UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2023

Or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: 001-32877

Mastercard Incorporated

(Exact name of registrant as specified in its charter)

Delaware	**13-4172551**
(State or other jurisdiction of incorporation or organization)	**(IRS Employer Identification Number)**
2000 Purchase Street **Purchase, NY**	**10577** **(Zip Code)**
(Address of principal executive offices)	

(914) 249-2000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange of which registered
Class A Common Stock, par value $0.0001 per share	MA	New York Stock Exchange
2.1% Notes due 2027	MA27	New York Stock Exchange
1.0% Notes due 2029	MA29A	New York Stock Exchange
2.5% Notes due 2030	MA30	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files) Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check One):

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13 (a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act) Yes ☐ No ☒

As of July 24, 2023, there were 934,847,899 shares outstanding of the registrant's Class A common stock, par value $0.0001 per share; and 7,364,444 shares outstanding of the registrant's Class B common stock, par value $0.0001 per share.

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In this Report on Form 10-Q ("Report"), references to the "Company," "Mastercard," "we," "us" or "our" refer to the business conducted by Mastercard Incorporated and its consolidated subsidiaries, including our operating subsidiary, Mastercard International Incorporated, and to the Mastercard brand.

Forward-Looking Statements

This Report contains forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts may be forward-looking statements. When used in this Report, the words "believe", "expect", "could", "may", "would", "will", "trend" and similar words are intended to identify forward-looking statements. Examples of forward-looking statements include, but are not limited to, statements that relate to the Company's future prospects, developments and business strategies.

Many factors and uncertainties relating to our operations and business environment, all of which are difficult to predict and many of which are outside of our control, influence whether any forward-looking statements can or will be achieved. Any one of those factors could cause our actual results to differ materially from those expressed or implied in writing in any forward-looking statements made by Mastercard or on its behalf, including, but not limited to, the following factors:

- regulation directly related to the payments industry (including regulatory, legislative and litigation activity with respect to interchange rates and surcharging)
- the impact of preferential or protective government actions
- regulation of privacy, data, security and the digital economy
- regulation that directly or indirectly applies to us based on our participation in the global payments industry (including anti-money laundering, counter financing of terrorism, economic sanctions and anti-corruption, account-based payments systems, and issuer and acquirer practice regulation)
- the impact of changes in tax laws, as well as regulations and interpretations of such laws or challenges to our tax positions
- potential or incurred liability and limitations on business related to any litigation or litigation settlements
- the impact of competition in the global payments industry (including disintermediation and pricing pressure)
- the challenges relating to rapid technological developments and changes
- the challenges relating to operating a real-time account-based payments system and to working with new customers and end users
- the impact of information security incidents, account data breaches or service disruptions
- issues related to our relationships with our stakeholders (including loss of substantial business from significant customers, competitor relationships with our customers, consolidation amongst our customers, merchants' continued focus on acceptance costs and unique risks from our work with governments)
- the impact of global economic, political, financial and societal events and conditions, including adverse currency fluctuations and foreign exchange controls as well as events and resulting actions related to the Russian invasion of Ukraine
- the impact of the global COVID-19 pandemic and measures taken in response
- reputational impact, including impact related to brand perception and lack of visibility of our brands in products and services
- the impact of environmental, social and governance matters and related stakeholder reaction
- the inability to attract and retain a highly qualified and diverse workforce, or maintain our corporate culture
- issues related to acquisition integration, strategic investments and entry into new businesses
- exposure to loss or illiquidity due to our role as guarantor and other contractual obligations
- issues related to our Class A common stock and corporate governance structure

Please see a complete discussion of these risk factors in Part I, Item 1A - Risk Factors of the Company's Annual Report on Form 10-K for the year ended December 31, 2022. We caution you that the important factors referenced above may not contain all of the factors that are important to you. Our forward-looking statements speak only as of the date of this Report or as of the date they are made, and we undertake no obligation to update our forward-looking statements.

PART I

Item 1. Consolidated financial statements (unaudited)

Item 2. Management’s discussion and analysis of financial condition and results of operations

Item 3. Quantitative and qualitative disclosures about market risk

Item 4. Controls and procedures

Item 1. Consolidated financial statements (unaudited)

Mastercard Incorporated
Index to consolidated financial statements (unaudited)

Consolidated Statement of Operations (Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions, except per share data)			
Net Revenue	**$ 6,269**	**$ 5,497**	**$ 12,017**	**$ 10,664**
Operating Expenses:				
General and administrative	2,200	1,947	4,243	3,791
Advertising and marketing	201	210	368	391
Depreciation and amortization	192	189	383	381
Provision for litigation	20	133	231	133
Total operating expenses	2,613	2,479	5,225	4,696
Operating income	3,656	3,018	6,792	5,968
Other Income (Expense):				
Investment income	59	7	114	12
Gains (losses) on equity investments, net	123	(117)	(89)	(193)
Interest expense	(144)	(114)	(276)	(224)
Other income (expense), net	10	4	16	8
Total other income (expense)	48	(220)	(235)	(397)
Income before income taxes	3,704	2,798	6,557	5,571
Income tax expense	859	523	1,351	665
Net Income	**$ 2,845**	**$ 2,275**	**$ 5,206**	**$ 4,906**
Basic Earnings per Share	**$ 3.01**	**$ 2.34**	**$ 5.48**	**$ 5.04**
Basic weighted-average shares outstanding	946	971	949	974
Diluted Earnings per Share	**$ 3.00**	**$ 2.34**	**$ 5.47**	**$ 5.02**
Diluted weighted-average shares outstanding	949	974	952	977

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

Consolidated Statement of Comprehensive Income (Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions)			
Net Income	**$ 2,845**	**$ 2,275**	**$ 5,206**	**$ 4,906**
Other comprehensive income (loss):				
Foreign currency translation adjustments	53	(710)	147	(774)
Income tax effect	—	31	(14)	43
Foreign currency translation adjustments, net of income tax effect	53	(679)	133	(731)
Translation adjustments on net investment hedges	(11)	314	(85)	400
Income tax effect	2	(70)	19	(89)
Translation adjustments on net investment hedges, net of income tax effect	(9)	244	(66)	311
Cash flow hedges	(14)	6	(24)	7
Income tax effect	6	(2)	6	(2)
Reclassification adjustments for cash flow hedges	9	—	17	(5)
Income tax effect	(5)	—	(4)	1
Cash flow hedges, net of income tax effect	(4)	4	(5)	1
Reclassification adjustments for defined benefit pension and other postretirement plans	—	(1)	—	(1)
Income tax effect	—	—	—	—
Defined benefit pension and other postretirement plans, net of income tax effect	—	(1)	—	(1)
Investment securities available-for-sale	—	(2)	2	(4)
Income tax effect	—	—	—	1
Investment securities available-for-sale, net of income tax effect	—	(2)	2	(3)
Other comprehensive income (loss), net of income tax effect	40	(434)	64	(423)
Comprehensive Income	**$ 2,885**	**$ 1,841**	**$ 5,270**	**$ 4,483**

