45). The increase in the dollar index was consistent with a widening of interest rate differentials between the U.S. and the rest of the world.

45. U.S. dollar exchange rate index



Note: The data, which are in foreign currency units per dollar, are weekly averages of daily values of the broad dollar index and extend through June 28, 2024. As indicated by the arrow, increases in the data reflect U.S. dollar appreciation and decreases reflect U.S. dollar depreciation.

SOURCE: Federal Reserve Board staff calculations; Federal Reserve Board, Statistical Release H.10, "Foreign Exchange Rates."

PART 2 MONETARY POLICY

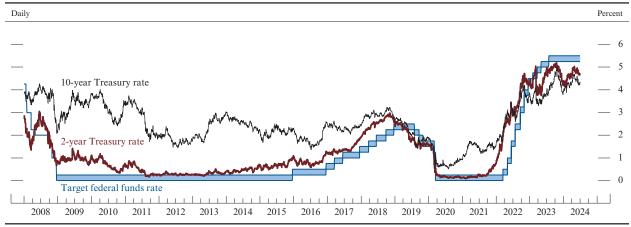
The Federal Open Market Committee has held the federal funds rate steady . . .

The Federal Reserve conducts monetary policy to promote its statutory goals of maximum employment and price stability. (See the box "Monetary Policy Independence, Transparency, and Accountability.") Inflation has eased over the past year but has remained elevated while the economy has continued to expand at a solid pace. Job gains have been strong, and the unemployment rate has remained low. Against this backdrop, the Federal Open Market Committee (FOMC) has maintained a restrictive stance of policy at recent meetings to keep demand in line with supply and reduce inflationary pressures. Since its July 2023 meeting, the Committee has maintained the target range for the federal funds rate at $5\frac{1}{4}$ to $5\frac{1}{2}$ percent, after having raised the target range a total of 525 basis points starting in early 2022 (figure 46). The FOMC's policy tightening actions and current policy stance reflect the Committee's strong

commitment to return inflation to its 2 percent objective. Restoring price stability is essential to achieving maximum employment and stable prices over the long run that benefit all Americans.

With labor market tightness continuing to ease gradually and inflation easing over the past year, the risks to achieving the Committee's employment and inflation goals have moved toward better balance. The Committee remains highly attentive to inflation risks and is acutely aware that high inflation imposes significant hardship, especially on those least able to meet the higher costs of essentials, like food, housing, and transportation. In considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks. The Committee does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent.

46. Selected interest rates



NOTE: The 2-year and 10-year Treasury rates are the constant-maturity yields based on the most actively traded securities. SOURCE: Department of the Treasury; Federal Reserve Board.

Monetary Policy Independence, Transparency, and **Accountability**

Monetary policy is carried out by the Federal Reserve in pursuit of maximum employment and price stability—the dual-mandate goals assigned to it by Congress. Congress has also given the Federal Reserve operational independence. Under this arrangement, the Federal Reserve, rather than other parts of the government, makes determinations about the monetary policy actions that are most appropriate for achieving the dual-mandate goals. This arrangement allows monetary policy decisions to be insulated from shortterm political influences.

There is broad support for the principles underlying independent monetary policy. It is widely understood that the monetary policy actions that deliver maximum employment and price stability in the longer run may involve restraining measures that entail short-run economic costs, while actions that raise output and employment to unsustainable levels have no long-run real benefits and may lead to elevated inflation rates. These considerations highlight the value of monetary policy being carried out by an independent agency whose decisions are based on the congressionally assigned dual mandate.1 Operational independence of

1. The same basic case for independence has been sketched by successive Federal Reserve Chairs. For example, Paul Volcker noted in congressional testimony in February 1982 that "Congress deliberately set us up with an insulation from that kind of political pressure, and that that is a trust that you have given us and that we mean to discharge," and he elaborated in July 1987: "[Not] responding to all the shortterm political considerations that exist to produce easier money than the basic situation warrants and the long-term health of the currency and the economy warrants . . . [is] the basic justification for the independence of the Federal Reserve." Alan Greenspan testified in October 1993 that there was "an awareness that independence of the central bank is an element in keeping inflation down." Ben Bernanke remarked in May 2010: "It is important that we maintain and protect . . . the ability of central banks to make monetary policy decisions based on what is good for the economy in the longer run, independent of short-term political considerations." Also in 2010, Janet Yellen (who was at the time Vice Chair of the Federal Reserve Board and who later served as Federal Reserve Chair) observed: "The principle of central bank independence in the conduct of monetary policy is widely accepted as vital to achieving maximum employment and price stability." Chair Jerome Powell likewise stated in January 2023 that "the case for monetary policy independence lies in the benefits of insulating monetary policy decisions from short-term political considerations."

monetary policy has become an international norm, and economic research indicates that economic performance has tended to be better when central banks have such independence.²

Because the Federal Reserve is accountable to Congress and has been granted independence in

See Paul A. Volcker (1982), "Panel Discussion," in Federal Reserve's First Monetary Policy Report for 1982, hearings before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 11 and 25, Senate Hearing 97-48, 97th Cong. (Washington: U.S. Government Printing Office), quoted text on p. 28, https://fraser.stlouisfed.org/title/monetarypolicy-oversight-671/federal-reserve-s-first-monetary-policy report-1982-22312; Paul A. Volcker (1987), remarks in Federal Reserve's Second Monetary Policy Report for 1987, hearing before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, July 23, 100th Cong. (Washington: U.S. Government Printing Office), quoted text on p. 45, https:// fraser.stlouisfed.org/title/monetary-policy-oversight-671/ federal-reserve-s-second-monetary-policy-report-1987-22373; Alan Greenspan (1994), remarks in The Federal Reserve Accountability Act of 1993, hearing before the Committee on Banking, Finance, and Urban Affairs, U.S. House of Representatives, October 13, 1993, 103rd Cong. (Washington: U.S. Government Printing Office), quoted text on p. 40, https://fraser.stlouisfed.org/title/federal-reserve-accountabilityact-1993-1154; Ben S. Bernanke (2010), "Central Bank Independence, Transparency, and Accountability," speech delivered at the Institute for Monetary and Economic Studies International Conference, Bank of Japan, Tokyo, May 25, quoted text in paragraph 2, https://www.federalreserve.gov/ newsevents/speech/bernanke20100525a.htm; Janet L. Yellen (2010), "Macroprudential Supervision and Monetary Policy in the Post-crisis World," speech delivered at the Annual Meeting of the National Association for Business Economics, Denver, Colo., October 11, quoted text in paragraph 44, https://www. federalreserve.gov/newsevents/speech/yellen20101011a. htm; and Jerome H. Powell (2023), "Panel on 'Central Bank Independence and the Mandate—Evolving Views," " speech delivered at the Symposium on Central Bank Independence, Sveriges Riksbank, Stockholm, Sweden, January 10, quoted text in paragraph 2, https://www.federalreserve. gov/newsevents/speech/powell20230110a.htm. A detailed discussion of the issues involved is provided by Paul Tucker (2018), Unelected Power: The Quest for Legitimacy in Central Banking and the Regulatory State (Princeton, N.J.: Princeton

2. See, for example, Christopher Crowe and Ellen E. Meade (2008), "Central Bank Independence and Transparency: Evolution and Effectiveness," European Journal of Political Economy, vol. 24 (December), pp. 763-77.

the setting of monetary policy, it is vitally important that the Federal Reserve be transparent to Congress and the American people about its monetary policy actions. Transparency requires that the Federal Open Market Committee (FOMC) explain the reasons for its monetary policy decisions, including how these decisions relate to its statutory goals. This feature of transparency underlies the FOMC's assessment that "transparency and accountability . . . are essential in a democratic society."

Specifically, monetary policy transparency consists of the process in which the Federal Reserve provides to the American people and their elected representatives information about the objectives and strategy of monetary policy, announces its decisions regarding the setting of its policy instruments, explains the reasoning behind those decisions, and provides detailed records of monetary policy committee meetings. The Federal Reserve promotes monetary policy transparency in multiple ways, including through testimony given by Federal Reserve policymakers at congressional hearings, speeches by the Chair and other FOMC meeting participants on economic and policy developments, the FOMC's postmeeting statements, the published minutes and transcripts of each FOMC meeting, the quarterly Summary of Economic Projections (SEP), the Chair's press conferences, and dialogues between FOMC participants and community representatives across the country.

A strong emphasis on transparency has characterized the past 30 years of U.S. monetary policy. Previously, Federal Reserve officials from the 1950s to

on p. 296.

the 1980s regularly gave congressional testimony and speeches on monetary policy. Nevertheless, important aspects of transparency were missing. The FOMC in these decades did not provide, in a systematic and timely manner, information on its monetary policy decisions.⁴ In particular, it did not follow a regular practice of issuing, after policy meetings, an announcement of Committee policy actions and the rationale for those actions. The situation changed starting in the mid-1990s. Reflecting on this change, in 2023 Chair Powell noted: "Over the past several decades we have steadily broadened our efforts to provide meaningful transparency about the basis for, and consequences of, the decisions we make."

The shift to greater transparency has reflected not only the fact that transparency supports the Federal Reserve's accountability, but also widespread acceptance that transparency can contribute to the effectiveness of monetary policy. Explanations to the general public of the FOMC's decisions, strategy, and plans tend to enhance the effects of monetary policy actions on financial conditions, economic activity, and inflation. For example, a numerical inflation objective can be helpful in anchoring longer-run inflation expectations, while forward guidance (which is at times provided in FOMC statements) about the federal funds rate can influence key longer-term interest rates by shaping the private sector's assessment of the likely future course of the funds rate. Consequently, the FOMC has observed that clarity about monetary

(continued on next page)

^{3.} See the FOMC's Statement on Longer-Run Goals and Monetary Policy Strategy (quoted text in paragraph 1), available on the Board's website at https://www.federalreserve.gov/monetarypolicy/files/fomc_longerrungoals.pdf. More specifically, paragraph 1 of this statement indicates that "the Committee seeks to explain its monetary policy decisions to the public as clearly as possible" and that "such clarity facilitates . . . transparency and accountability, which are essential in a democratic society." In the same spirit, a major contribution to the research literature on the practice of monetary policy—the 1999 book *Inflation Targeting*—earlier observed: "Transparency and communication together enhance accountability." See Ben S. Bernanke, Thomas Laubach, Frederic S. Mishkin, and Adam S. Posen (1999), *Inflation Targeting: Lessons from the International Experience* (Princeton N.J.: Princeton University Press), quoted text

^{4.} See David E. Lindsey (2003), "A Modern History of FOMC Communication: 1975–2002," memorandum to the Federal Open Market Committee, Board of Governors of the Federal Reserve System, Division of Monetary Affairs, June 24, https://www.federalreserve.gov/monetarypolicy/files/FOMC20030624memo01.pdf; and Ben S. Bernanke (2013), "A Century of US Central Banking: Goals, Frameworks, Accountability," *Journal of Economic Perspectives*, vol. 27 (Fall), pp. 3–16.

^{5.} See Powell, "Panel on 'Central Bank Independence," in box note 1 (quoted text in paragraph 4). See also Alan S. Blinder (2002), "Through the Looking Glass: Central Bank Transparency," CEPS Working Paper 86 (Princeton, N.J.: Princeton University Department of Economics, December), https://gceps.princeton.edu/wp-content/uploads/2017/01/86blinder.pdf.

Monetary Policy Independence (continued)

policy decisions "increases the effectiveness of monetary policy." 6

Today the acceptance of the need for, and benefits of, monetary policy transparency is reflected in the large volume of material that the FOMC and the individual Committee participants provide about their decisions and thinking.7 A major step in the direction of greater transparency took place in 1994, when announcements of policy changes began to be issued after FOMC meetings. By the end of the decade, these releases had evolved into the now standard and key part of the Committee's policy communications—a statement released by the Committee after each meeting that announces the decision on the federal funds rate target range and any other policy actions, puts that decision in the context of the Committee's assessment of incoming data and the economic outlook, and gives the record of the vote on the action.8 Further information about Committee decisions is provided via FOMC meeting minutes, released three weeks after each FOMC meeting (a shorter lag than that prevailing until the mid-2000s). After five years, transcripts of the FOMC meetings are made public.

6. See the FOMC's Statement on Longer-Run Goals and Monetary Policy Strategy, in box note 3 (quoted text in paragraph 1).

At the end of 2007, the FOMC began publishing, on a quarterly basis, the SEP, which distills information about individual meeting participants' economic projections. Since then, numerous features have been added to the SEP, including longer-run projections in 2009 and federal funds rate projections in 2012. In 2011, Chair Bernanke started holding regular postmeeting press conferences. In 2019, Chair Powell initiated the practice of holding press conferences after every FOMC meeting.

With regard to its strategy, in January 2012 the FOMC issued a Statement on Longer-Run Goals and Monetary Policy Strategy, or "consensus statement." The consensus statement has been reaffirmed in the years since 2012, and it has been revised several times. From its inception, the consensus statement made the pricestability component of the dual mandate numerically precise by indicating that Federal Reserve policymakers interpret it as corresponding to a 2 percent longerrun inflation rate (in the personal consumption expenditures price index). Also in the area of strategy, in 2018 the Federal Reserve launched the practice of having a review of monetary policy strategy, tools, and communication practices roughly every five years. The first such framework review took place from 2019 to 2020. An innovation of this review was the holding, around the country, of Fed Listens events, consisting of a dialogue between Federal Reserve policymakers and community members on monetary policy and economic issues. The Federal Reserve has continued to hold Fed Listens events between the periods of framework review.

The framework review process also included internal FOMC deliberations. These deliberations took place at Committee meetings and were detailed in the publicly released FOMC meeting minutes. The Federal Reserve staff memos that served as an input into these deliberations were released publicly after the completion of the 2019–20 review. The next framework review is scheduled to begin later this year.

Along with the transparency-enhancing activities, documents, and statements described earlier, further information on monetary policy decisions is provided in the frequent speeches, interviews, and testimony given by FOMC meeting participants.

^{7.} For further details, see Board of Governors of the Federal Reserve System (2019), "Review of Monetary Policy Strategy, Tools, and Communications," webpage, https://www.federalreserve.gov/monetarypolicy/review-of-monetary-policy-strategy-tools-and-communications-fed-listens-timelines.htm; and Jerome H. Powell (2024), "Opening Remarks," speech delivered at the Stanford Business, Government, and Society Forum, Stanford Graduate School of Business, Stanford, Calif., April 3, https://www.federalreserve.gov/newsevents/speech/powell20240403a.htm.

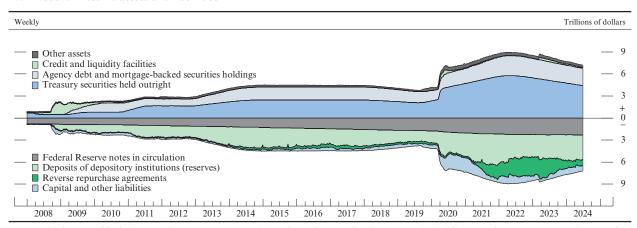
^{8.} In the past 15 years, information about the Committee's balance sheet policy has been an important part of the postmeeting statement and related FOMC statements. A detailed account of key communications on balance sheet policy that the Committee has issued in recent years is provided in Board of Governors of the Federal Reserve System (2024), "FOMC Communications Related to Policy Normalization," webpage, https://www.federalreserve.gov/monetarypolicy/policy-normalization.htm. A longer-term chronology, covering developments over the past decade, is available at Board of Governors of the Federal Reserve System (2024), "History of the FOMC's Policy Normalization Discussions and Communications," webpage, https://www.federalreserve.gov/monetarypolicy/policy-normalization-discussions-communications-history.htm.

The FOMC began reducing its securities holdings in June 2022 and, since then, has continued to implement its plan for significantly reducing the size of the Federal Reserve's balance sheet in a predictable manner. For some time, principal payments from securities held in the System Open Market Account (SOMA) had been reinvested only to the extent that they exceeded monthly caps of \$60 billion per month for Treasury securities and \$35 billion per month for agency debt and agency mortgage-backed securities (MBS). On June 1, the Committee slowed the pace of decline of its securities holdings, consistent with its Plans for Reducing the Size of the Federal Reserve's Balance Sheet. Specifically, the Committee reduced the redemption cap on Treasury securities to \$25 billion per month and maintained the redemption cap on agency debt and agency MBS at \$35 billion per month. Any proceeds

in excess of the agency debt and agency MBS cap would be reinvested into Treasury securities, consistent with the Committee's intention to hold primarily Treasury securities in the longer run. The decision to slow the pace of balance sheet runoff does not have implications for the stance of monetary policy and does not mean that the balance sheet will ultimately shrink by less than it would otherwise. Rather, a slower pace of balance sheet runoff helps facilitate a smooth transition from abundant to ample reserve balances and gives the Committee more time to assess market conditions as the balance sheet continues to shrink. It will also allow banks, and short-term funding markets more generally, additional time to adjust to the lower level of reserves, thus reducing the probability that money markets experience undue stress that could require an early end to runoff.

The SOMA holdings of Treasury and agency securities have declined about \$1.7 trillion since the start of the balance sheet reduction and about \$260 billion since February 2024 to around \$6.8 trillion, a level equivalent to 24 percent of U.S. nominal gross domestic product, down from its peak of 35 percent reached at the end of 2021 (figure 47). Also, since February 2024, reserve balances—

47. Federal Reserve assets and liabilities



Note: "Other assets" includes repurchase agreements, FIMA (Foreign and International Monetary Authorities) repurchase agreements, and unamortized premiums and discounts on securities held outright. "Credit and liquidity facilities" consists of primary, secondary, and seasonal credit; term auction credit; central bank liquidity swaps; support for Maiden Lane, Bear Stearns Companies, Inc., and AIG; and other credit and liquidity facilities, including the Primary Dealer Credit Facility, the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, the Term Asset-Backed Securities Loan Facility, the Primary and Secondary Market Corporate Credit Facilities, the Paycheck Protection Program Liquidity Facility, the Municipal Liquidity Facility, and the Main Street Lending Program. "Agency debt and mortgage-backed securities holdings" includes agency residential mortgage-backed securities and agency commercial mortgage-backed securities. "Capital and other liabilities" includes the U.S. Treasury General Account and the U.S. Treasury Supplementary Financing Account. The key identifies shaded areas in order from top to bottom. The data extend through June 19, 2024.

SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

^{9.} See the May 4, 2022, press release regarding the Plans for Reducing the Size of the Federal Reserve's Balance Sheet, available on the Board's website at https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504b.htm.

46 PART 2: MONETARY POLICY

the largest liability item on the Federal Reserve's balance sheet—have declined about \$180 billion to a level of around \$3.4 trillion. The smaller decline of reserve balances compared with the decline in SOMA holdings reflects decreases in nonreserve liabilities such as balances at the overnight reverse repurchase agreement facility. (See the box "Developments in the Federal Reserve's Balance Sheet and Money Markets.")

The FOMC has stated that it intends to maintain securities holdings at amounts consistent with implementing monetary policy efficiently and effectively in its amplereserves regime—that is, a regime in which an ample supply of reserves ensures that control over the level of the federal funds rate and other short-term interest rates is exercised primarily through the setting of the Federal Reserve's administered rates and in which active management of the supply of reserves is not required. To ensure a smooth transition to ample reserve balances, the FOMC slowed the pace of decline of its securities holdings in June 2024 and intends to stop reductions in its securities holdings when reserve balances are somewhat above the level that the FOMC judges to be consistent with ample reserves. Once balance sheet runoff has ceased, reserve balances will likely continue to decline at a slower pace—reflecting growth in other Federal Reserve liabilities—until the FOMC judges that reserve balances are at an ample level. Thereafter, the FOMC will manage securities holdings as needed to maintain ample reserves over time.

The FOMC will continue to monitor the implications of incoming information for the economic outlook and the balance of risks

As already indicated, the FOMC is strongly committed to returning inflation to its

2 percent objective, and, in considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks. Its assessments will take into account a wide range of information, including readings on labor market conditions, inflation pressures and inflation expectations, and financial and international developments. The Committee has noted that it is also prepared to adjust its approach to reducing the size of the balance sheet in light of economic and financial developments.

In addition to considering a wide range of economic and financial data, the FOMC gathers information from business contacts and other informed parties around the country, as summarized in the Beige Book. The Federal Reserve has regular arrangements under which it hears from a broad range of participants in the U.S. economy about how monetary policy affects people's daily lives and livelihoods. In particular, the Federal Reserve has continued to gather insights into these matters through the *Fed Listens* initiative and the Federal Reserve System's community development outreach.

Policymakers also routinely consult prescriptions for the policy interest rate provided by various monetary policy rules. These rule prescriptions can provide useful benchmarks for the conduct of monetary policy. However, simple rules cannot capture all of the complex considerations that go into the formation of appropriate monetary policy, and many practical considerations make it undesirable for the FOMC to adhere strictly to the prescriptions of any specific rule. Nevertheless, some principles of good monetary policy are embedded in these simple rules. (See the box "Monetary Policy Rules in the Current Environment.")

Developments in the Federal Reserve's Balance Sheet and Money Markets

The Federal Open Market Committee (FOMC) continued to reduce the size of the Federal Reserve's System Open Market Account (SOMA) portfolio. Since the previous report, total Federal Reserve assets have decreased \$315 billion, leaving the total size of the balance sheet at \$7.3 trillion, \$1.7 trillion smaller since the reduction in the size of the SOMA portfolio began in June 2022 (figures A and B).¹ On May 1, the FOMC

(continued on next page)

1. The last Federal Reserve Board statistical release H.4.1 ("Factors Affecting Reserve Balances") before the publication of the previous *Monetary Policy Report* on March 1 was

dated February 29, 2024. As a result, this discussion refers to changes in the Federal Reserve's balance sheet since late February

2. See the May 4, 2022, press release regarding the Plans for Reducing the Size of the Federal Reserve's Balance Sheet, available on the Board's website at https://www.federalreserve.gov/newsevents/pressreleases/monetary20220504b.htm.

A. Balance sheet comparison

Billions of dollars

	June 19, 2024	February 28, 2024	Change (since February 2024)	Memo: Change (since Fed's balance sheet reduction began on June 1, 2022)	
Assets					
Total securities					
Treasury securities	4,453	4,661	-208	-1,318	
Agency debt and MBS	2,357	2,406	-49	-353	
Unamortized premiums	265	274	-8	-72	
Repurchase agreements	0	0	0	0	
Loans and lending facilities					
PPPLF	3	3	0	-17	
Discount window	7	2	5	6	
BTFP	107	163	-56	107	
Other loans and lending facilities	11	15	-4	-23	
Central bank liquidity swaps	0	0	0	0	
Other assets	49	44	6	7	
Total assets	7,253	7,568	-315	-1,663	
Liabilities					
Federal Reserve notes	2,301	2,282	18	70	
Reserves held by depository institutions	3,366	3,541	-175	9	
Reverse repurchase agreements					
Foreign official and international accounts	389	339	50	124	
Others	376	570	-194	-1,589	
U.S. Treasury General Account	782	768	14	2	
Other deposits	158	162	-4	-90	
Other liabilities and capital	-120	-94	-25	-188	
Total liabilities and capital	7,253	7,568	-315	-1,663	

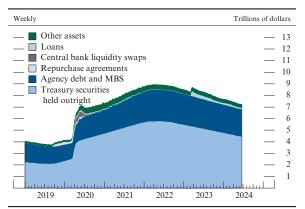
NOTE: MBS is mortgage-backed securities. PPPLF is Paycheck Protection Program Liquidity Facility. BTFP is Bank Term Funding Program. Components may not sum to totals because of rounding.

Source: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

announced that beginning in June, the Committee would slow the pace of decline of its securities holdings, consistent with its Plans for Reducing the Size of the Federal Reserve's Balance Sheet.²

Federal Reserve's Balance Sheet and Money Markets (continued)

B. Federal Reserve assets



Note: MBS is mortgage-backed securities. The key identifies shaded areas in order from top to bottom. The data extend through June 19, 2024. SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances

Reserves, the largest liability item on the Federal Reserve's balance sheet, have declined \$175 billion since late February 2024 to a level of about \$3.4 trillion.³ Since the beginning of balance sheet runoff, reserves have been little changed because the reserve-draining effect of balance sheet runoff was more than offset by a \$1.6 trillion decline in balances at the overnight reverse repurchase agreement (ON RRP) facility. Since February 2024, usage of the ON RRP facility has continued to decline, albeit at a slower pace than that seen over the second half of 2023. Usage of the facility has averaged around \$450 billion since the end of February (figure C). Reduced usage of the ON RRP facility largely reflects money market mutual funds shifting their portfolios toward higher-yielding investments, including Treasury bills and private-market repurchase agreements.

Conditions in overnight money markets remained stable. The ON RRP facility continued to serve its intended purpose of supporting the control of the effective federal funds rate (EFFR), and the Federal Reserve's administered rates—the interest rate on reserve balances and the ON RRP offering rate remained highly effective at maintaining the EFFR within the target range.

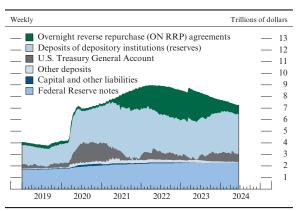
The Federal Reserve's expenses have continued to exceed its income over recent months. The Federal Reserve's deferred asset has increased \$23 billion since late February to a level of around \$175 billion.4 Negative net income and the associated deferred asset

(continued)

^{3.} Reserve balances consist of deposits held at the Federal Reserve Banks by depository institutions (DIs), such as commercial banks, savings banks, credit unions, thrift institutions, and U.S. branches and agencies of foreign banks.

^{4.} The deferred asset is equal to the cumulative shortfall of net income and represents the amount of future net income that will need to be realized before remittances to the Treasury resume. Although remittances are suspended at the time of this

C. Federal Reserve liabilities



Note: "Capital and other liabilities" includes the liability for earnings remittances due to the U.S. Treasury and contributions from the U.S. Treasury. The current sum is negative on June 19, 2024, because of the deferred asset that the Federal Reserve reports. The key identifies shaded areas in order from top to bottom. The data extend through June 19, 2024.

SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances."

do not affect the Federal Reserve's conduct of monetary policy or its ability to meet its financial obligations.⁵

report, over the past decade and a half, the Federal Reserve has remitted over \$1 trillion to the Treasury.

5. Net income is expected to turn positive again as interest expenses fall, and remittances will resume once the temporary deferred asset falls to zero. As a result of the ongoing reduction in the size of the Federal Reserve's balance sheet, interest

While the reduction in the size of the SOMA portfolio has continued as planned, amid the banking-sector developments of spring 2023, the Federal Reserve provided liquidity to help ensure the stability of the banking system and the ongoing provision of money and credit to the economy. Loans extended under the Bank Term Funding Program (BTFP)—which made longer-term funding and liquidity available to eligible depository institutions to support American households and businesses and ceased making new loans as scheduled on March 11, 2024—have decreased \$56 billion to a level of \$107 billion since February 2024.6

expenses will fall over time in line with the decline in the Federal Reserve's liabilities.

6. The BTFP was established under section 13(3) of the Federal Reserve Act with the approval of the Secretary of the Treasury. The BTFP offered loans of up to one year to banks, savings associations, credit unions, and other eligible DIs against collateral such as U.S. Treasury securities, U.S. agency securities, and U.S. agency mortgage-backed securities. For more details, see Board of Governors of the Federal Reserve System (2024), "Bank Term Funding Program," webpage, June 11, https://www.federalreserve.gov/financial-stability/bank-term-funding-program.htm.

Monetary Policy Rules in the Current Environment

As part of their monetary policy deliberations, policymakers regularly consult the prescriptions of a variety of simple interest rate rules without mechanically following the prescriptions of any particular rule. Simple interest rate rules relate a policy interest rate, such as the federal funds rate, to a small number of other economic variables—typically including the current deviation of inflation from its target value and a measure of resource slack in the economy.

Since 2021, inflation has run above the Federal Open Market Committee's (FOMC) 2 percent longerrun objective, and labor market conditions have been tight. Although inflation remains elevated, it has eased over the past year, and labor supply and demand have come into better balance. Against this backdrop, the simple monetary policy rules considered in this discussion have called for levels of the policy interest rate over 2021, 2022, and the first half of 2023 that were elevated relative to the FOMC's target range for the federal funds rate. However, the rates prescribed by these rules for the first quarter of 2024, the most recent quarter for which data are available, are close to or below the current target range for the federal funds rate at 51/4 to 51/2 percent. In support of its goals of maximum employment and inflation at the rate of 2 percent over the longer run, the FOMC has maintained the target range for the federal funds rate at 51/4 to 51/2 percent since last July while continuing to reduce its holdings of Treasury securities and agency debt and agency mortgage-backed securities.

Selected Policy Rules: Descriptions

In many economic models, desirable economic outcomes can be achieved over time if monetary policy responds to changes in economic conditions in a manner that is predictable and adheres to some key design principles. In recognition of this idea, economists have analyzed many monetary policy rules, including the well-known Taylor (1993) rule, the "balanced approach" rule, the "adjusted Taylor (1993)" rule, and the "first difference" rule. Figure A shows these rules, along with a "balanced approach

(continued)

1. The Taylor (1993) rule was introduced in John B. Taylor (1993), "Discretion versus Policy Rules in Practice," *Carnegie-Rochester Conference Series on Public Policy*, vol. 39 (December), pp. 195–214. The balanced-approach rule was analyzed in John B. Taylor (1999), "A Historical Analysis of Monetary Policy Rules," in John B. Taylor, ed., *Monetary Policy Rules* (Chicago: University of Chicago Press), pp. 319–41. The adjusted Taylor (1993) rule was studied in David Reifschneider and John C. Williams (2000), "Three Lessons for Monetary Policy in a Low-Inflation Era," *Journal of Money, Credit and Banking*, vol. 32 (November), pp. 936–66. The first-difference rule is based on a rule suggested by Athanasios Orphanides (2003), "Historical Monetary Policy Analysis and the Taylor Rule," *Journal of Monetary Economics*, vol. 50 (July),

A. Monetary policy rules

Taylor (1993) rule	$R_t^{T93} = r_t^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + (u_t^{LR} - u_t)$
Balanced-approach rule	$R_t^{BA} = r_t^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + 2(u_t^{LR} - u_t)$
Balanced-approach (shortfalls) rule	$R_t^{BAS} = r_t^{LR} + \pi_t + 0.5(\pi_t - \pi^{LR}) + 2min\{(u_t^{LR} - u_t), 0\}$
Adjusted Taylor (1993) rule	$R_{t}^{T93adj} = max\{R_{t}^{T93} - Z_{t}, \text{ELB}\}$
First-difference rule	$R_t^{FD} = R_{t-1} + 0.5(\pi_t - \pi^{LR}) + (u_t^{LR} - u_t) - (u_{t-4}^{LR} - u_{t-4})$

Note: R_i^{T93} , R_i^{BA} , R_i^{BAS} , R_i^{T93aul} , and R_i^{FD} represent the values of the nominal federal funds rate prescribed by the Taylor (1993), balanced-approach, balanced-approach (shortfalls), adjusted Taylor (1993), and first-difference rules, respectively.