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

Consolidated Balance Sheet (Unaudited)

	June 30, 2023	December 31, 2022
	(in millions, except per share data)	
Assets		
Current assets:		
Cash and cash equivalents	$ 6,170	$ 7,008
Restricted cash for litigation settlement	598	589
Investments	344	400
Accounts receivable	3,763	3,425
Settlement assets	1,378	1,270
Restricted security deposits held for customers	1,723	1,568
Prepaid expenses and other current assets	2,554	2,346
Total current assets	**16,530**	**16,606**
Property, equipment and right-of-use assets, net of accumulated depreciation and amortization of $2,082 and $1,904, respectively	1,986	2,006
Deferred income taxes	1,121	1,151
Goodwill	7,579	7,522
Other intangible assets, net of accumulated amortization of $2,087 and $1,960, respectively	4,049	3,859
Other assets	7,739	7,580
Total Assets	**$ 39,004**	**$ 38,724**
Liabilities, Redeemable Non-controlling Interests and Equity		
Current liabilities:		
Accounts payable	$ 643	$ 926
Settlement obligations	1,142	1,111
Restricted security deposits held for customers	1,723	1,568
Accrued litigation	1,079	1,094
Accrued expenses	7,117	7,801
Short-term debt	1,336	274
Other current liabilities	1,596	1,397
Total current liabilities	**14,636**	**14,171**
Long-term debt	14,284	13,749
Deferred income taxes	395	393
Other liabilities	4,110	4,034
Total Liabilities	**33,425**	**32,347**
Commitments and Contingencies		
Redeemable Non-controlling Interests	**22**	**21**
Stockholders' Equity		
Class A common stock, $0.0001 par value; authorized 3,000 shares, 1,401 and 1,399 shares issued and 936 and 948 shares outstanding, respectively	—	—
Class B common stock, $0.0001 par value; authorized 1,200 shares, 7 and 8 shares issued and outstanding, respectively	—	—
Additional paid-in-capital	5,622	5,298
Class A treasury stock, at cost, 465 and 451 shares, respectively	(56,659)	(51,354)
Retained earnings	57,730	53,607
Accumulated other comprehensive income (loss)	(1,189)	(1,253)
Mastercard Incorporated Stockholders' Equity	**5,504**	**6,298**
Non-controlling interests	53	58
Total Equity	**5,557**	**6,356**
Total Liabilities, Redeemable Non-controlling Interests and Equity	**$ 39,004**	**$ 38,724**

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

Consolidated Statement of Changes in Equity (Unaudited)

	Three Months Ended June 30, 2023								
	Stockholders' Equity								
	Common Stock		Additional Paid-In Capital	Class A Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Mastercard Incorporated Stockholders' Equity	Non-Controlling Interests	Total Equity
	Class A	Class B							
	(in millions)								
Balance at March 31, 2023	**$ —**	**$ —**	**$ 5,376**	**$(54,241)**	**$55,424**	**$ (1,229)**	**$ 5,330**	**$ 56**	**$ 5,386**
Net income	—	—	—	—	2,845	—	2,845	—	2,845
Activity related to non-controlling interests	—	—	—	—	—	—	—	(3)	(3)
Redeemable non-controlling interest adjustments	—	—	—	—	(1)	—	(1)	—	(1)
Other comprehensive income (loss)	—	—	—	—	—	40	40	—	40
Dividends	—	—	—	—	(538)	—	(538)	—	(538)
Purchases of treasury stock	—	—	—	(2,423)	—	—	(2,423)	—	(2,423)
Share-based payments	—	—	246	5	—	—	251	—	251
Balance at June 30, 2023	**$ —**	**$ —**	**$ 5,622**	**$(56,659)**	**$57,730**	**$ (1,189)**	**$ 5,504**	**$ 53**	**$ 5,557**

	Six Months Ended June 30, 2023								
	Stockholders' Equity								
	Common Stock		Additional Paid-In Capital	Class A Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Mastercard Incorporated Stockholders' Equity	Non-Controlling Interests	Total Equity
	Class A	Class B							
	(in millions)								
Balance at December 31, 2022	**$ —**	**$ —**	**$ 5,298**	**$(51,354)**	**$53,607**	**$ (1,253)**	**$ 6,298**	**$ 58**	**$ 6,356**
Net income	—	—	—	—	5,206	—	5,206	—	5,206
Activity related to non-controlling interests	—	—	—	—	—	—	—	(5)	(5)
Redeemable non-controlling interest adjustments	—	—	—	—	(4)	—	(4)	—	(4)
Other comprehensive income (loss)	—	—	—	—	—	64	64	—	64
Dividends	—	—	—	—	(1,079)	—	(1,079)	—	(1,079)
Purchases of treasury stock	—	—	—	(5,317)	—	—	(5,317)	—	(5,317)
Share-based payments	—	—	324	12	—	—	336	—	336
Balance at June 30, 2023	**$ —**	**$ —**	**$ 5,622**	**$(56,659)**	**$57,730**	**$ (1,189)**	**$ 5,504**	**$ 53**	**$ 5,557**

Consolidated Statement of Changes in Equity (Unaudited) - (Continued)

	Three Months Ended June 30, 2022								
	Stockholders' Equity								
	Common Stock								
	Class A	Class B	Additional Paid-In Capital	Class A Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Mastercard Incorporated Stockholders' Equity	Non-Controlling Interests	Total Equity
	(in millions)								
Balance at March 31, 2022	**$ —**	**$ —**	**$ 5,026**	**$(44,994)**	**$47,800**	**$ (798)**	**$ 7,034**	**$ 68**	**$ 7,102**
Net income	—	—	—	—	2,275	—	2,275	—	2,275
Activity related to non-controlling interests	—	—	—	—	—	—	—	(3)	(3)
Redeemable non-controlling interest adjustments	—	—	—	—	(2)	—	(2)	—	(2)
Other comprehensive income (loss)	—	—	—	—	—	(434)	(434)	—	(434)
Dividends	—	—	—	—	(474)	—	(474)	—	(474)
Purchases of treasury stock	—	—	—	(2,365)	—	—	(2,365)	—	(2,365)
Share-based payments	—	—	137	—	—	—	137	—	137
Balance at June 30, 2022	**$ —**	**$ —**	**$ 5,163**	**$(47,359)**	**$49,599**	**$ (1,232)**	**$ 6,171**	**$ 65**	**$ 6,236**

	Six Months Ended June 30, 2022								
	Stockholders' Equity								
	Common Stock								
	Class A	Class B	Additional Paid-In Capital	Class A Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Mastercard Incorporated Stockholders' Equity	Non-Controlling Interests	Total Equity
	(in millions)								
Balance at December 31, 2021	**$ —**	**$ —**	**$ 5,061**	**$(42,588)**	**$45,648**	**$ (809)**	**$ 7,312**	**$ 71**	**$ 7,383**
Net income	—	—	—	—	4,906	—	4,906	—	4,906
Activity related to non-controlling interests	—	—	—	—	—	—	—	(6)	(6)
Redeemable non-controlling interest adjustments	—	—	—	—	(4)	—	(4)	—	(4)
Other comprehensive income (loss)	—	—	—	—	—	(423)	(423)	—	(423)
Dividends	—	—	—	—	(951)	—	(951)	—	(951)
Purchases of treasury stock	—	—	—	(4,776)	—	—	(4,776)	—	(4,776)
Share-based payments	—	—	102	5	—	—	107	—	107
Balance at June 30, 2022	**$ —**	**$ —**	**$ 5,163**	**$(47,359)**	**$49,599**	**$ (1,232)**	**$ 6,171**	**$ 65**	**$ 6,236**

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

Consolidated Statement of Cash Flows (Unaudited)

	Six Months Ended June 30,	
	2023	2022
	(in millions)	
Operating Activities		
Net income	$ 5,206	$ 4,906
Adjustments to reconcile net income to net cash provided by operating activities:		
Amortization of customer and merchant incentives	782	812
Depreciation and amortization	383	381
(Gains) losses on equity investments, net	89	193
Share-based compensation	243	175
Deferred income taxes	24	(466)
Other	37	18
Changes in operating assets and liabilities:		
Accounts receivable	(268)	(257)
Settlement assets	(108)	255
Prepaid expenses	(1,286)	(1,033)
Accrued litigation and legal settlements	(20)	85
Restricted security deposits held for customers	155	(252)
Accounts payable	(287)	(110)
Settlement obligations	31	(239)
Accrued expenses	(707)	(282)
Net change in other assets and liabilities	343	53
Net cash provided by operating activities	4,617	4,239
Investing Activities		
Purchases of investment securities available-for-sale	(157)	(124)
Purchases of investments held-to-maturity	(31)	(139)
Proceeds from sales of investment securities available-for-sale	45	14
Proceeds from maturities of investment securities available-for-sale	102	113
Proceeds from maturities of investments held-to-maturity	91	160
Purchases of property and equipment	(190)	(201)
Capitalized software	(395)	(280)
Purchases of equity investments	(53)	(43)
Proceeds from sales of equity investments	44	6
Acquisition of businesses, net of cash acquired	—	(313)
Other investing activities	(71)	(5)
Net cash used in investing activities	(615)	(812)
Financing Activities		
Purchases of treasury stock	(5,294)	(4,788)
Dividends paid	(1,086)	(956)
Proceeds from debt, net	1,550	843
Tax withholdings related to share-based payments	(79)	(136)
Cash proceeds from exercise of stock options	172	68
Other financing activities	3	(6)
Net cash used in financing activities	(4,734)	(4,975)
Effect of exchange rate changes on cash, cash equivalents, restricted cash and restricted cash equivalents	57	(202)
Net decrease in cash, cash equivalents, restricted cash and restricted cash equivalents	(675)	(1,750)
Cash, cash equivalents, restricted cash and restricted cash equivalents - beginning of period	9,196	9,902
Cash, cash equivalents, restricted cash and restricted cash equivalents - end of period	$ 8,521	$ 8,152

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

Notes to consolidated financial statements (unaudited)

Note 1. Summary of Significant Accounting Policies

Organization

Mastercard Incorporated and its consolidated subsidiaries, including Mastercard International Incorporated ("Mastercard International" and together with Mastercard Incorporated, "Mastercard" or the "Company"), is a global technology company in the payments industry. Mastercard connects consumers, financial institutions, merchants, governments, digital partners, businesses and other organizations worldwide by enabling electronic forms of payment instead of cash and checks and making those payment transactions safe, simple, smart and accessible.

Consolidation and Basis of Presentation

The consolidated financial statements include the accounts of Mastercard and its majority-owned and controlled entities, including any variable interest entities ("VIEs") for which the Company is the primary beneficiary. Investments in VIEs for which the Company is not considered the primary beneficiary are not consolidated and are accounted for as marketable, equity method or measurement alternative method investments and recorded in other assets on the consolidated balance sheet. At June 30, 2023 and December 31, 2022, there were no significant VIEs which required consolidation and the investments were not considered material to the consolidated financial statements. The Company consolidates acquisitions as of the date the Company has obtained a controlling financial interest. Intercompany transactions and balances have been eliminated in consolidation. During the fourth quarter of 2022, the Company updated its disaggregated net revenue presentation by category and geography to reflect the nature of its payment services and to align such information with the way in which management views its categories of net revenue. Prior period amounts have been reclassified to conform to the 2022 presentation. The reclassification had no impact on previously reported total net revenue, operating income or net income. The Company follows accounting principles generally accepted in the United States of America ("GAAP").

The balance sheet as of December 31, 2022 was derived from the audited consolidated financial statements as of December 31, 2022. The consolidated financial statements for the three and six months ended June 30, 2023 and 2022 and as of June 30, 2023 are unaudited, and in the opinion of management, include all normal recurring adjustments that are necessary to present fairly the results for interim periods. The results of operations for the three and six months ended June 30, 2023 are not necessarily indicative of the results to be expected for the full year.

The accompanying unaudited consolidated financial statements are presented in accordance with the U.S. Securities and Exchange Commission ("SEC") requirements for Quarterly Reports on Form 10-Q. Reference should be made to Mastercard's Annual Report on Form 10-K for the year ended December 31, 2022 for additional disclosures, including a summary of the Company's significant accounting policies.

Note 2. Acquisitions

In April 2022, Mastercard acquired 100% equity interest in Dynamic Yield LTD. As of March 31, 2023, the Company finalized the purchase price accounting of $325 million for this acquisition. The final fair value of the purchase price allocation was not materially different than the preliminary estimated fair value. For the preliminary estimated fair value of the purchase price allocation as of the acquisition date, refer to Note 2 (Acquisitions) to the consolidated financial statements included in Part II, Item 8 of the Company's Annual Report on Form 10-K for the year ended December 31, 2022.