 R_{t-1} denotes the midpoint of the target range for the federal funds rate for quarter t-1, u_t is the unemployment rate in quarter t, and r_t^{LR} is the level of the neutral real federal funds rate in the longer run that is expected to be consistent with sustaining maximum employment and keeping inflation at the Federal Open Market Committee's 2 percent longer-run objective, represented by π^{LR} , π_t denotes the realized 4-quarter price inflation for quarter t. In addition, u_t^{LR} is the rate of unemployment expected in the longer run. Z_t is the cumulative sum of past deviations of the federal funds rate from the prescriptions of the Taylor (1993) rule when that rule prescribes setting the federal funds rate below an effective lower bound (ELB) of 12.5 basis points.

The Taylor (1993) rule and other policy rules generally respond to the deviation of real output from its full capacity level. In these equations, the output gap has been replaced with the gap between the rate of unemployment in the longer run and its actual level (using a relationship known as Okun's law) to represent the rules in terms of the unemployment rate. The rules are implemented as responding to core personal consumption expenditures (PCE) inflation rather than to headline PCE inflation because current and near-term core inflation rates tend to outperform headline inflation rates as predictors of the medium-term behavior of headline inflation. Box note 1 provides references for the policy rules.

(shortfalls)" rule, which responds to the unemployment rate only when it is higher than its estimated longer-run level.² All of the simple rules shown embody key design principles of good monetary policy, including the requirement that the policy rate should be adjusted by enough over time to ensure a return of inflation to the central bank's longer-run objective and to anchor longer-term inflation expectations at levels consistent with that objective.

All five rules feature the difference between inflation and the FOMC's longer-run objective of 2 percent. The five rules use the unemployment rate gap, measured as the difference between an estimate of the rate of unemployment in the longer run (u_t^{LR}) and the current unemployment rate; the first-difference rule includes the change in the unemployment rate gap rather than its level.³ All but the first-difference rule include an estimate of the neutral real interest rate in the longer run (r_t^{LR}).⁴

pp. 983–1022. A review of policy rules is provided in John B. Taylor and John C. Williams (2011), "Simple and Robust Rules for Monetary Policy," in Benjamin M. Friedman and Michael Woodford, eds., *Handbook of Monetary Economics*, vol. 3B (Amsterdam: North-Holland), pp. 829–59. The same volume of the *Handbook of Monetary Economics* also discusses approaches to deriving policy rate prescriptions other than through the use of simple rules.

- 2. The balanced-approach (shortfalls) rule responds asymmetrically to unemployment rates above or below their estimated longer-run value: When unemployment is above that value, the policy rates are identical to those prescribed by the balanced-approach rule, whereas when unemployment is below that value, policy rates do not rise because of further declines in the unemployment rate. As a result, the prescription of the balanced-approach (shortfalls) rule has been less restrictive than that of the balanced-approach rule since the first quarter of 2022.
- 3. Implementations of simple rules often use the output gap as a measure of resource slack in the economy. The rules described in figure A instead use the unemployment rate gap because that gap better captures the FOMC's statutory goal to promote maximum employment. Movements in these alternative measures of resource utilization tend to be highly correlated. For more information, see the note associated with figure A.
- 4. The neutral real interest rate in the longer run (r_t^{LR}) is the level of the real federal funds rate that is expected to be consistent, in the longer run, with maximum employment and stable inflation. Like u_t^{LR} , r_t^{LR} is determined largely by nonmonetary factors. The first-difference rule shown in figure A does not require an estimate of r_t^{LR} , a feature that is touted by proponents of such rules as providing an element of robustness. However, this rule has its own shortcomings. For example, research suggests that this sort of rule often results in greater volatility in employment and inflation than what would be obtained under the Taylor (1993) and balanced-approach rules.

Unlike the other simple rules featured here, the adjusted Taylor (1993) rule recognizes that the federal funds rate cannot be reduced materially below the effective lower bound (ELB). By contrast, the standard Taylor (1993) rule prescribed policy rates that, during the pandemic-induced recession, were far below zero. To make up for the cumulative shortfall in policy accommodation following a recession during which the federal funds rate is constrained by its ELB, the adjusted Taylor (1993) rule prescribes delaying the return of the policy rate to the (positive) levels prescribed by the standard Taylor (1993) rule.

Policy Rules: Limitations

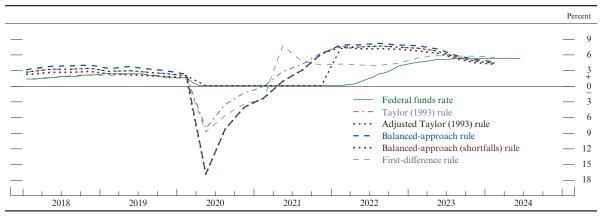
As benchmarks for monetary policy, simple policy rules have important limitations. One of these limitations is that the simple policy rules mechanically respond to only a small set of economic variables and thus necessarily abstract from many of the factors that the FOMC considers when it assesses the appropriate setting of the policy rate. In addition, the structure of the economy and current economic conditions differ in important respects from those prevailing when the simple policy rules were originally devised and proposed. As a result, most simple policy rules do not take into account the ELB on interest rates, which limits the extent to which the policy rate can be lowered to support the economy. This constraint was particularly evident during the pandemic-driven recession, when the lower bound on the policy rate motivated the FOMC's other policy actions to support the economy. Relatedly, another limitation is that simple policy rules do not explicitly take into account other important tools of monetary policy, such as balance sheet policies. Finally, simple policy rules are not forward looking and do not allow for important risk-management considerations, associated with uncertainty about economic relationships and the evolution of the economy, that factor into FOMC decisions.

Selected Policy Rules: Prescriptions

Figure B shows historical prescriptions for the federal funds rate under the five simple rules considered. For each quarterly period, the figure reports the policy rates prescribed by the rules, taking as given the prevailing economic conditions and survey-based estimates of u_t^{LR} and r_t^{LR} at the time. All of the rules considered called for a highly accommodative stance of monetary policy in response to the pandemic-driven recession, followed by (continued on next page)

Monetary Policy Rules (continued)

B. Historical federal funds rate prescriptions from simple policy rules



Note: The rules use historical values of core personal consumption expenditures inflation, the unemployment rate, and, where applicable, historical values of the midpoint of the target range for the federal funds rate. Quarterly projections of longer-run values for the federal funds rate, the unemployment rate, and inflation used in the computation of the rules' prescriptions are interpolations to quarterly values of projections from the Survey of Primary Dealers. The rules' prescriptions are quarterly, and the federal funds rate data are the monthly average of the daily midpoint of the target range for the federal funds rate and extend through June 2024.

SOURCE: Federal Reserve Bank of New York, Survey of Primary Dealers; Federal Reserve Bank of St. Louis, Federal Reserve Economic Data, DFEDTARL and DFEDTARU; Federal Reserve Board staff estimates.

positive values as inflation picked up and labor market conditions strengthened.⁵ In 2022 and during the first half of 2023, the prescriptions of the simple rules for

the federal funds rate were well above the prescriptions observed before the pandemic, reflecting, in large part, elevated inflation readings. Because inflation has recently run notably below levels observed at its peak in 2022, the policy rates prescribed by these rules have now declined. The current prescriptions from these rules are close to or below the current target range for the federal funds rate, though higher than survey-based estimates of the longer-run value of the federal funds rate.

discussion in the *Monetary Policy Report*, where Z_t cumulated from the fourth quarter of 2020.

^{5.} For the adjusted Taylor (1993) rule, Z_t —the cumulative sum of past deviations of the federal funds rate from the prescriptions of the Taylor (1993) rule when that rule prescribes setting the federal funds rate below an ELB of 12.5 basis points—is positive in the third quarter of 2020, one quarter after the prescription of the Taylor (1993) rule falls below the ELB, through to the first quarter of 2022. This approach is a slight adjustment from previous editions of this

PART 3 SUMMARY OF ECONOMIC PROJECTIONS

The following material was released after the conclusion of the June 11–12, 2024, meeting of the Federal Open Market Committee.

In conjunction with the Federal Open Market Committee (FOMC) meeting held on June 11–12, 2024, meeting participants submitted their projections of the most likely outcomes for real gross domestic product (GDP) growth, the unemployment rate, and inflation for each year from 2024 to 2026 and over the longer run. Each participant's projections were based on information available at the time of the meeting, together with her or his assessment of appropriate monetary policy—including a path for the federal funds rate and its longer-run value—and assumptions about other factors likely

to affect economic outcomes. The longerrun projections represent each participant's assessment of the value to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. "Appropriate monetary policy" is defined as the future path of policy that each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her individual interpretation of the statutory mandate to promote maximum employment and price stability.

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, under their individual assumptions of projected appropriate monetary policy, June 2024

Percent

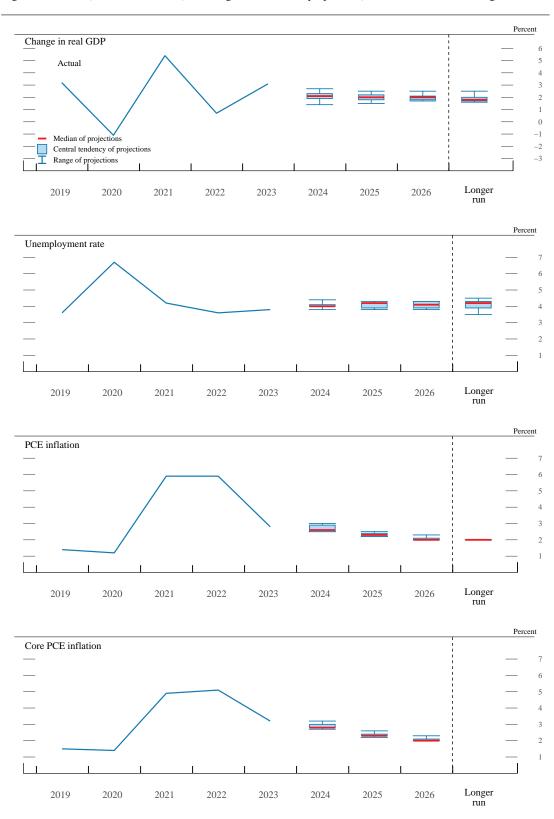
	Median ¹			Central tendency ²			Range ³					
Variable	2024	2025	2026	Longer run	2024	2025	2026	Longer run	2024	2025	2026	Longer run
Change in real GDP	2.1	2.0	2.0	1.8	1.9–2.3	1.8-2.2	1.8-2.1	1.7–2.0	1.4-2.7	1.5-2.5	1.7–2.5	1.6–2.5
March projection	2.1	2.0	2.0	1.8	2.0-2.4	1.9-2.3	1.8-2.1	1.7-2.0	1.3–2.7	1.7-2.5	1.7-2.5	1.6–2.5
Unemployment rate	4.0	4.2	4.1	4.2	4.0-4.1	3.9-4.2	3.9-4.3	3.9–4.3	3.8–4.4	3.8-4.3	3.8-4.3	3.5–4.5
March projection	4.0	4.1	4.0	4.1	3.9-4.1	3.9-4.2	3.9-4.3	3.8–4.3	3.8–4.5	3.7-4.3	3.7-4.3	3.5–4.3
PCE inflation	2.6	2.3	2.0	2.0	2.5–2.9	2.2-2.4	2.0-2.1	2.0	2.5–3.0	2.2-2.5	2.0-2.3	2.0
March projection	2.4	2.2	2.0	2.0	2.3–2.7	2.1-2.2	2.0-2.1	2.0	2.2–2.9	2.0-2.5	2.0-2.3	2.0
Core PCE inflation ⁴	2.8	2.3	2.0		2.8-3.0	2.3-2.4	2.0-2.1		2.7–3.2	2.2-2.6	2.0-2.3	! ! !
March projection	2.6	2.2	2.0		2.5–2.8	2.1-2.3	2.0-2.1		2.4–3.0	2.0–2.6	2.0-2.3	
Memo: Projected appropriate policy path												1
Federal funds rate	5.1	4.1	3.1	2.8	4.9–5.4	3.9-4.4	2.9-3.6	2.5–3.5	4.9–5.4	2.9-5.4	2.4-4.9	2.4–3.8
March projection	4.6	3.9	3.1	2.6	4.6–5.1	3.4-4.1	2.6-3.4	2.5-3.1	4.4–5.4	2.6-5.4	2.4-4.9	2.4–3.8

Note: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The projections for the federal funds rate are the value of the midpoint of the projected appropriate target range for the federal funds rate or the projected appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. The March projections were made in conjunction with the meeting of the Federal Open Market Committee on March 19–20, 2024. One participant did not submit longer-run projections for the change in real GDP, the unemployment rate, or the federal funds rate in conjunction with the March 19–20, 2024, meeting.

1. For each period, the median is the middle projection when the projections are arranged from lowest to highest. When the number of projections is even, the median is the average

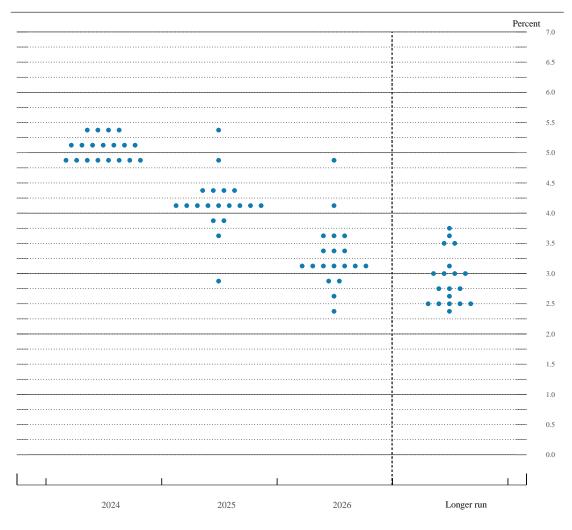
- 2. The central tendency excludes the three highest and three lowest projections for each variable in each year.
- 3. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
- Longer-run projections for core PCE inflation are not collected.

Figure 1. Medians, central tendencies, and ranges of economic projections, 2024-26 and over the longer run



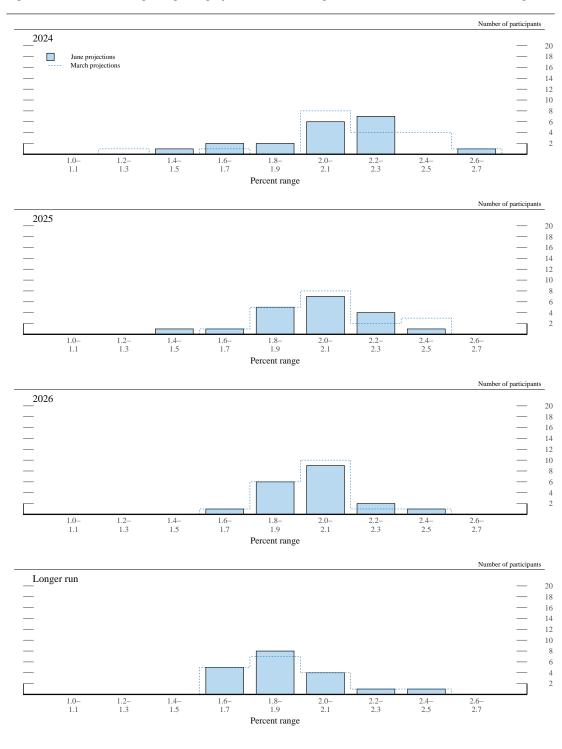
NOTE: Definitions of variables and other explanations are in the notes to table 1. The data for the actual values of the variables are annual.

Figure 2. FOMC participants' assessments of appropriate monetary policy: Midpoint of target range or target level for the federal funds rate



Note: Each shaded circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run.

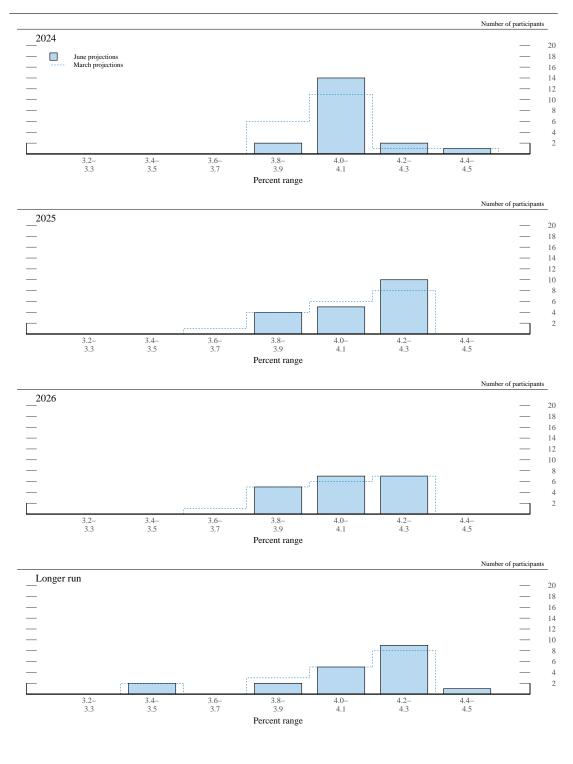
Figure 3.A. Distribution of participants' projections for the change in real GDP, 2024-26 and over the longer run



Note: Definitions of variables and other explanations are in the notes to table 1.

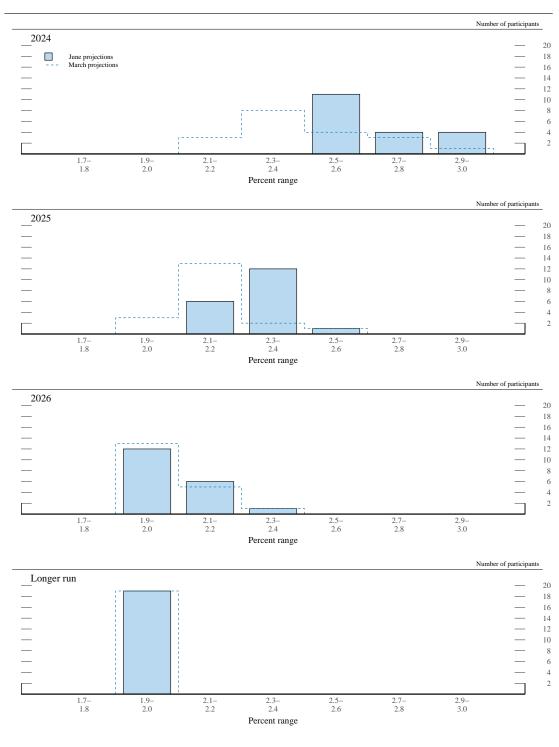
57

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2024–26 and over the longer run



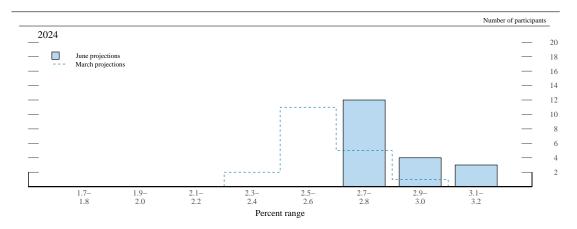
Note: Definitions of variables and other explanations are in the notes to table 1.

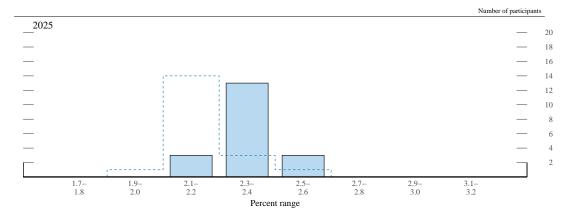
Figure 3.C. Distribution of participants' projections for PCE inflation, 2024-26 and over the longer run



Note: Definitions of variables and other explanations are in the notes to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2024–26





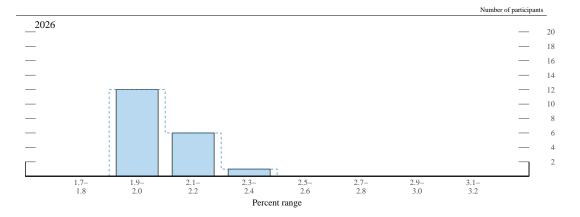
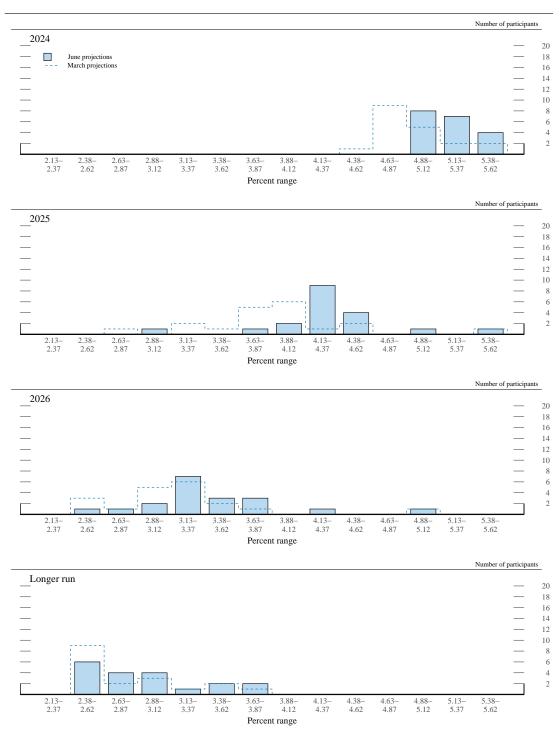
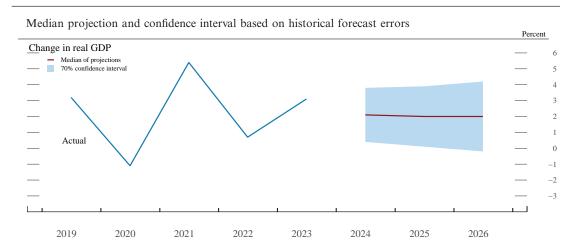


Figure 3.E. Distribution of participants' judgments of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate, 2024–26 and over the longer run

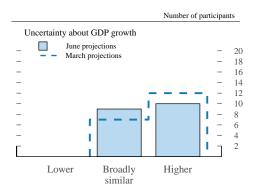


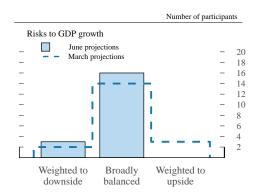
Note: Definitions of variables and other explanations are in the notes to table 1.

Figure 4.A. Uncertainty and risks in projections of GDP growth



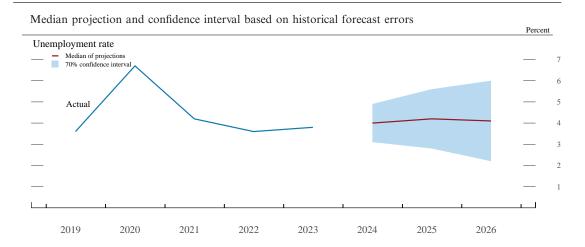
FOMC participants' assessments of uncertainty and risks around their economic projections



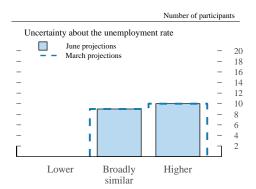


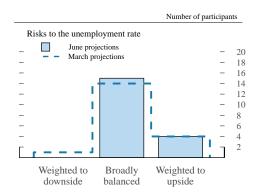
Note: The blue and red lines in the top panel show actual values and median projected values, respectively, of the percent change in real gross domestic product (GDP) from the fourth quarter of the previous year to the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root mean squared errors of various private and government forecasts made over the previous 20 years; more information about these data is available in table 2. Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections; these current assessments are summarized in the lower panels. Generally speaking, participants who judge the uncertainty about their projections as "broadly similar" to the average levels of the past 20 years would view the width of the confidence interval shown in the historical fan chart as largely consistent with their assessments of the uncertainty about their projections. Likewise, participants who judge the risks to their projections as "broadly balanced" would view the confidence interval around their projections as approximately symmetric. For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty."

Figure 4.B. Uncertainty and risks in projections of the unemployment rate



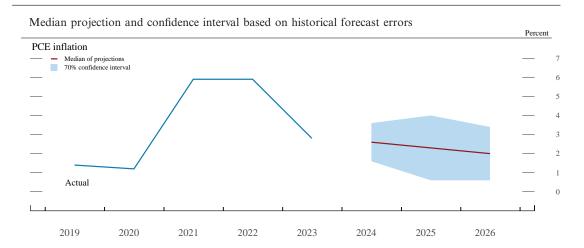
FOMC participants' assessments of uncertainty and risks around their economic projections



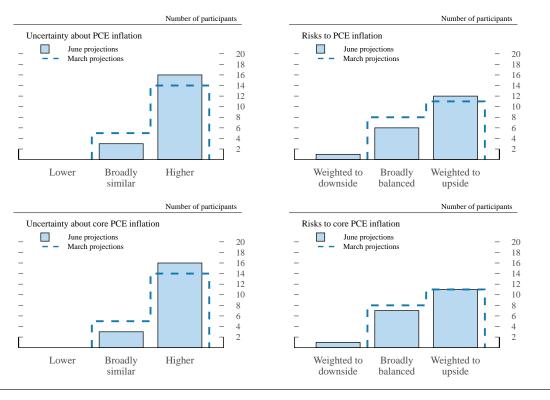


Note: The blue and red lines in the top panel show actual values and median projected values, respectively, of the average civilian unemployment rate in the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root mean squared errors of various private and government forecasts made over the previous 20 years; more information about these data is available in table 2. Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections; these current assessments are summarized in the lower panels. Generally speaking, participants who judge the uncertainty about their projections as "broadly similar" to the average levels of the past 20 years would view the width of the confidence interval shown in the historical fan chart as largely consistent with their assessments of the uncertainty about their projections. Likewise, participants who judge the risks to their projections as "broadly balanced" would view the confidence interval around their projections as approximately symmetric. For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty."

Figure 4.C. Uncertainty and risks in projections of PCE inflation



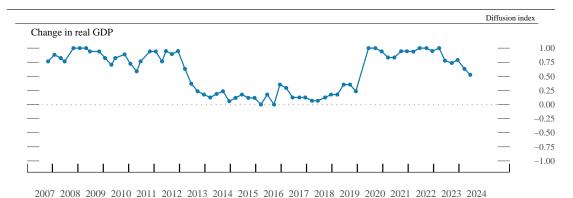
FOMC participants' assessments of uncertainty and risks around their economic projections



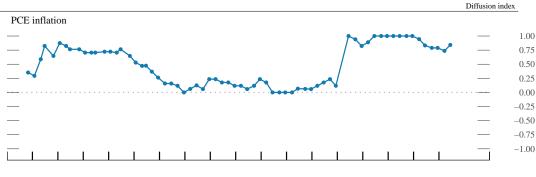
Note: The blue and red lines in the top panel show actual values and median projected values, respectively, of the percent change in the price index for personal consumption expenditures (PCE) from the fourth quarter of the previous year to the fourth quarter of the year indicated. The confidence interval around the median projected values is assumed to be symmetric and is based on root mean squared errors of various private and government forecasts made over the previous 20 years; more information about these data is available in table 2. Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections; these current assessments are summarized in the lower panels. Generally speaking, participants who judge the uncertainty about their projections as "broadly similar" to the average levels of the past 20 years would view the width of the confidence interval shown in the historical fan chart as largely consistent with their assessments of the uncertainty about their projections. Likewise, participants who judge the risks to their projections as "broadly balanced" would view the confidence interval around their projections as approximately symmetric. For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty."

64 PART 3: SUMMARY OF ECONOMIC PROJECTIONS

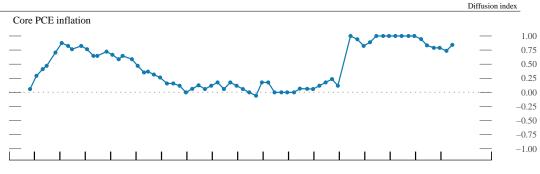
Figure 4.D. Diffusion indexes of participants' uncertainty assessments



2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024



 $2007\ 2008\ 2009\ 2010\ 2011\ 2012\ 2013\ 2014\ 2015\ 2016\ 2017\ 2018\ 2019\ 2020\ 2021\ 2022\ 2023\ 2024$

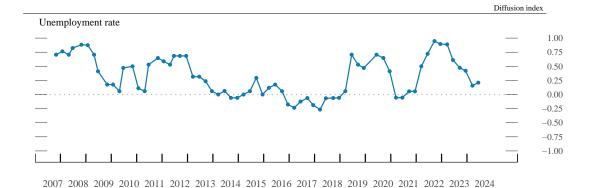


2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

Note: For each SEP, participants provided responses to the question "Please indicate your judgment of the uncertainty attached to your projections relative to the levels of uncertainty over the past 20 years." Each point in the diffusion indexes represents the number of participants who responded "Higher" minus the number who responded "Lower," divided by the total number of participants. Figure excludes March 2020 when no projections were submitted.

Figure 4.E. Diffusion indexes of participants' risk weightings

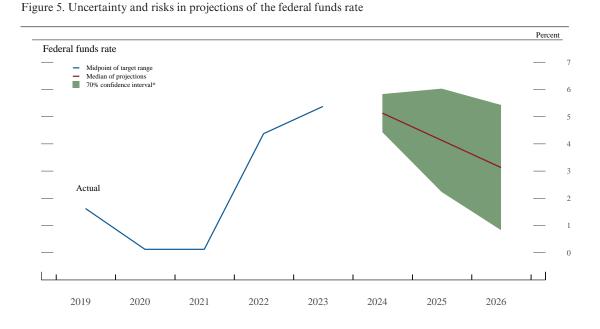








Note: For each SEP, participants provided responses to the question "Please indicate your judgment of the risk weighting around your projections." Each point in the diffusion indexes represents the number of participants who responded "Weighted to the Upside" minus the number who responded "Weighted to the Downside," divided by the total number of participants. Figure excludes March 2020 when no projections were submitted.