Note 3. Revenue

The Company's disaggregated net revenue by category and geographic region were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions)			
Net revenue by category:				
Payment network	$ 4,073	$ 3,609	$ 7,723	$ 7,008
Value-added services and solutions	2,196	1,888	4,294	3,656
Net revenue	**$ 6,269**	**$ 5,497**	**$ 12,017**	**$ 10,664**
Net revenue by geographic region:				
North American Markets [1]	$ 2,138	$ 2,008	$ 4,034	$ 3,738
International Markets	4,131	3,489	7,983	6,926
Net revenue	**$ 6,269**	**$ 5,497**	**$ 12,017**	**$ 10,664**

1. North American Markets includes the United States and Canada, excluding the U.S. Territories.

The Company's customers are generally billed weekly, however, the frequency is dependent upon the nature of the performance obligation and the underlying contractual terms. The Company does not typically offer extended payment terms to customers. The following table sets forth the location of the amounts recognized on the consolidated balance sheet from contracts with customers:

	June 30, 2023	December 31, 2022
	(in millions)	
Receivables from contracts with customers		
Accounts receivable	$ 3,531	$ 3,213
Contract assets		
Prepaid expenses and other current assets	108	118
Other assets	421	442
Deferred revenue [1]		
Other current liabilities	567	434
Other liabilities	290	248

1 Revenue recognized from performance obligations satisfied during the three and six months ended June 30, 2023 was $457 million and $828 million, respectively.

Note 4. Earnings Per Share

The components of basic and diluted earnings per share ("EPS") for common shares were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions, except per share data)			
Numerator				
Net income	$ 2,845	$ 2,275	$ 5,206	$ 4,906
Denominator				
Basic weighted-average shares outstanding	946	971	949	974
Dilutive stock options and stock units	2	3	3	3
Diluted weighted-average shares outstanding [1]	949	974	952	977
Earnings per Share				
Basic	$ 3.01	$ 2.34	$ 5.48	$ 5.04
Diluted	$ 3.00	$ 2.34	$ 5.47	$ 5.02

Note: Table may not sum due to rounding.

1 For the periods presented, the calculation of diluted EPS excluded a minimal amount of anti-dilutive share-based payment awards.

Note 5. Cash, Cash Equivalents, Restricted Cash and Restricted Cash Equivalents

The following table provides a reconciliation of cash, cash equivalents, restricted cash and restricted cash equivalents reported on the consolidated balance sheet that total to the amounts shown on the consolidated statement of cash flows.

	June 30, 2023	December 31, 2022
	(in millions)	
Cash and cash equivalents	$ 6,170	$ 7,008
Restricted cash and restricted cash equivalents		
Restricted cash for litigation settlement	598	589
Restricted security deposits held for customers	1,723	1,568
Prepaid expenses and other current assets	30	31
Cash, cash equivalents, restricted cash and restricted cash equivalents	**$ 8,521**	**$ 9,196**

Note 6. Investments

The Company's investments on the consolidated balance sheet include both available-for-sale and held-to-maturity debt securities (see Investments section below). The Company classifies its investments in equity securities of publicly traded and privately held companies within other assets on the consolidated balance sheet (see Equity Investments section below).

Investments

Investments on the consolidated balance sheet consisted of the following:

	June 30, 2023	December 31, 2022
	(in millions)	
Available-for-sale securities [1]	$ 279	$ 272
Held-to-maturity securities [2]	65	128
Total investments	**$ 344**	**$ 400**

1 See Available-for-Sale Securities section below for further detail.

2 Held-to-maturity securities represent investments in time deposits that mature within one year. The cost of these securities approximates fair value.

Investment income on the consolidated statement of operations primarily consists of interest income generated from cash, cash equivalents, held-to maturity and available-for-sale investment securities, as well as realized gains and losses on the Company's investment securities. The realized gains and losses from the sales of available-for-sale securities for the three and six months ended June 30, 2023 and 2022 were not material.

Available-for-Sale Securities

The major classes of the Company's available-for-sale investment securities and their respective amortized cost basis and fair values were as follows:

	June 30, 2023				December 31, 2022			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
	(in millions)							
Government and agency securities	$ 100	$ —	$ (1)	$ 99	$ 91	$ —	$ (2)	$ 89
Corporate securities	183	—	(3)	180	187	—	(4)	183
Total	**$ 283**	**$ —**	**$ (4)**	**$ 279**	**$ 278**	**$ —**	**$ (6)**	**$ 272**

The Company's government and agency securities include U.S. government bonds, U.S. government sponsored agency bonds and foreign government bonds which are denominated in the national currency of the issuing country. Corporate available-for-sale investment securities held at June 30, 2023 and December 31, 2022 primarily carried a credit rating of A- or better. Corporate securities are comprised of commercial paper and corporate bonds. Unrealized gains and losses are recorded as a separate component of other comprehensive income (loss) on the consolidated statement of comprehensive income.

The maturity distribution based on the contractual terms of the Company's available-for-sale investment securities at June 30, 2023 was as follows:

	Amortized Cost	Fair Value
	(in millions)	
Due within 1 year	$ 167	$ 166
Due after 1 year through 5 years	116	113
Total	**$ 283**	**$ 279**

Equity Investments

Included in other assets on the consolidated balance sheet are equity investments with readily determinable fair values ("Marketable securities") and equity investments without readily determinable fair values ("Nonmarketable securities"). Marketable securities are equity interests in publicly traded companies and are measured using unadjusted quoted prices in their respective active markets. Nonmarketable securities that do not qualify for equity method accounting are measured at cost, less any impairment and adjusted for changes resulting from observable price changes in orderly transactions for the identical or similar investments of the same issuer ("Measurement alternative").

The following table is a summary of the activity related to the Company's equity investments:

	Balance at December 31, 2022	Purchases	Sales	Changes in Fair Value [1]	Other [2]	Balance at June 30, 2023
	(in millions)					
Marketable securities	$ 399	$ —	$ —	$ 55	$ 8	$ 462
Nonmarketable securities	1,331	53	(44)	(144)	6	1,202
Total equity investments	**$ 1,730**	**$ 53**	**$ (44)**	**$ (89)**	**$ 14**	**$ 1,664**

1 Recorded in gains (losses) on equity investments, net on the consolidated statement of operations.

2 Includes translational impact of currency.

The following table sets forth the components of the Company's Nonmarketable securities:

	June 30, 2023	December 31, 2022
	(in millions)	
Measurement alternative	$ 991	$ 1,087
Equity method	211	244
Total Nonmarketable securities	**$ 1,202**	**$ 1,331**

The following table summarizes the total carrying value of the Company's Measurement alternative investments, including cumulative unrealized gains and losses through June 30, 2023:

	(in millions)
Initial cost basis	$ 529
Cumulative adjustments [1]:	
Upward adjustments	629
Downward adjustments (including impairment)	(167)
Carrying amount, end of period	**$ 991**

1 Includes immaterial translational impact of currency.

The following table summarizes the unrealized gains and losses included in the carrying value of the Company's Measurement alternative investments and Marketable securities:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions)			
Measurement alternative investments:				
Upward adjustments	$ 6	$ 17	$ 6	$ 103
Downward adjustments (including impairment)	(2)	(12)	(135)	(12)
Marketable securities:				
Unrealized gains (losses), net	121	(126)	55	(288)

Note 7. Fair Value Measurements

The Company's financial instruments are carried at fair value, cost or amortized cost on the consolidated balance sheet. The Company classifies its fair value measurements of financial instruments into a three-level hierarchy (the "Valuation Hierarchy").