Note: The blue and red lines are based on actual values and median projected values, respectively, of the Committee's target for the federal funds rate at the end of the year indicated. The actual values are the midpoint of the target range; the median projected values are based on either the midpoint of the target range or the target level. The confidence interval around the median projected values is based on root mean squared errors of various private and government forecasts made over the previous 20 years. The confidence interval is not strictly consistent with the projections for the federal funds rate, primarily because these projections are not forecasts of the likeliest outcomes for the federal funds rate, but rather projections of participants' individual assessments of appropriate monetary policy. Still, historical forecast errors provide a broad sense of the uncertainty around the future path of the federal funds rate generated by the uncertainty about the macroeconomic variables as well as additional adjustments to monetary policy that may be appropriate to offset the effects of shocks to the economy.

The confidence interval is assumed to be symmetric except when it is truncated at zero - the bottom of the lowest target range for the federal funds rate that has been adopted in the past by the Committee. This truncation would not be intended to indicate the likelihood of the use of negative interest rates to provide additional monetary policy accommodation if doing so was judged appropriate. In such situations, the Committee could also employ other tools, including forward guidance and large-scale asset purchases, to provide additional accommodation. Because current conditions may differ from those that prevailed, on average, over the previous 20 years, the width and shape of the confidence interval estimated on the basis of the historical forecast errors may not reflect FOMC participants' current assessments of the uncertainty and risks around their projections.

* The confidence interval is derived from forecasts of the average level of short-term interest rates in the fourth quarter of the year indicated; more information about these data is available in table 2. The shaded area encompasses less than a 70 percent confidence interval if the confidence interval has been truncated at zero.

Table 2. Average historical projection error ranges Percentage points

Variable	2024	2025	2026
Change in real GDP ¹	± 1.7	± 1.9	± 2.2
Unemployment rate ¹	± 0.9	± 1.4	± 1.9
Total consumer prices ²	± 1.0	± 1.7	± 1.4
Short-term interest rates ³	± 0.7	± 1.9	± 2.3

Note: Error ranges shown are measured as plus or minus the root mean squared error of projections for 2004 through 2023 that were released in the summer by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, consumer prices, and the federal funds rate will be in ranges implied by the average size of projection errors made in the past. For more information, see David Reifschneider and Peter Tulip (2017), "Gauging the Uncertainty of the Economic Outlook Using Historical Forecasting Errors: The Federal Reserve's Approach," Finance and Economics Discussion Series 2017-020 (Washington: Board of Governors of the Federal Reserve System, February), https://dx.doi.org/10.17016/FEDS.2017.020.

1. Definitions of variables are in the general note to table 1.

- 2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projections are percent changes on a fourth quarter to fourth quarter basis.
- 3. For Federal Reserve staff forecasts, measure is the federal funds rate. For other forecasts, measure is the rate on 3-month Treasury bills. Projection errors are calculated using average levels, in percent, in the fourth quarter.

Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world, and the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee (FOMC). The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers

reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 1.3 to 4.7 percent in the current year, 1.1 to 4.9 percent in the second year, and 0.8 to 5.2 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.0 to 3.0 percent in the current year, 0.3 to 3.7 percent in the second year, and 0.6 to 3.4 percent in the third year. Figures 4.A through 4.C illustrate these confidence bounds in "fan charts" that are symmetric and centered on the medians of FOMC participants' projections for GDP growth, the unemployment rate, and inflation. However, in some instances, the risks around the projections may not be symmetric. In particular, the unemployment rate cannot be negative; furthermore, the risks around a particular projection might be tilted to either the upside or the downside, in which case the corresponding fan chart would be asymmetrically positioned around the median projection.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each economic variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty seen in the past 20 years, as presented in table 2 and reflected in the widths of the confidence intervals shown in the top panels of figures 4.A through 4.C. Participants' current assessments of the uncertainty surrounding their projections are summarized in the bottom-left panels

(continued)

of those figures. Participants also provide judgments as to whether the risks to their projections are weighted to the downside, or

to the upside, are weighted to the downside, or are broadly balanced. That is, while the symmetric historical fan charts shown in the top panels of figures 4.A through 4.C imply that the risks to participants' projections are balanced, participants may judge that there is a greater risk that a given variable will be above rather than below their projections. These judgments are summarized in the lower-right panels of figures 4.A through 4.C.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward. The final line in table 2 shows the error ranges for forecasts of shortterm interest rates. They suggest that the historical confidence intervals associated with projections of the federal funds rate are quite wide. It should be noted, however, that these confidence intervals are not strictly consistent with the projections for the federal funds rate, as these projections are not forecasts of the most likely quarterly outcomes but rather are projections of participants' individual

assessments of appropriate monetary policy and are on an end-of-year basis. However, the forecast errors should provide a sense of the uncertainty around the future path of the federal funds rate generated by the uncertainty about the macroeconomic variables as well as additional adjustments to monetary policy that would be appropriate to offset the effects of shocks to the economy.

If at some point in the future the confidence interval around the federal funds rate were to extend below zero, it would be truncated at zero for purposes of the fan chart shown in figure 5; zero is the bottom of the lowest target range for the federal funds rate that has been adopted by the Committee in the past. This approach to the construction of the federal funds rate fan chart would be merely a convention; it would not have any implications for possible future policy decisions regarding the use of negative interest rates to provide additional monetary policy accommodation if doing so were appropriate. In such situations, the Committee could also employ other tools, including forward guidance and asset purchases, to provide additional accommodation.

While figures 4.A through 4.C provide information on the uncertainty around the economic projections, figure 1 provides information on the range of views across FOMC participants. A comparison of figure 1 with figures 4.A through 4.C shows that the dispersion of the projections across participants is much smaller than the average forecast errors over the past 20 years.

ABBREVIATIONS

AFE advanced foreign economy

AI artificial intelligence

BOJ Bank of Japan

BTFP Bank Term Funding Program
CBO Congressional Budget Office
CES Current Employment Statistics

COVID-19 coronavirus disease 2019
CPI consumer price index
CRE commercial real estate
DI depository institution

EFFR effective federal funds rate

ELB effective lower bound

EME emerging market economy

EPOP ratio employment-to-population ratio

FOMC Federal Open Market Committee; also, the Committee

GDI gross domestic income
GDP gross domestic product

JOLTS Job Openings and Labor Turnover Survey

LFPR labor force participation rate
MBS mortgage-backed securities

MMF money market fund

NFIB National Federation of Independent Business

OER owners' equivalent rent

ON RRP overnight reverse repurchase agreement

OPEC Organization of the Petroleum Exporting Countries

PCE personal consumption expenditures

QCEW Quarterly Census of Employment and Wages

SEP Summary of Economic Projections

SLOOS Senior Loan Officer Opinion Survey on Bank Lending Practices

SOMA System Open Market Account

S&P Standard & Poor's

VIX implied volatility for the S&P 500 index



Exhibit 5

CFO update through the first quarter of fiscal year 2024

OCTOBER 1, 2023 - DECEMBER 31, 2023

Issued: March 1, 2024 (revised July 31, 2024)

Bureau Fund

As of December 31, 2023, the end of the first quarter¹ (Q1) of fiscal year (FY) 2024, the Consumer Financial Protection Bureau (CFPB) had incurred approximately \$279.1 million in FY 2024 commitments and obligations² to carry out the authorities of the CFPB under federal financial consumer law. Approximately \$150.7 million was spent on employee compensation and benefits for the 1,689 CFPB employees³ who were on-board at the end of the quarter.

In addition to payroll expenses, the largest obligations made during Q1 were related to contractual services. Some of the CFPB's significant obligations that occurred during the quarter included:

- \$11.1 million for cybersecurity operations, architecture & engineering, project & risk management, and associated support;
- \$8.5 million to the Department of Treasury for shared government systems and administrative support services, including: human capital support, procurement, financial management, core financial accounting and transaction processing, and travel services;
- \$7.1 million for development of the Small Business Lending Program regulatory data collection system and associated services and support;
- \$4.4 million for case and customer relationship management system tools and services to support the IT service desk management system, stakeholder engagement, legal case and matter management, enforcement case and matter management, supervision and examination support, and other enterprise platform tools;
- \$4.1 million for CFPB headquarters building operations and maintenance;
- \$3.8 million for contractor support and software licenses associated with Home Mortgage Disclosure Act operations;
- \$3.5 million for enterprise-wide IT software design & development tools and support services;

¹ October 1, 2023 – December 31, 2023

² This amount includes commitments, new obligations, and upward adjustments to previous year obligations. A commitment is a reservation of funds related to an authorized procurement action. An obligation is a transaction or agreement that creates a legal liability and obligates the government to pay for goods and services ordered or received.

³ Reflects employees on board during the final complete pay-period of the quarter (PP26, ending December 30, 2023).

- \$3.1 million for enterprise-wide cloud hosting infrastructure, system administration and support services;
- \$2.7 million for wide-area network services and support;
- \$2.3 million for CFPB regional office space rental payments to the General Services Administration;
- \$2.2 million to the Office of Employee Benefits (OEB) of the Federal Reserve for OEB assessment fees and personal choice statements;
- \$1.6 million for security services at CFPB headquarters;
- \$1.6 million for bureau-wide hosting and attendance of conferences & events;
- \$1.4 million for video and audio-conferencing capabilities and services;
- \$1.2 million for ongoing enterprise development of the customer relationship management system with regard to enforcement case management;
- \$1.2 million for enterprise risk management, internal policy, audit oversight, and internal governance support;
- \$1.1 million for program support to internal controls;
- \$1.0 million to provide contractor support for the design, development and implementation of the Non-Bank Registration system.

The tables below categorize spending⁴ by expense category and division/program area:

Table 1: Year-to-date spending by expense category:

Expense Category	FY 2024
Personnel Compensation	77,602,000
Personnel Benefits	73,065,000
Benefits for Former Personnel	-
Travel	2,053,000
Transportation of Things	-
Rents, Communications, Utilities & Misc.	6,261,000
Printing and Reproduction	865,000
Other Contractual Services	100,597,000
Supplies & Materials	4,367,000
Equipment	14,311,000
Land & Structures	-
Total (as of December 31, 2023)	\$279,121,000

Table 2: Year-to-date spending by division/program area:

Division/Program Area	FY 2024
Office of the Director	6,548,000
Operations	114,012,000
Consumer Response & Education	22,767,000
Research, Monitoring & Regulations	18,363,000
Supervision, Enforcement, Fair Lending	47,291,000
Legal Division	5,486,000
External Affairs	1,571,000
Other Programs ⁵	855,000
Centralized Services ⁶	62,228,000
Total (as of December 31, 2023)	\$279,121,000

⁴ This amount includes commitments, new obligations, and upward adjustments to previous year obligations.

⁵ Other Programs includes the costs of the Office of Ombudsman, Administrative Law Judges, and other CFPB programs.

⁶ Includes the cost of centralized benefits and certain administrative and operational services provided centrally to other Divisions in support of all strategic goals.

FY 2024 funds transfers received from the Federal Reserve

The CFPB is funded principally by transfers from the Federal Reserve System, up to the limits set forth in the Dodd-Frank Act. Funding from the Federal Reserve System for fiscal year 2024 is capped at \$785.4 million. As of December 31, 2023, the CFPB had received the following transfers for FY 2024. The dates and amounts of the transfers are shown below.

Total	\$315.0M
October 25, 2023	\$315.0M

Civil Penalty Fund

The Dodd-Frank Act authorizes the CFPB to collect for specified purposes civil penalties it obtains in judicial and administrative actions under federal consumer financial laws. The CFPB is authorized to use these funds for payments to victims of activities for which civil penalties have been imposed and may also use the funds for consumer education and financial literacy programs to the extent that such victims cannot be located or payments to them are otherwise not practicable. As directed by the Dodd-Frank Act, the CFPB maintains a separate account for these funds at the Federal Reserve Bank of New York.

Civil Penalties Collected in FY 2024

In the first quarter of FY 2024, the CFPB collected civil penalties from 10 defendants totaling \$90.3 million.

FY 2024 Civil Penalty Fund Collections:

Defendant Name	Civil Penalty Collected	Collection Date
TransUnion; Trans Union LLC; and TransUnion Interactive, Inc.	\$5,000,000	10/19/2023
TransUnion Rental Screening Solutions, Inc., and Trans Union LLC	\$4,000,000	10/19/2023
Chime, Inc. d/b/a Sendwave	\$1,500,000	10/27/2023
Citibank, N.A.	\$24,500,000	11/17/2023
Toyota Motor Credit Corporation d/b/a Toyota Financial Services	\$12,000,000	11/20/2023
Enova International, Inc.	\$15,000,000	11/22/2023
Bank of America, N.A.	\$12,000,000	12/5/2023
Atlantic Union Bank	\$1,200,000	12/8/2023
U.S. Bank National Association	\$15,000,000	12/20/2023
Commonwealth Financial Systems, Inc.	\$95,000	12/21/2023
Total	\$90,295,000	

Civil Penalty Fund Allocations in FY 2024

Period 22: April 1, 2023 - September 30, 2023

On November 29, 2023, the CFPB made its twenty-second allocation from the Civil Penalty Fund. As of September 30, 2023, the Civil Penalty Fund contained an available unallocated balance of \$1,980,060,536.7 The CFPB has set aside \$40,000,000 to cover administrative expenses associated with distributing funds to harmed consumers, reducing the amount available for allocation to \$1,940,060,536.

A civil penalty was imposed in 11 cases with final orders from Period 22. Of those 11 cases, Tempoe, LLC, and Progrexion Marketing, Inc., et. al ("Lexington Law") received an allocation this period. Victims in one prior period matter, Driver Loan, LLC, became eligible for compensation in period 22 and received an allocation this period. The eligible harm associated with these three matters totals \$2,856,001,246.

The allocations for each case are as follows:

- The Driver Loan case received an allocation of \$2,863,648 from the Civil Penalty Fund. The class of victims receiving an allocation are consumers who deposited funds with the defendants between June 1, 2020 and June 1, 2021. This allocation covers 100% of eligible consumer harm.
- The Tempoe case received an allocation of \$192,259,616 from the Civil Penalty Fund. The class of victims receiving an allocation are certain consumers who entered into lease agreements with Tempoe from January 1, 2015 to September 11, 2023 where the agreement extended six months after the initial term and disclosures were not provided. This allocation covers 100% of eligible consumer harm
- The Lexington Law case received a total of \$1,744,937,273 from the Civil Penalty Fund for two classes of consumers.
 - One class of consumers received an allocation of \$1,725,937,273. The class of victims receiving this allocation are certain consumers who purchased the defendants' credit repair services from March 8, 2016 through August 30, 2023. The eligible harm associated with this class of consumers is \$2,641,877,981. Due to funding limitations, this class was prorated and received 65.3% of their eligible harm. The Bureau believes that this approach provides the maximum benefit to the public at the lowest administrative cost therefore allowing the Bureau to dedicate the

⁷ The unallocated balance amount does not include \$10,828,201 in funds that were collected pursuant to three orders that are currently pending appeal and are thus not yet "final orders" as defined in 12 C.F.R. § 1075.101. Those funds are therefore not available for allocation under 12 C.F.R. § 1075.105(c). The amount includes \$109,378,447 that was sequestered during 2023 and became available to the CFPB in fiscal year 2024.

6

- maximum amount of recovery to the public that otherwise would have no chance for compensation. If sufficient funds are available in future periods, these victims may receive additional allocations to cover up to 100% of their eligible harm.
- One class of consumers received an allocation of \$19,000,000. These are certain consumers who made a payment to Lexington Law or CreditRepair.com from July 21, 2011 through March 7, 2016. This allocation covers 100% of eligible consumer harm.