Financial Instruments - Carried at Fair Value

Financial instruments carried at fair value are categorized for fair value measurement purposes as recurring or non-recurring in nature.

Recurring Measurements

The distribution of the Company's financial instruments measured at fair value on a recurring basis within the Valuation Hierarchy were as follows:

	June 30, 2023				December 31, 2022			
	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
	(in millions)							
Assets								
Investment securities available-for-sale [1]:								
Government and agency securities	$ 39	$ 60	$ —	$ 99	$ 35	$ 54	$ —	$ 89
Corporate securities	—	180	—	180	—	183	—	183
Derivative instruments [2]:								
Foreign exchange contracts	—	49	—	49	—	108	—	108
Marketable securities [3]:								
Equity securities	462	—	—	462	399	—	—	399
Deferred compensation plan [4]:								
Deferred compensation assets	86	—	—	86	74	—	—	74
Liabilities								
Derivative instruments [2]:								
Foreign exchange contracts	$ —	$ 55	$ —	$ 55	$ —	$ 21	$ —	$ 21
Interest rate contracts	—	105	—	105	—	105	—	105
Deferred compensation plan [5]:								
Deferred compensation liabilities	84	—	—	84	73	—	—	73

1 The Company's U.S. government securities are classified within Level 1 of the Valuation Hierarchy as the fair values are based on unadjusted quoted prices for identical assets in active markets. The fair value of the Company's available-for-sale non-U.S. government and agency securities and corporate securities are based on observable inputs such as quoted prices, benchmark yields and issuer spreads for similar assets in active markets and are therefore included in Level 2 of the Valuation Hierarchy.

2 The Company's foreign exchange and interest rate derivative asset and liability contracts have been classified within Level 2 of the Valuation Hierarchy as the fair value is based on observable inputs such as broker quotes for similar derivative instruments. See Note 17 (Derivative and Hedging Instruments) for further details.

3 The Company's Marketable securities are publicly held and classified within Level 1 of the Valuation Hierarchy as the fair values are based on unadjusted quoted prices in their respective active markets.

4 The Company has a nonqualified deferred compensation plan where assets are invested primarily in mutual funds held in a rabbi trust, which is restricted for payments to participants of the plan. The Company has elected to use the fair value option for these mutual funds, which are measured using quoted prices of identical instruments in active markets and are included in prepaid expenses and other current assets on the consolidated balance sheet.

5 The deferred compensation liabilities are measured at fair value based on the quoted prices of identical instruments to the investment vehicles selected by the participants. These are included in other liabilities on the consolidated balance sheet.

Nonrecurring Measurements

Nonmarketable Securities

The Company's Nonmarketable securities are recorded at fair value on a nonrecurring basis in periods after initial recognition under the equity method or measurement alternative method. Nonmarketable securities are classified within Level 3 of the Valuation Hierarchy due to the absence of quoted market prices, the inherent lack of liquidity and unobservable inputs used to measure fair value that require management's judgment. The Company uses discounted cash flows and market assumptions to estimate the fair value of its Nonmarketable securities when certain events or circumstances indicate that impairment may exist. See Note 6 (Investments) for further details.

Financial Instruments - Not Carried at Fair Value

Debt

Debt instruments are carried on the consolidated balance sheet at amortized cost. The Company estimates the fair value of its debt based on either market quotes or observable market data. Debt is classified as Level 2 of the Valuation Hierarchy as it is generally not traded in active markets. At June 30, 2023, the carrying value and fair value of debt was $15.6 billion and $14.4 billion, respectively. At December 31, 2022, the carrying value and fair value of debt was $14.0 billion and $12.7 billion, respectively. See Note 10 (Debt) for further details.

Other Financial Instruments

Certain other financial instruments are carried on the consolidated balance sheet at cost or amortized cost basis, which approximates fair value due to their short-term, highly liquid nature. These instruments include cash and cash equivalents, restricted cash, time deposits, accounts receivable, settlement assets, restricted security deposits held for customers, accounts payable, settlement obligations and other accrued liabilities.

Note 8. Prepaid Expenses and Other Assets

Prepaid expenses and other current assets consisted of the following:

	June 30, 2023	December 31, 2022
	(in millions)	
Customer and merchant incentives	$ 1,472	$ 1,392
Prepaid income taxes	65	34
Other	1,017	920
Total prepaid expenses and other current assets	**$ 2,554**	**$ 2,346**

Other assets consisted of the following:

	June 30, 2023	December 31, 2022
	(in millions)	
Customer and merchant incentives	$ 4,778	$ 4,578
Equity investments	1,664	1,730
Income taxes receivable	656	633
Other	641	639
Total other assets	**$ 7,739**	**$ 7,580**

Customer and merchant incentives represent payments made to customers and merchants under business agreements. Payments made directly related to entering into such an agreement are generally capitalized and amortized over the life of the agreement.

Note 9. Accrued Expenses and Accrued Litigation

Accrued expenses consisted of the following:

	June 30, 2023	December 31, 2022
	(in millions)	
Customer and merchant incentives	$ 5,397	$ 5,600
Personnel costs	754	1,322
Income and other taxes	449	279
Other	517	600
Total accrued expenses	**$ 7,117**	**$ 7,801**

Customer and merchant incentives represent amounts to be paid to customers under business agreements. As of June 30, 2023 and December 31, 2022, long-term customer and merchant incentives included in other liabilities were $2,507 million and $2,293 million, respectively.

As of June 30, 2023 and December 31, 2022, the Company's provision for litigation was $1,079 million and $1,094 million, respectively. These amounts are not included in the accrued expenses table above and are separately reported as accrued litigation on the consolidated balance sheet. See Note 15 (Legal and Regulatory Proceedings) for additional information regarding the Company's accrued litigation.

Note 10. Debt

Debt consisted of the following:

		June 30, 2023	December 31, 2022	Effective Interest Rate
		(in millions)		
Senior Notes				
2023 USD Notes	4.875 % Senior Notes due March 2028	$ 750	$ —	5.003 %
	4.850 % Senior Notes due March 2033	750	—	4.923 %
2022 EUR Notes [1]	1.000 % Senior Notes due February 2029	817	800	1.138 %
2021 USD Notes	2.000 % Senior Notes due November 2031	750	750	2.112 %
	1.900 % Senior Notes due March 2031	600	600	1.981 %
	2.950 % Senior Notes due March 2051	700	700	3.013 %
2020 USD Notes	3.300 % Senior Notes due March 2027	1,000	1,000	3.420 %
	3.350 % Senior Notes due March 2030	1,500	1,500	3.430 %
	3.850 % Senior Notes due March 2050	1,500	1,500	3.896 %
2019 USD Notes	2.950 % Senior Notes due June 2029	1,000	1,000	3.030 %
	3.650 % Senior Notes due June 2049	1,000	1,000	3.689 %
	2.000 % Senior Notes due March 2025	750	750	2.147 %
2018 USD Notes	3.500 % Senior Notes due February 2028	500	500	3.598 %
	3.950 % Senior Notes due February 2048	500	500	3.990 %
2016 USD Notes	2.950 % Senior Notes due November 2026	750	750	3.044 %
	3.800 % Senior Notes due November 2046	600	600	3.893 %
2015 EUR Notes [2]	2.100 % Senior Notes due December 2027	872	854	2.189 %
	2.500 % Senior Notes due December 2030	163	160	2.562 %
2014 USD Notes	3.375 % Senior Notes due April 2024	1,000	1,000	3.484 %
Other Debt				
April 2023 INR Term Loan [3]	9.480 % Term Loan due July 2023	61	—	9.705 %
2022 INR Term Loan [4]	8.640 % Term Loan due July 2023	277	275	9.090 %
		15,840	**14,239**	
Less: Unamortized discount and debt issuance costs		(115)	(111)	
Less: Cumulative hedge accounting fair value adjustments [5]		(105)	(105)	
Total debt outstanding		**15,620**	**14,023**	
Less: Short-term debt [6]		(1,336)	(274)	
Long-term debt		**$ 14,284**	**$ 13,749**	

1 €750 million euro-denominated debt issued in February 2022.

2 €950 million euro-denominated debt remaining of the €1.650 billion issued in December 2015.

3 INR4.97 billion Indian rupee-denominated loan issued in April 2023.

4 INR22.7 billion Indian rupee-denominated loan issued in July 2022.

5 The Company has an interest rate swap which is accounted for as a fair value hedge. See Note 17 (Derivative and Hedging Instruments) for additional information.

6 The INR Term Loans due July 2023 and the 2014 USD Notes due April 2024 are classified as short-term debt on the consolidated balance sheet as of June 30, 2023. The INR Term Loan due July 2023 is classified as short-term debt on the consolidated balance sheet as of December 31, 2022.

Senior Notes

In March 2023, the Company issued $750 million principal amount of notes due March 2028 and $750 million principal amount of notes due March 2033 (collectively the "2023 USD Notes"). The net proceeds from the issuance of the 2023 USD Notes, after deducting the original issue discount, underwriting discount and offering expenses, were $1.489 billion.

The Senior Notes described above are not subject to any financial covenants and may be redeemed in whole, or in part, at the Company's option at any time for a specified make-whole amount. These notes are senior unsecured obligations and would rank equally with any future unsecured and unsubordinated indebtedness.

Indian Rupee ("INR") Term Loan

In July 2022, the Company entered into an unsecured INR22.7 billion ($277 million as of June 30, 2023) term loan originally due July 2023 (the "2022 INR Term Loan"). The net proceeds of the 2022 INR Term Loan, after deducting issuance costs, were INR22.6 billion ($284 million as of the date of settlement).

In April 2023, the Company entered into an additional unsecured INR4.97 billion ($61 million as of June 30, 2023) term loan, also originally due July 2023 (the "April 2023 INR Term Loan"). The net proceeds of the April 2023 INR Term Loan, after deducting issuance costs, were INR4.96 billion ($61 million as of the date of settlement).

In July 2023, the Company modified and combined each of the 2022 INR Term Loan and April 2023 INR Term Loan, increasing the total of the unsecured loans to INR28 billion ($342 million as of the date of settlement), which was an increase of INR412 million ($5 million as of the date of settlement) due July 2024.

The Company obtained the INR Term Loans to serve as economic hedges to offset possible changes in the value of INR-denominated monetary assets due to foreign exchange fluctuations. The INR Term Loans are not subject to any financial covenants and they may be repaid in whole at the Company's option at any time for a specified make-whole amount.

Note 11. Stockholders' Equity

Dividends

The Company declared quarterly cash dividends on its Class A and Class B common stock as summarized below:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(in millions, except per share data)			
Dividends declared per share	$ 0.57	$ 0.49	$ 1.14	$ 0.98
Total dividends declared	$ 538	$ 474	$ 1,079	$ 951

Common Stock Activity

The following table presents the changes in the Company's outstanding Class A and Class B common stock:

	Three Months Ended June 30,			
	2023		2022	
	Outstanding Shares		Outstanding Shares	
	Class A	Class B	Class A	Class B
	(in millions)			
Balance at beginning of period	941.4	7.5	966.5	7.7
Purchases of treasury stock	(6.5)	—	(6.9)	—
Share-based payments	0.9	—	0.4	—
Conversion of Class B to Class A common stock	0.1	(0.1)	—	—
Balance at end of period	**935.9**	**7.4**	**960.0**	**7.7**

	Six Months Ended June 30,			
	2023		2022	
	Outstanding Shares		Outstanding Shares	
	Class A	Class B	Class A	Class B
	(in millions)			
Balance at beginning of period	948.4	7.6	972.1	7.8
Purchases of treasury stock	(14.4)	—	(13.7)	—
Share-based payments	1.7	—	1.5	—
Conversion of Class B to Class A common stock	0.2	(0.2)	0.1	(0.1)
Balance at end of period	**935.9**	**7.4**	**960.0**	**7.7**

In December 2022 and November 2021, the Company's Board of Directors approved share repurchase programs of its Class A common stock authorizing the Company to repurchase up to $9.0 billion and $8.0 billion, respectively. The following table summarizes the Company's share repurchases of its Class A common stock:

	Six Months Ended June 30,	
	2023	2022
	(in millions, except per share data)	
Dollar-value of shares repurchased [1]	$ 5,294	$ 4,788
Shares repurchased	14.4	13.7
Average price paid per share	$ 367.00	$ 350.10

[1] The six months ended June 30, 2023 dollar-value of shares repurchased does not include a 1% excise tax that became effective January 1, 2023. The incremental tax is recorded in treasury stock on the consolidated balance sheet and is payable annually beginning in 2024.