The CFPB exercised discretion and deferred an allocation to a class of consumers in one matter, OneMain Financial Holdings, LLC, et al. In the OneMain case, the victim allocation is deferred while the CFPB pursues additional consumer level data. This case will be reviewed as part of the Period 23 allocation.

Additionally, a review of the Northern Resolution Group case, which had been deferred for allocation in prior periods, has been completed. Consumers in this matter will not receive an allocation from the Civil Penalty Fund.⁸ As of the time of this allocation, there were no prior period victim classes with uncompensated harm that is compensable from the Civil Penalty Fund.

No funds were available for allocation for Consumer Education and Financial Literacy purposes.

The total allocation for Period 22 was \$1,940,060,536.

Period 22 Allocation Summary:

Case Name	Allocation Amount
Driver Loan	\$2,863,648
Tempoe LLC	\$192,259,616
Lexington Law – Class A	\$1,725,937,273
Lexington Law – Class B	\$19,000,000
Total	\$1,940,060,536

7

⁸ Due to data limitations, it is not practicable to compensate consumers in this matter.

Bureau-Administered Redress

Dodd-Frank Act section 1055 authorizes a court in a judicial action, or the CFPB in an administrative proceeding, to grant any appropriate legal or equitable relief for a violation of Federal consumer financial law. Such relief may include redress for victims of the violations, including refunds, restitution, and damages. Relief that is intended to compensate victims is treated as fiduciary funds and deposited into the "Legal or Equitable Relief Fund" established at the Department of the Treasury.

Bureau-Administered Redress Collected in FY 2024:

In the first quarter of FY 2024, the CFPB collected \$124,873 in Bureau-Administered Redress from one defendant. Funds are distributed in accordance with the terms of the final order for the case.

FY 2024 Bureau-Administered Redress Collections:

Defendant Name	Amount Collected	Collection Date
Consumer Advocacy Center Inc., d/b/a Premier Student Loan Center, et al. – Defendant Consumer Advocacy Center, Inc.	\$124,873	10/18/2023
Total	\$124,873	

See additional information on CFPB's Civil Penalty Fund and Bureau-Administered Redress programs at https://www.consumerfinance.gov/enforcement/payments-harmed-consumers/civil-penalty-fund/.

Exhibit 6



CFPB Examines Payday Lending

JAN 19, 2012

Bureau Publishes Payday Loan Examination Procedures; Hosts First Field Hearing

WASHINGTON, D.C. - In Birmingham, Ala. today, the Consumer Financial Protection Bureau (CFPB) is convening the agency's first-ever field hearing to gather information and input on the payday lending market. The hearing coincides with the publication of the Bureau's Short-Term, Small-Dollar Lending Procedures – a field guide CFPB examiners will use to make sure payday lenders – banks and nonbanks – are following federal consumer financial laws.

"We recognize the need for emergency credit. At the same time, it is important that these products actually help consumers, rather than harm them," said CFPB Director Richard Cordray in his opening remarks at today's field hearing. "Now, the Bureau will be giving payday lenders much more attention."

The Short-Term, Small-Dollar Lending Procedures can be found here ☑ (cfpb.gov/wp-content/uploads/2012/01/Short-Term-Small-Dollar-Lending-Examination-Manual.pdf).

Payday loans are typically marketed to bridge a cash flow shortage between pay or benefits checks. They generally have three features: the loans are small dollar amounts; borrowers must repay the loan quickly; and they require that a borrower give lenders access to repayment through a claim on the borrower's deposit account.

Most loans are for several hundred dollars and have finance charges of \$15 or \$20 for each \$100 borrowed. For the two-week term typical of a payday loan, these fees equate to an Annual Percentage Rate ranging from 391 percent to 521 percent. Loan amounts and finance charges vary depending on state law. If the consumer does not repay the loan in full by the due date, the loan agreement typically permits the lender to cash the consumer's check to obtain repayment.

Payday lenders have sprung up across the country over the past 20 years, beginning in storefront locations. With the advent of new media, payday loans now are offered through the Internet. Most recently, some banks began offering similar loan products.

With the establishment of the CFPB, a federal agency for the first time can supervise not only bank payday lenders but also all nonbank payday lenders. Specifically, the Short-Term, Small Dollar Lending Procedures describe the types of information that the agency's

examiners will gather to evaluate payday lenders' policies and procedures, assess whether lenders are in compliance with federal consumer financial laws, and identify risks to consumers throughout the lending process. The procedures track key payday lending activities, from initial advertisements and marketing to collection practices.

The CFPB will be implementing its payday lending supervision program based on its assessment of risks to consumers, including consideration of factors such as the volume of business and the extent of state oversight. The CFPB also will be coordinating with federal and state partners to maximize supervisory capability and minimize regulatory burden. If a violation of a federal consumer financial law has occurred, the CFPB will determine whether supervisory or enforcement actions are appropriate.

In general, CFPB supervision will include gathering reports from and conducting examinations of bank and nonbank activities. The examination process will begin with scoping, review of information, and data analysis followed by onsite examinations. The CFPB will be in regular communication with supervised entities, and it will conduct follow-up monitoring.

The Consumer Financial Protection Bureau is a 21st century agency that implements and enforces Federal consumer financial law and ensures that markets for consumer financial products are fair, transparent, and competitive. For more information, visit www.consumerfinance.gov(http://www.consumerfinance.gov/).

PRESS INFORMATION

If you want to republish the article or have questions about the content, please contact the press office.

Go to press resources page (cfpb.gov/about-us/newsroom/press-resources/)

An official website of the United States government

Exhibit 7



CFPB Finalizes Rule To Stop Payday Debt Traps

Lenders Must Determine If Consumers Have the Ability to Repay Loans That Require All or Most of the Debt to be Paid Back at Once OCT 05, 2017

WASHINGTON, D.C. – The Consumer Financial Protection Bureau (CFPB) today finalized a rule that is aimed at stopping payday debt traps by requiring lenders to determine upfront whether people can afford to repay their loans. These strong, common-sense protections cover loans that require consumers to repay all or most of the debt at once, including payday loans, auto title loans, deposit advance products, and longer-term loans with balloon payments. The Bureau found that many people who take out these loans end up repeatedly paying expensive charges to roll over or refinance the same debt. The rule also curtails lenders' repeated attempts to debit payments from a borrower's bank account, a practice that racks up fees and can lead to account closure.

"The CFPB's new rule puts a stop to the payday debt traps that have plagued communities across the country," said CFPB Director Richard Cordray. "Too often, borrowers who need quick cash end up trapped in loans they can't afford. The rule's common sense ability-to-repay protections prevent lenders from succeeding by setting up borrowers to fail."

Payday loans are typically for small-dollar amounts and are due in full by the borrower's next paycheck, usually two or four weeks. They are expensive, with annual percentage rates of over 300 percent or even higher. As a condition of the loan, the borrower writes a post-dated check for the full balance, including fees, or allows the lender to electronically debit funds from their checking account. Single-payment auto title loans also have expensive charges and short terms usually of 30 days or less. But for these loans, borrowers are required to put up their car or truck title for collateral. Some lenders also offer longer-term loans of more than 45 days where the borrower makes a series of smaller payments before the remaining balance comes due. These longer-term loans – often referred to as balloon-payment loans – often require access to the borrower's bank account or auto title.

These loans are heavily marketed to financially vulnerable consumers who often cannot afford to pay back the full balance when it is due. Faced with unaffordable payments, cash-strapped consumers must choose between defaulting, re-borrowing, or skipping other financial obligations like rent or basic living expenses such as buying food or obtaining

medical care. Many borrowers end up repeatedly rolling over or refinancing their loans, each time racking up expensive new charges. More than four out of five payday loans are reborrowed within a month, usually right when the loan is due or shortly thereafter. And nearly one-in-four initial payday loans are re-borrowed nine times or more, with the borrower paying far more in fees than they received in credit. As with payday loans, the CFPB found that the vast majority of auto title loans are re-borrowed on their due date or shortly thereafter.

The cycle of taking on new debt to pay back old debt can turn a single, unaffordable loan into a long-term debt trap. The consequences of a debt trap can be severe. Even when the loan is repeatedly re-borrowed, many borrowers wind up in default and getting chased by a debt collector or having their car or truck seized by their lender. Lenders' repeated attempts to debit payments can add significant penalties, as overdue borrowers get hit with insufficient funds fees and may even have their bank account closed.

Rule to Stop Debt Traps

The CFPB rule aims to stop debt traps by putting in place strong ability-to-repay protections. These protections apply to loans that require consumers to repay all or most of the debt at once. Under the new rule, lenders must conduct a "full-payment test" to determine upfront that borrowers can afford to repay their loans without re-borrowing. For certain short-term loans, lenders can skip the full-payment test if they offer a "principal-payoff option" that allows borrowers to pay off the debt more gradually. The rule requires lenders to use credit reporting systems registered by the Bureau to report and obtain information on certain loans covered by the proposal. The rule allows less risky loan options, including certain loans typically offered by community banks and credit unions, to forgo the full-payment test. The new rule also includes a "debit attempt cutoff" for any short-term loan, balloon-payment loan, or longer-term loan with an annual percentage rate higher than 36 percent that includes authorization for the lender to access the borrower's checking or prepaid account. The specific protections under the rule include:

- Full-payment test: Lenders are required to determine whether the borrower can afford the loan payments and still meet basic living expenses and major financial obligations. For payday and auto title loans that are due in one lump sum, full payment means being able to afford to pay the total loan amount, plus fees and finance charges within two weeks or a month. For longer-term loans with a balloon payment, full payment means being able to afford the payments in the month with the highest total payments on the loan. The rule also caps the number of loans that can be made in quick succession at three.
- Principal-payoff option for certain short-term loans: Consumers may take out a short-term loan of up to \$500 without the full-payment test if it is structured to allow the borrower to get out of debt more gradually. Under this option, consumers may take out one loan that meets the restrictions and pay it off in full. For those needing more time to repay, lenders may offer up to two extensions, but only if the borrower pays off at least one-third of the original principal each time. To prevent debt traps, these loans cannot be offered to

borrowers with recent or outstanding short-term or balloon-payment loans. Further, lenders cannot make more than three such loans in quick succession, and they cannot make loans under this option if the consumer has already had more than six short-term loans or been in debt on short-term loans for more than 90 days over a rolling 12-month period. The principal-payoff option is not available for loans for which the lender takes an auto title as collateral.

- Less risky loan options: Loans that pose less risk to consumers do not require the full-payment test or the principal-payoff option. This includes loans made by a lender who makes 2,500 or fewer covered short-term or balloon-payment loans per year and derives no more than 10 percent of its revenue from such loans. These are usually small personal loans made by community banks or credit unions to existing customers or members. In addition, the rule does not cover loans that generally meet the parameters of "payday alternative loans" authorized by the National Credit Union Administration. These are low-cost loans which cannot have a balloon payment with strict limitations on the number of loans that can be made over six months. The rule also excludes from coverage certain nocost advances and advances of earned wages made under wage-advance programs offered by employers or their business partners.
- **Debit attempt cutoff:** The rule also includes a debit attempt cutoff that applies to short-term loans, balloon-payment loans, and longer-term loans with an annual percentage rate over 36 percent that includes authorization for the lender to access the borrower's checking or prepaid account. After two straight unsuccessful attempts, the lender cannot debit the account again unless the lender gets a new authorization from the borrower. The lender must give consumers written notice before making a debit attempt at an irregular interval or amount. These protections will give consumers a chance to dispute any unauthorized or erroneous debit attempts, and to arrange to cover unanticipated payments that are due. This should mean fewer consumers being debited for payments they did not authorize or anticipate, or charged multiplying fees for returned payments and insufficient funds.

The CFPB developed the payday rule over five years of research, outreach, and a review of more than one million comments on the proposed rule from payday borrowers, consumer advocates, faith leaders, payday and auto title lenders, tribal leaders, state regulators and attorneys general, and others. The final rule does not apply ability-to-repay protections to all of the longer-term loans that would have been covered under the proposal. The CFPB is conducting further study to consider how the market for longer-term loans is evolving and the best ways to address concerns about existing and potential practices. The CFPB also made other changes in the rule in response to the comments received. These changes include adding the new provisions for the less risky options. The Bureau also streamlined components of the full-payment test and refined the approach to the principal-payoff option.

The rule takes effect 21 months after it is published in the Federal Register, although the provisions that allow for registration of information systems take effect earlier. All lenders who regularly extend credit are subject to the CFPB's requirements for any loan they make

8/14/24, Cash 2:24-cv-04108-RGKcAR in a Decrument of Square Decruments of storefronts and regardless of the types of state licenses they may hold. These protections are in addition to existing requirements under state or tribal law.

A factsheet summarizing the CFPB rule on payday loans is available at:

https://files.consumerfinance.gov/f/documents/201710_cfpb_fact-sheet_payday-loans.pdf

(https://files.consumerfinance.gov/f/documents/201710_cfpb_fact-sheet_payday-loans.pdf)

Text of the CFPB rule on payday loans is available at:

https://files.consumerfinance.gov/f/documents/201710_cfpb_final-rule_payday-loans-rule.pdf (https://files.consumerfinance.gov/f/documents/201710_cfpb_final-rule_payday-loans-rule.pdf)

The Consumer Financial Protection Bureau is a 21st century agency that implements and enforces Federal consumer financial law and ensures that markets for consumer financial products are fair, transparent, and competitive. For more information, visit www.consumerfinance.gov(http://www.consumerfinance.gov/).

PRESS INFORMATION

If you want to republish the article or have questions about the content, please contact the press office.

Go to press resources page (cfpb.gov/about-us/newsroom/press-resources/)

An official website of the United States government

Exhibit 8



Remarks by Richard Cordray at the Payday Loan Field Hearing in Birmingham, AL

By Richard Cordray - JAN 19, 2012

Prepared Remarks by Richard Cordray
Director of the Consumer Financial Protection Bureau
Payday Loan Field Hearing
Birmingham, AL
January 19, 2012

Thank you, Congresswoman Sewell and U.S. Attorney Vance for joining us today. We are in Birmingham to hold our first field hearing on payday lending.

Dr. Martin Luther King, Jr. once said, "The dignity of the individual will flourish when the decisions concerning his life are in his own hands, when he has the means to seek self-improvement."

At the Consumer Financial Protection Bureau, we deeply believe in empowering people so that they can make informed financial decisions and take responsibility for those decisions.

Before we open this hearing, I will take a few minutes to discuss the payday lending market and our role in overseeing it. Let me stress again that this is a field hearing. We came here to listen, to learn, and to gather information on the ground that will help inform our approach to these issues. We are thinking hard about these issues, and we do not have all the answers worked out by any means.

* * *

Payday loans are short-term, high-cost loans made in exchange for a commitment to repayment from the person's next paycheck. According to reports from the industry, about 19 million American households are currently choosing to borrow money through payday loans.

Payday lending as we know it has grown rapidly since the 1990s. Today, payday loans are readily available online and in strip malls. Even some traditional banks now offer a similar product called a deposit "advance."

Payday loan storefronts are scattered throughout the country - in some places more than others. Alabama has one of the highest concentrations of payday lenders in the U.S. There

has been such a growth of payday lenders in Birmingham that your City Council last month passed a six-month moratorium on any new payday lenders setting up in the city.

Just who is using these payday loans? From what we have seen so far, families who take out a payday loan tend to have less income, fewer assets, and lower net worth than the average family. Surveys indicate that payday borrowers are disproportionately people of color.

People often are responding to an emergency that requires quick access to cash.

It appears that a significant share of payday borrowers do not have savings or a credit card. And many like the payday option because it is relatively anonymous, quick and easy - a borrower can have the money in half an hour, and other family members may not have to find out about the loan.

Whatever their reasons may be for taking out a payday loan, Americans are now borrowing billions of dollars this way. Lenders collect over \$7 billion in fees annually.

In a pinch, getting the cash you need can seem worth it at any cost. Maybe you would never dream of paying an annual percentage rate of 400 percent on a credit card or any other type of loan, but you might do it for a payday loan. When you are desperate, the terms of the loan seem to matter a lot less. You need the money. Now. Rightly or wrongly, people faced with tough situations often think these payday loans are their only options. It matters on this issue that we all look to develop a more vibrant, competitive market for small consumer loans.

At the Bureau, we now have the authority to examine nonbank payday lenders of all types and sizes, as well as large banks that offer deposit advances. We already have begun examining the banks, and we will be paying close attention to deposit advance products at the banks that offer them. And this month, we have launched our examination program for nonbank financial firms as well.

Today we are releasing our Short-Term, Small-Dollar Lending Procedures, the field guide for our examiners across the country who will be visiting both banks and payday lenders to see first-hand how they conduct business. Our examination authority is an important tool that will allow us to inspect their books, ask tough questions, and work with them to fix any problems we uncover. This includes looking at the materials and strategies that are used to market the loans.

Before this month, the federal government did not examine payday lenders. Some state regulators have been examining payday lenders for compliance with their state laws. We hope to use our combined resources as effectively as possible.

So now, the Bureau will be giving payday lenders much more attention. This is an important new area for us. And the purpose of this field hearing, and the purpose of all our research and analysis and outreach on these issues, is to help us figure out how to determine the

right approach to protect consumers and ensure that they have access to a small loan market that is fair, transparent, and competitive.

At the Bureau, we hear from consumers all across the country. One person from Michigan told us of having to use payday loans several times and wanting them to remain available because alternatives did not exist. And so I want to be clear about one thing: We recognize the need for emergency credit. At the same time, it is important that these products actually help consumers, rather than harm them.

A lack of supervision at the federal level means there is a lot we do not know about some of the inherent risks associated with payday products. Through forums like this and through our supervision program, we will systematically gather data to get a complete picture of the payday market and its impact on consumers. This assessment will allow us to better choose among the tools we have available at the Consumer Bureau to balance the needs of consumers with the risks they face.

For example, we hear a lot about repeated long-term use of payday loans. We plan to dig deep on this topic to understand what consumers know when they take out a loan and how they are affected by long-term use of these products. For borrowers who are already living paycheck-to-paycheck, it may be difficult to repay the loan and still have enough left over for other bills. Trouble strikes when they cannot pay back the money and that two-week loan rolls over and over and turns into a loan that the consumer has been carrying for months and months. Soon they are living off money borrowed at a rate of 400 percent.

One consumer wrote a "Tell Your Story" on our website about borrowing \$500 to pay for car repairs. In nine months, \$900 has now been paid out with \$312 to go. The payday lender takes the money directly from the consumer's checking account, and not enough is left to pay other bills.

In addition to the things we need to learn more about, we know there are some payday lenders engaged in practices that present immediate risk to consumers and are clearly illegal. While we need to learn more about the prevalence of this conduct and what allows it to fester, where we find these practices we will take immediate steps to eliminate them.

One example is unauthorized debits on a person's checking account. These can occur when, unbeknownst to them, the consumer is dealing with several businesses hidden behind the payday loan. When consumers are shopping for a payday loan, the person advertising the loan may not be the same person as the lender and may simply be gathering and selling the customer's information. The highest bidder may be a legitimate lender, but it could also be a fraudster that has enough of the consumer's sensitive financial information to make unauthorized withdrawals from their bank account.

Another example is aggressive debt collection tactics involving payday loans - either by the lenders themselves or by debt collectors acting on their behalf. These include posing as federal authorities, threatening borrowers with criminal prosecution, trying to garnish wages improperly, and harassing the borrower as well as their families, friends, and co-workers. These illegal practices are outrageous. We want to root them out where we find them. And we want to work with responsible parties in the industry to prevent them from expanding.

Let me say to all of you, that it is a privilege for us to visit Birmingham, where so many people endured police dogs and fire hoses in their pursuit of freedom. The fundamental principles of dignity and equality that powered the civil rights movement also animate our work at the Bureau.

Dr. King showed the whole world how determination and imagination and perseverance in service of a great cause could move not only the course of institutions but the trajectory of an entire society.

The work of the Bureau is more modest - it is not designed to redeem fundamental constitutional principles of American life. But we are here to make sure there is fundamental fairness for all consumers. And we can do that. We can find and expose the hidden risks, and we can make sure people are able to pursue their hopes and dreams by working with responsible businesses to make informed financial decisions.

In this field hearing, please share your thoughts and experiences with us. Tell us what works and what does not. Tell us how we can do our small part to achieve Dr. King's vision of an America where we all have a chance to achieve our deepest aspirations.

Thank you.

PRESS INFORMATION

If you want to republish the article or have questions about the content, please contact the press office.

Go to press resources page (cfpb.gov/about-us/newsroom/press-resources/)

An official website of the United States government

THOMAS M. HEFFERON (admitted pro hac vice) THefferon@goodwinlaw.com LEVI W. SWANK (admitted pro hac vice) LSwank@goodwinlaw.com GOODWIN PROCTER LLP 1900 N Street, NW Washington, DC 20036 Tel.: +1 202 346 4000 Fax: +1 202 346 4444 LAURA A. STOLL (SBN 255023)		
hac vice) THefferon@goodwinlaw.com LEVI W. SWANK (admitted pro hac vice) LSwank@goodwinlaw.com GOODWIN PROCTER LLP 1900 N Street, NW Washington, DC 20036 Tel.: +1 202 346 4000 Fax: +1 202 346 4444 LAURA A. STOLL (SBN 255023)		
3 LEVI W. SWANK (admitted pro hac vice) LSwank@goodwinlaw.com GOODWIN PROCTER LLP 1900 N Street, NW Washington, DC 20036 Tel.: +1 202 346 4000 Fax: +1 202 346 4444 LAURA A. STOLL (SBN 255023)		
4 GOODWIN PROCTER LLP 1900 N Street, NW Washington, DC 20036 Tel.: +1 202 346 4000 Fax: +1 202 346 4444 7 LAURA A. STOLL (SBN 255023)		
Washington, DC 20036 Tel.: +1 202 346 4000 Fax: +1 202 346 4444 LAURA A. STOLL (SBN 255023)		
6 Tel.: +1 202 346 4000 Fax: +1 202 346 4444 7 LAURA A. STOLL (SBN 255023)		
7 LAURA A. STOLL (SBN 255023)		
8 LStoll@goodwinlaw.com		
9 GOODWIN PROCTER LLP 601 S. Figueroa Street, 41st Floor		
10 Los Angeles, CA 90017 Tel.: +1 213 426 2500		
11 Fax: +1 213 623 1673		
12 Attorneys for Defendant		
13 SOLO FUNDS, INC.		
UNITED STATES DISTRICT COURT		
CENTRAL DISTRICT OF CALIFORNIA		
WESTERN DIVISION – LOS ANGELES		
17 CONSUMER FINANCIAL Case No. 2:24-cv-04108-RGK-AJR		
18 PROTECTION BUREAU, DECLARATION OF TRAVIS		
19 Plaintiff, HOLOWAY IN SUPPORT OF DEFENDANT'S MOTION TO		
v. DISMISS COMPLAINT		
21 SOLO FUNDS, INC., Date: Monday, September 16, 202	4	
Defendant. Ctrm: 850 (8 th Fl.)	Time: 9:00 am Ctrm: 850 (8 th Fl.)	
Judge: Hon. R. Gary Klausner		
255 East Temple Street		
Los Angeles, CA 90012		
26		
27		
28		
DECLARATION OF TRAVIS HOLOWAY Case No. 2:24-cv-04108-RGK-AJR		

I, Travis Holoway, declare as follows:

- 1. I am the Co-Founder and Chief Executive Officer of SoLo Funds, Inc. ("SoLo"). I make this declaration based upon my personal knowledge and review of SoLo's records made at or near the time of the occurrence and kept in the ordinary course and scope of business as a regular practice. If called to testify as to any of these matters set forth in this declaration, I could and would competently testify thereto.
- 2. I submit this Declaration in support of Defendant's Motion to Dismiss the Complaint filed concurrently herewith.
- Agreement and Promissory Note that SoLo provided to prospective borrowers on behalf of marketplace lenders as part of the loan request and funding process. Exhibit 9 reflects the Loan Agreement and Promissory Note as it existed after May 2021, and is substantially similar in form and substance to the version of the Loan Agreement and Promissory Note in use today. Exhibit 9 has been redacted for personally identifiable information.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct. Executed on this 15th day of August, Los Angeles, CA 2024, in ______.

TRAVIS HOLOWAY

CERTIFICATE OF SERVICE I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States District Court for the Central District of California by using the CM/ECF system on August 15, 2024. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the CM/ECF system. I certify under penalty of perjury that the foregoing is true and correct. Executed on August 15, 2024. /s/ *Laura A. Stoll* LAURA A. STOLL -2-

DECLARATION OF TRAVIS HOLOWAY Case No. 2:24-cv-04108-RGK-AJR

Exhibit 9

Loan Agreement and Promissory Note

FOR VALUE RECEIVED, [Leah pay, as herein provided, [Nickolas in the amount of [\$400.00],(the "Loan"), as originated through the mobile application at http://wwww.solofunds.com/ (the "Platform") maintained by SoLo Funds, Inc. ("SoLo") and in accordance with the terms set forth below.

This Loan Agreement and Promissory Note (together, the "Note") may not be amended, modified or discharged, nor may any provision hereof be waived, orally, by course of dealing or otherwise, unless such amendment, modification, discharge or waiver shall be in writing and duly executed by Lender. The non-exercise by Lender of any right or remedy in any particular instance shall not constitute a waiver thereof in that or any other instance.

BY ELECTRONICALLY SIGNING THIS AGREEMENT, YOU HAVE SIGNIFIED YOUR CONSENT TO THESE TERMS.

Payment. The Loan, meaning the principal sum borrowed together with all other charges, costs and expenses, is due and payable in full on or before [10/08/2021] (the "**Repayment Date**")(such period, the "**Term**").

Prepayment. Any part of the principal balance of the Loan may be prepaid at any time without penalty.

Interest. This Note bears no interest for the term of the Loan until paid in full, [0%] per annum.

Loan Consummation. The Borrower is not obligated under the terms of this Note and the loan transaction is not consummated until the Borrower's ability to cancel the loan application has expired. The Borrower may cancel the Note at any time before 11:59 pm EST of the third day after the Loan is funded by contacting the Lender's service provider at support@solofunds.com. If the Borrower exercises this cancellation right, all loan proceeds will be withdrawn from the Borrower's account at Evolve Bank within the following 5-7 business days. If the full amount cannot be withdrawn the account, Borrower will be responsible for any returned payment fees, late fees, administrative fees, and full repayment of the Loan.

Platform Donation. For avoidance of doubt, any donation the Borrower chooses to make to the Platform is purely voluntary and shall not be construed to be a requirement under this Note or a condition of the Loan.

Lender Tips. For avoidance of doubt, any tip the Borrower chooses to make to the Lender is purely voluntary and shall not be construed to be a requirement under this Note or a condition of the Loan.

Returned Payment Fee. If payment is returned or fails due to insufficient funds in the designated account or otherwise cannot be processed, Borrower acknowledges and agrees to pay a Returned Payment Fee of fifteen dollars (\$15.00), to the extent permitted by applicable law.

Late Fee. If any portion of the Loan is not repaid before 35 days after the funding date, a Late Fee of 10% of the principal loan amount, whichever is greater shall be due and payable by the Borrower, to the extent permitted by applicable law.

Synapse Transaction Fee. If any portion of the Loan is not repaid before 35 days after the funding date, a Synapse Transaction Fee of 2 times (0.9% of the principal loan + \$0.70) for the funding and repayment transaction costs applied by the payment provider (Synapse) shall be due and payable by the Borrower, to the extent permitted by applicable law.

10/18/2 Cassen 2:24-cv-04108-RGK-AJR Document 23-11 Filed: \$08/15/24 Page 3 of 3 Page ID #:399

Borrower Collection Costs. Borrower agrees to pay all costs and expenses, if any, in connection with the collection of any amounts due under this Loan Agreement or its enforcement (whether through negotiations, legal proceedings or otherwise), including, without limitation, reasonable attorneys' fees and court costs.

Other Charges. If any law or regulation which applies to my Loan, and which sets maximum charges for such Loan, is finally interpreted so that any other charges collected or to be collected in connection with the Loan exceeds the permitted limit, then: (a) any such charge will be reduced by the amount necessary to reduce the charge to the permitted limit; and (b) any sums already collected from Borrower, which exceeded permitted limit, will be refunded.

Payment Methods. You will repay the Loan in a single installment using ACH transfer/Debit Card, the payment method available on the Platform.

Default. Borrower may be deemed in default (each, an "Event of Default") of Borrower's obligations under this Note if Borrower: (1) fails to pay timely any amount due on the Loan; (2) files or has instituted against it any bankruptcy or insolvency proceedings or make any assignment for the benefit of creditors; (3) commits fraud or makes any material misrepresentation in this Note, or in any other documents, applications or related materials delivered to Lender in connection with the Loan; or (4) fails to abide by the terms of this Note or the SoLo Terms and Conditions. Upon the occurrence of an Event of Default, Lender may exercise all remedies available under applicable law and this Note, including without limitation demand that Borrower immediately pay all amounts due and outstanding on this Note.

Heirs; Executors. The obligations under this Note shall be binding upon Borrower's heirs, executors, and administrators.

Transfer of Agreement and Discharge of Liability. Borrower may not assign or otherwise transfer any of my obligations or rights under this Note without Lender's prior written consent. Lender may, to the extent permitted by law, transfer this Note to one or more third parties, and the transferee(s) will immediately become vested with all the powers and rights given to Lender with respect to this Note; and Lender will then be forever relieved and fully discharged from any liability or responsibility in the matter.

Covered Borrowers under the Military Lending Act. Federal law provides important protections to members of the Armed Forces and their dependents relating to extensions of consumer credit. In general, the cost of consumer credit to a member of the Armed Forces and his or her dependent may not exceed an annual percentage rate of 36 percent. This rate must include, as applicable to the credit transaction or account: The costs associated with credit insurance premiums; fees for ancillary products sold in connection with the credit transaction; any application fee charged (other than certain application fees for specified credit transactions or accounts); and any participation fee charged (other than certain participation fees for a credit card account). Nothing in this Agreement shall be construed as applying to a covered borrower or their dependents to the extent inconsistent with the Military Lending Act. To obtain an oral statement regarding the Military Annual Percentage Rate and a description of the payment obligation, covered borrowers may call the following toll-free phone number: 1-855-912-0415.

Severability. Any provision hereof found to be illegal, invalid or unenforceable for any reason whatsoever shall not affect the validity, legality or enforceability of the remainder hereof.

Entire Agreement. This Agreement constitutes the entire and final agreement concerning the Loan and supersedes any other communication with you regarding the Loan.

IN WITNESS WHEREOF, the undersigned has executed this Note as of [09/23/2021].