As of June 30, 2023, the remaining authorization under the share repurchase programs approved by the Company's Board of Directors was $6.9 billion.

Note 12. Accumulated Other Comprehensive Income (Loss)

The changes in the balances of each component of accumulated other comprehensive income (loss), net of tax, for the six months ended June 30, 2023 and 2022 were as follows:

	December 31, 2022	Increase / (Decrease)	Reclassifications	June 30, 2023
		(in millions)		
Foreign currency translation adjustments [1]	$ (1,414)	$ 133	$ —	$ (1,281)
Translation adjustments on net investment hedges [2]	309	(66)	—	243
Cash flow hedges				
Foreign exchange contracts [3]	(8)	(18)	11	(15)
Interest rate contracts	(123)	—	2	(121)
Defined benefit pension and other postretirement plans	(11)	—	—	(11)
Investment securities available-for-sale	(6)	2	—	(4)
Accumulated other comprehensive income (loss)	**$ (1,253)**	**$ 51**	**$ 13**	**$ (1,189)**

	December 31, 2021	Increase / (Decrease)	Reclassifications	June 30, 2022
		(in millions)		
Foreign currency translation adjustments [1]	$ (739)	$ (731)	$ —	$ (1,470)
Translation adjustments on net investment hedges [2]	34	311	—	345
Cash flow hedges				
Foreign exchange contracts [3]	4	5	(6)	3
Interest rate contracts	(128)	—	2	(126)
Defined benefit pension and other postretirement plans	21	—	(1)	20
Investment securities available-for-sale	(1)	(3)	—	(4)
Accumulated other comprehensive income (loss)	**$ (809)**	**$ (418)**	**$ (5)**	**$ (1,232)**

1 During the six months ended June 30, 2023, the decrease in the accumulated other comprehensive loss related to foreign currency translation adjustments was driven primarily by the appreciation of the British pound and euro against the U.S. dollar. During the six months ended June 30, 2022, the increase in the accumulated other comprehensive loss related to foreign currency translation adjustments was driven primarily by the depreciation of the euro and British pound against the U.S. dollar.

2 During the six months ended June 30, 2023, the decrease in the accumulated other comprehensive gain related to the net investment hedges was driven by the appreciation of the euro against the U.S. dollar. During the six months ended June 30, 2022, the increase in the accumulated other comprehensive gain related to the net investment hedges was driven by the depreciation of the euro against the U.S. dollar. See Note 17 (Derivative and Hedging Instruments) for additional information.

3 Certain foreign exchange derivative contracts are designated as cash flow hedging instruments. Gains and losses resulting from changes in the fair value of these contracts are deferred in accumulated other comprehensive income (loss) and subsequently reclassified to the consolidated statement of operations when the underlying hedged transactions impact earnings. See Note 17 (Derivative and Hedging Instruments) for additional information.

Note 13. Share-Based Payments

During the six months ended June 30, 2023, the Company granted the following awards under the Mastercard Incorporated 2006 Long Term Incentive Plan, amended and restated as of June 22, 2021 (the "LTIP"). The LTIP is a stockholder-approved plan that permits the grant of various types of equity awards to employees.

	Grants in 2023	Weighted-Average Grant-Date Fair Value
	(in millions)	(per option/unit)
Non-qualified stock options	0.3	$ 123
Restricted stock units	1.1	$ 349
Performance stock units	0.2	$ 365

The Company used the Black-Scholes option pricing model to determine the grant-date fair value of stock options and calculated the expected life and the expected volatility based on historical Mastercard information. The expected life of stock options granted in 2023 was estimated to be six years, while the expected volatility was determined to be 29.6%. These awards expire ten years from the date of grant and vest ratably over three years.

The fair value of restricted stock units ("RSUs") is determined and fixed on the grant date based on the Company's Class A common stock price, adjusted for the exclusion of dividend equivalents. For RSUs granted in 2023, the awards generally vest ratably over three years.

The Company used the Monte Carlo simulation valuation model to determine the grant-date fair value of performance stock units ("PSUs") granted. PSUs vest after three years from the date of grant and are subject to a mandatory one-year deferral period, during which vested PSUs are eligible for dividend equivalents.

Compensation expense is recorded net of estimated forfeitures over the shorter of the vesting period or the date the individual becomes eligible to retire under the LTIP. The Company uses the straight-line method of attribution over the requisite service period for expensing equity awards.

Note 14. Income Taxes

The effective income tax rates were 23.2% and 18.7% for the three months ended June 30, 2023 and 2022, respectively. The higher effective income tax rate for the three months ended June 30, 2023, versus the comparable period in 2022, was primarily due to a $212 million discrete tax expense to establish a valuation allowance associated with the U.S. foreign tax credit carryforward deferred tax asset resulting from foreign tax legislation enacted in Brazil in the current period. The U.K. statutory tax rate increase, effective in 2023, also contributed to the higher effective income tax rate for the current period.

The effective income tax rates were 20.6% and 11.9% for the six months ended June 30, 2023 and 2022, respectively. The higher effective income tax rate for the six months ended June 30, 2023, versus the comparable period in 2022, was primarily due to changes in the valuation allowance associated with the U.S. foreign tax credit carryforward deferred tax asset. In 2022, the Company recognized a discrete tax benefit related to final U.S. tax regulations published in the first quarter of 2022 (the "2022 Regulations"), which resulted in a valuation allowance release of $333 million. In the second quarter of 2023, foreign tax legislation was enacted in Brazil which changed the treatment of foreign taxes paid under the 2022 Regulations. Therefore, the Company recognized a $212 million discrete tax expense in 2023 to establish the valuation allowance on the remaining U.S. foreign tax credit carryforward deferred tax asset. The foreign tax legislation allows the Company the ability to generate additional foreign tax credits going forward. The U.K. statutory tax rate increase, effective in 2023, also contributed to the higher effective income tax rate in 2023.

On July 21, 2023, the U.S. Department of Treasury released Notice 2023-55 (the "Notice"), providing taxpayers relief from certain aspects of the 2022 Regulations for 2022 and 2023. The Company is evaluating the impacts of the Notice to its effective tax rate, as well as deferred tax assets and corresponding valuation allowance.