1	THOMAS M. HEFFERON (admitted		
2	pro hac vice) THefferon@goodwinlaw.com		
3	LEVI W. SWANK (admitted pro hac v	rice)	
4	LSwank@goodwinlaw.com GOODWIN PROCTER LLP		
5	1900 N Street, NW		
6	Washington, DC 20036 Tel.: +1 202 346 4000		
7	Fax: +1 202 346 4444		
	LAURA A. STOLL (SBN 255023)		
8	LStoll@goodwinlaw.com GOODWIN PROCTER LLP		
9	601 S. Figueroa Street, 41st Floor		
10	Los Angeles, CA 90017 Tel.: +1 213 426 2500		
11	Fax: +1 213 623 1673		
12	Attorneys for Defendant		
13	SOLO FUNDS, INC.		
14	UNITED STATES DISTRICT COURT		
15	CENTRAL DISTRICT OF CALIFORNIA		
16	WESTERN DIVISION – LOS ANGELES		
17	CONCLIMED FINANCIAL	Case No. 2:24-cv-04108-RGK-AJR	
18	CONSUMER FINANCIAL PROTECTION BUREAU,		
19	Plaintiff,	DEFENDANT SOLO FUNDS, INC.'S REQUEST FOR JUDICIAL NOTICE	
20	V.	IN SUPPORT OF MOTION TO DISMISS COMPLAINT	
21			
22	SOLO FUNDS, INC.,	Date: Monday, September 16, 2024 Time: 9:00 am	
23	Defendant.	Ctrm: 850 (8 th Fl.)	
$\begin{bmatrix} 23 \\ 24 \end{bmatrix}$		Judge: Hon. R. Gary Klausner Roybal Federal Building	
$\begin{bmatrix} 27 \\ 25 \end{bmatrix}$		255 East Temple Street Los Angeles, CA 90012	
		Los migeres, en 70012	
26			
27		•	
28			
	DEFENDANT'S REQUEST FOR JUDICIAL NOTICE	E Case No. 2:24-cv-04108-RGK-AJR	
	•		

REQUEST FOR JUDICIAL NOTICE

TO ALL PARTIES AND COUNSEL OF RECORD:

PLEASE TAKE NOTICE that pursuant to Federal Rule of Evidence 201 and supporting case law, Defendant SoLo Funds, Inc. ("SoLo") hereby respectfully requests that the Court take judicial notice of the following materials in support of SoLo's Motion to Dismiss:

- Exhibits 1-8 to the Declaration of Levi W. Swank: true and correct copies of reports, announcements, and statements from federal government agencies publicly available on their websites.
- Exhibit 9 to the Declaration of Travis Holoway: a true and correct copy of an exemplar Loan Agreement and Promissory Note provided by SoLo to marketplace lenders as part of the loan application and funding process.

MEMORANDUM OF POINTS AND AUTHORITIES

The documents listed above are properly subject to judicial notice, and the Court should consider them when ruling on SoLo's Motion to Dismiss.

I. LEGAL STANDARD

A. Judicial Notice

The Court may take judicial notice of facts that are "not subject to reasonable dispute" because they are "(1)[] generally known within the trial court's territorial jurisdiction; or (2) can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned." Fed. R. Evid. 201(b). The Court may take judicial notice of certain documents without converting SoLo's motion to dismiss into a motion for summary judgment. *See United States v. Ritchie*, 342 F.3d 903, 908 (9th Cir. 2003) ("A court may, however, consider certain materials—documents attached to the complaint, documents incorporated by reference in the complaint, or matters of judicial notice—without converting the motion to dismiss into a motion for summary judgment."); *Khoja v. Orexigen Therapeutics, Inc.*, 899 F.3d 988, 999 (9th Cir. 2018) ("A court may take judicial notice of matters of public

record without converting a motion to dismiss into a motion for summary judgment.") (alterations and citation omitted). Judicial notice is mandatory if "a party requests it and the court is supplied with the necessary information." Fed. R. Evid. 201(c)(2).

Relevant here, "[u]nder Rule 201, the court can take judicial notice of public records and government documents available from reliable sources on the Internet, such as websites run by governmental agencies." *Gerritsen v. Warner Bros. Ent. Inc.*, 112 F. Supp. 3d 1011, 1033 (C.D. Cal. 2015) (citations and quotation marks omitted); *see also, e.g., Paralyzed Veterans of Am. v. McPherson*, No. 06-4670, 2008 WL 4183981, at *5 (N.D. Cal. Sept. 9, 2008) ("[I]nformation on government agency websites" has "often been treated as proper subjects for judicial notice."). Thus, "government documents and documents available on government websites" may be considered by the Court without converting a motion to dismiss into a motion for summary judgment. *See Dimas v. JPMorgan Chase Bank, N.A.*, No. 17-05205, 2018 WL 809508, at *6 (N.D. Cal. Feb. 9, 2018).

B. Incorporation by Reference

Under the doctrine of incorporation by reference, courts may consider documents referenced in a complaint when plaintiff's claims "depend[] on the contents of a document." *Datel Holdings Ltd. v. Microsoft Corp.*, 712 F. Supp. 2d 974, 984 (N.D. Cal. 2010) (citing *Knievel v. ESPN*, 393 F.3d 1068, 1076 (9th Cir. 2005)); *see also Khoja*, 899 F.3d at 999, 1002 (defendant "may seek to incorporate a document into the complaint 'if the plaintiff refers extensively to the document or the document forms the basis of the plaintiff's claim." (quoting *Ritchie*, 342 F.3d at 907)). The Court may consider evidence on which Plaintiffs' Complaint "necessarily relies" if: "(1) the complaint refers to the document; (2) the document is central to the plaintiff's claim; and (3) no party questions the authenticity of the copy attached to the 12(b)(6) motion." *Marder v. Lopez*, 450 F.3d 445, 448 (9th Cir. 2006). This rule exists "in order to prevent plaintiffs from surviving a Rule 12(b)(6) motion by

deliberately omitting . . . documents upon which their claims are based[.]" *Swartz v. KPMG LLP*, 476 F.3d 756, 763 (9th Cir. 2007) (alterations, citation, and quotation marks omitted). A document "may be incorporated even if it is never referenced directly in the complaint if the claim necessarily depend[s] on the document." *In re Apple Inc. Device Performance Litig.*, 386 F. Supp. 3d 1155, 1165 (N.D. Cal. 2019) (incorporating product warranty where plaintiff's theory of liability necessarily depended on the warranty).

A court may assume the content of the document incorporated by reference is true for the purposes of a motion to dismiss, as long as such assumptions do not serve "the sole purpose of disputing facts stated in a well-pleaded complaint." *In re Ocera Therapeutics, Inc. Sec. Litig.*, No. 17-06687, 2018 WL 7019481, at *4 (N.D. Cal. Oct. 16, 2018) ("Generally, a court may assume an incorporated document's contents are true for purposes of a motion to dismiss under Rule 12(b)(6)."), *aff'd*, 806 F. App'x 603 (9th Cir. 2020); *see also Khoja*, 899 F.3d at 1002-03. In other words, a court can consider the truth of documents incorporated by reference in a complaint to prevent plaintiffs from "omitting portions of those very documents that weaken—or doom—their claims." *Khoja*, 899 F.3d at 1002.

II. THE COURT SHOULD TAKE JUDICIAL NOTICE OF THE EXHIBITS.

A. Publicly Available Federal Government Agency Reports and Webpages Are Properly Subject To Judicial Notice.

Exhibits 1-8 are true and correct copies of reports and announcements from two federal government agencies – the Consumer Financial Protection Bureau and the Board of Governors of the Federal Reserve System – that are publicly available on their ".gov" websites. SoLo is submitting herewith the Declaration of Levi W. Swank attesting to the authenticity of Exhibits 1-8. These documents reflect "matters of public record" – including concerns the Bureau has publicly expressed regarding the payday lending industry and financial statements of the Federal Reserve – which

are "facts not subject to reasonable dispute" that "can be accurately and readily determined from sources whose accuracy cannot be reasonably questioned." *Galindo v. Ocwen Loan Servicing, LLC*, 282 F. Supp. 3d 1193, 1195 n.1 (N.D. Cal. 2017) (citation omitted). These documents are therefore properly subject to judicial notice. *See, e.g., Gerritsen*, 112 F. Supp. 3d at 1033; *Paralyzed Veterans*, 2008 WL 4183981, at *5.

B. SoLo's Loan Agreement and Promissory Note Is Incorporated By Reference In The Complaint and Thus Subject to Judicial Notice.

Exhibit 9 is a true and accurate copy of the Loan Agreement and Promissory Note ("Note") that SoLo provided to prospective borrowers on behalf of marketplace lenders as part of the loan application and funding process. SoLo is submitting herewith the Declaration of SoLo's Chief Executive Officer, Travis Holoway, attesting to the authenticity of Exhibit 9.

The Note is incorporated by reference in the Complaint and therefore properly considered by the Court in connection with a motion to dismiss. The Bureau references the Note explicitly in the Complaint no fewer than six times, and entire paragraphs of the Complaint are devoted to describing its terms. For example, the Complaint asserts that "[a]s part of the loan application and funding process, SoLo provides each borrower with documents including a *promissory note* and a document titled 'Truth in Lending Disclosures,' both of which purport to describe the specific terms of the transaction, including the cost of credit," Compl. ¶42 (emphasis added), but that "[s]ince May 2021, . . . the *promissory notes* suggest that the consumer must repay only the original loan amount" when "in fact, SoLo debits the principal along with Lender tip fee and the SoLo donation fee from the borrower's account on the repayment date," *id.* ¶44 (emphasis added). Count II of the Complaint is predicated on these allegations concerning the terms of the Note. The Bureau asserts that SoLo "engaged in deceptive acts or practices when it issued *promissory notes* . . . that did not include the Lender tip fee and SoLo donation fee in the finance charge, the APR,

or the total of payments, in violation of Sections 1031 and 1036 of the CFPA." Compl. ¶101 (emphasis added). Courts in this Circuit have routinely found promissory note and loan agreements to be incorporated by reference and thus properly considered on a motion to dismiss under these same circumstances. *See, e.g., Chess v. Romine*, No. 18-05098, 2018 WL 5794526, at *4 (N.D. Cal. Nov. 2, 2018) ("The Court agrees, however, that the promissory notes are incorporated by reference because the notes are referenced extensively in the complaint and underlie Plaintiffs' fraud and UCL claims."); *Kim v. Ctr. Bank*, No. 10-01657, 2011 WL 13227797, at *2 (C.D. Cal. Jan. 10, 2011) ("The promissory note is incorporated by reference into the Complaint and, upon submission of the note by the defendant in connection with a motion to dismiss, a Court may consider the note.").

III. CONCLUSION

For the foregoing reasons, SoLo respectfully requests that the Court take judicial notice of Exhibits 1-8 to the Swank Declaration and Exhibit 9 to the Holoway Declaration.

Respectfully submitted,

Dated: August 15, 2024

By: /s/ Laura A. Stoll

THOMAS M. HEFFERON (admitted pro hac vice)
THefferon@goodwinlaw.com
LAURA A. STOLL (SBN 255023)

LStoll@goodwinlaw.com

LEVI W. SWANK (admitted pro hac vice) LSwank@goodwinlaw.com

GOODWIN PROCTER LLP

Attorneys for Defendant SOLO FUNDS, INC.

-5-

DEFENDANT'S REQUEST FOR JUDICIAL NOTICE

Case No. 2:24-cv-04108-RGK-AJR

CERTIFICATE OF SERVICE I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States District Court for the Central District of California by using the CM/ECF system on August 15, 2024. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the CM/ECF system. I certify under penalty of perjury that the foregoing is true and correct. Executed on August 15, 2024. /s/ Laura A. Stoll Dated: August 15, 2024 LAURA A. STOLL -6-DEFENDANT'S REQUEST FOR JUDICIAL NOTICE Case No. 2:24-cv-04108-RGK-AJR

I			
1	THOMAS M. HEFFERON (admitted p	pro	
2	hac vice) THefferon@goodwinlaw.com		
3	LEVI W. SWANK (admitted pro hac v	rice)	
4	LSwank@goodwinlaw.com GOODWIN PROCTER LLP		
5	1900 N Street, NW Washington, DC 20036		
6	Tel.: +1 202 346 4000		
7	Fax: +1 202 346 4444		
8	LAURA A. STOLL (SBN 255023)		
	LStoll@goodwinlaw.com GOODWIN PROCTER LLP		
9	601 S. Figueroa Street, 41st Floor Los Angeles, CA 90017		
10	Tel.: +1 213 426 2500		
11	Fax: +1 213 623 1673		
12	Attorneys for Defendant SOLO FUNDS, INC.		
13	SOLO PONDS, INC.		
14	UNITED STATES DISTRICT COURT		
15	CENTRAL DISTRICT OF CALIFORNIA		
16	WESTERN DIVISION – LOS ANGELES		
17	CONSUMER FINANCIAL	Case No. 2:24-cv-04108-RGK-AJR	
18	PROTECTION BUREAU,		
19	Plaintiff,	[PROPOSED] ORDER GRANTING DEFENDANT SOLO FUNDS, INC.'S	
20	V.	MOTION TO DISMISS COMPLAINT	
21		Date: Monday, September 16, 2024	
22	SOLO FUNDS, INC.,	Time: 9:00 am Ctrm: 850 (8 th Fl.)	
23	Defendant.	Judge: Hon. R. Gary Klausner	
24		Roybal Federal Building 255 East Temple Street	
$\begin{bmatrix} 27 \\ 25 \end{bmatrix}$		Los Angeles, CA 90012	
26			
27			
28			

[PROPOSED] ORDER 1 2 Upon consideration of Defendant SOLO FUNDS, INC.'s Motion To Dismiss 3 the Complaint of Plaintiff CONSUMER FINANCIAL PROTECTION BUREAU 4 under Federal Rule of Civil Procedure 12(b)(6) ("Motion"), the Memorandum of 5 Points and Authorities submitted in support of the Motion, the Declaration of Levi 6 W. Swank and the Declaration of Travis Holoway and the exhibits attached thereto, 7 the Request for Judicial Notice, and the entire record in this case, IT IS HEREBY ORDERED THAT Defendant SOLO FUNDS, INC.'s 8 9 Request for Judicial Notice is **GRANTED**; and 10 IT IS HEREBY ORDERED THAT Defendant SOLO FUNDS, INC.'s Motion to Dismiss is **GRANTED** and the Complaint is **DISMISSED** with prejudice. The 11 Court holds that Plaintiff CONSUMER FINANCIAL PROTECTION BUREAU 12 lacks a lawful source of funding to pursue this enforcement action against Defendant 13 SOLO FUNDS, INC. and has failed to state a claim for relief as to Counts I, II, IV, 14 V, VI, VIII and IX. 15 16 17 IT IS SO ORDERED 18 19 , 2024 HON. R. GARY KLAUSNER 20 UNITED STATES DISTRICT JUDGE 21 22 23 24 25 26 27 28

Case No. 2:24-cv-04108-RGK-AJR

PROPOSED ORDER ON DEFENDANT'S MOTION TO DISMISS

CERTIFICATE OF SERVICE I hereby certify that I electronically filed the foregoing with the Clerk of the Court for the United States District Court for the Central District of California by using the CM/ECF system on August 15, 2024. I further certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the CM/ECF system. I certify under penalty of perjury that the foregoing is true and correct. Executed on August 15, 2024. /s/ Laura A. Stoll LAURA A. STOLL PROPOSED ORDER ON DEFENDANT'S MOTION TO DISMISS

Case No. 2:24-cv-04108-RGK-AJR