The Company is subject to tax in the United States, Belgium, Singapore, the United Kingdom and various other foreign jurisdictions, as well as state and local jurisdictions. Uncertain tax positions are reviewed on an ongoing basis and are adjusted after considering facts and circumstances, including progress of tax audits, developments in case law and closing of statutes of limitation. Within the next twelve months, the Company believes that the resolution of certain federal, foreign and state and local examinations is reasonably possible and that a change in estimate, reducing unrecognized tax benefits, may occur. While such a change may be significant, it is not possible to provide a range of the potential change until the examinations progress further or the related statutes of limitation expire. The Company has effectively settled its U.S. federal income tax obligations through 2014. With limited exception, the Company is no longer subject to state and local or foreign examinations by tax authorities for years before 2011.

Note 15. Legal and Regulatory Proceedings

Mastercard is a party to legal and regulatory proceedings with respect to a variety of matters in the ordinary course of business. Some of these proceedings are based on complex claims involving substantial uncertainties and unascertainable damages. Accordingly, except as discussed below, it is not possible to determine the probability of loss or estimate damages, and therefore, Mastercard has not established reserves for any of these proceedings. When the Company determines that a loss is both probable and reasonably estimable, Mastercard records a liability and discloses the amount of the liability if it is material. When a material loss contingency is only reasonably possible, Mastercard does not record a liability, but instead discloses the nature and the amount of the claim, and an estimate of the loss or range of loss, if such an estimate can be made. Unless otherwise stated below with respect to these matters, Mastercard cannot provide an estimate of the possible loss or range of loss based on one or more of the following reasons: (1) actual or potential plaintiffs have not claimed an amount of monetary damages or the amounts are unsupportable or exaggerated, (2) the matters are in early stages, (3) there is uncertainty as to the outcome of pending appeals or motions, (4) there are significant factual issues to be resolved, (5) the existence in many such proceedings of multiple defendants or potential defendants whose share of any potential financial responsibility has yet to be determined and/or (6) there are novel legal issues presented. Furthermore, except as identified with respect to the matters below, Mastercard does not believe that the outcome of any individual existing legal or regulatory proceeding to which it is a party will have a material adverse effect on its results of operations, financial condition and overall business. However, an adverse judgment or other outcome or settlement with respect to any proceedings discussed below could result in fines or payments by Mastercard and/or could require Mastercard to change its business practices. In addition, an adverse outcome in a regulatory proceeding could lead to the filing of civil damage claims and possibly result in significant damage awards. Any of these events could have a material adverse effect on Mastercard's results of operations, financial condition and overall business.

Interchange Litigation and Regulatory Proceedings

Mastercard's interchange fees and other practices are subject to regulatory, legal review and/or challenges in a number of jurisdictions, including the proceedings described below. When taken as a whole, the resulting decisions, regulations and legislation with respect to interchange fees and acceptance practices may have a material adverse effect on the Company's prospects for future growth and its overall results of operations, financial position and cash flows.

United States. In June 2005, the first of a series of complaints were filed on behalf of merchants (the majority of the complaints were styled as class actions, although a few complaints were filed on behalf of individual merchant plaintiffs) against Mastercard International, Visa U.S.A., Inc., Visa International Service Association and a number of financial institutions. Taken together, the claims in the complaints were generally brought under both Sections 1 and 2 of the Sherman Act, which prohibit monopolization and attempts or conspiracies to monopolize a particular industry, and some of these complaints contain unfair competition law claims under state law. The complaints allege, among other things, that Mastercard, Visa, and certain financial institutions conspired to set the price of interchange fees, enacted point of sale acceptance rules (including the "no surcharge" rule) in violation of antitrust laws and engaged in unlawful tying and bundling of certain products and services, resulting in merchants paying excessive costs for the acceptance of Mastercard and Visa credit and debit cards. The cases were consolidated for pre-trial proceedings in the U.S. District Court for the Eastern District of New York in MDL No. 1720. The plaintiffs filed a consolidated class action complaint seeking treble damages.

In July 2006, the group of purported merchant class plaintiffs filed a supplemental complaint alleging that Mastercard's initial public offering of its Class A Common Stock in May 2006 (the "IPO") and certain purported agreements entered into between Mastercard and financial institutions in connection with the IPO: (1) violate U.S. antitrust laws and (2) constituted a fraudulent conveyance because the financial institutions allegedly attempted to release, without adequate consideration, Mastercard's right to assess them for Mastercard's litigation liabilities. The class plaintiffs sought treble damages and injunctive relief including, but not limited to, an order reversing and unwinding the IPO.

In February 2011, Mastercard and Mastercard International entered into each of: (1) an omnibus judgment sharing and settlement sharing agreement with Visa Inc., Visa U.S.A. Inc. and Visa International Service Association and a number of financial institutions; and (2) a Mastercard settlement and judgment sharing agreement with a number of financial institutions. The agreements provide for the apportionment of certain costs and liabilities which Mastercard, the Visa parties and the financial institutions may incur, jointly and/or severally, in the event of an adverse judgment or settlement of one or all of the merchant litigation cases. Among a number of scenarios addressed by the agreements, in the event of a global settlement involving the Visa parties, the financial institutions and Mastercard, Mastercard would pay 12% of the monetary portion of the settlement. In the event of a settlement involving only Mastercard and the financial institutions with respect to their issuance of Mastercard cards, Mastercard would pay 36% of the monetary portion of such settlement.

In October 2012, the parties entered into a definitive settlement agreement with respect to the merchant class litigation (including with respect to the claims related to the IPO) and the defendants separately entered into a settlement agreement with the individual merchant plaintiffs. The settlements included cash payments that were apportioned among the defendants pursuant to the omnibus judgment sharing and settlement sharing agreement described above. Mastercard also agreed to provide class members with a short-term reduction in default credit interchange rates and to modify certain of its business practices, including its no surcharge rule. The court granted final approval of the settlement in December 2013, and objectors to the settlement appealed that decision to the U.S. Court of Appeals for the Second Circuit. In June 2016, the court of appeals vacated the class action certification, reversed the settlement approval and sent the case back to the district court for further proceedings. The court of appeals' ruling was based primarily on whether the merchants were adequately represented by counsel in the settlement. As a result of the appellate court ruling, the district court divided the merchants' claims into two separate classes - monetary damages claims (the "Damages Class") and claims seeking changes to business practices (the "Rules Relief Class"). The court appointed separate counsel for each class.

In September 2018, the parties to the Damages Class litigation entered into a class settlement agreement to resolve the Damages Class claims. The time period during which Damages Class members were permitted to opt out of the class settlement agreement ended in July 2019 with merchants representing slightly more than 25% of the Damages Class interchange volume choosing to opt out of the settlement. The district court granted final approval of the settlement in December 2019, which was upheld by the appellate court in March 2023. The objectors to the settlement could petition the U.S. Supreme Court to request that the court agree to hear an appeal of this order. Mastercard has commenced settlement negotiations with a number of the opt-out merchants and has reached settlements and/or agreements in principle to settle a number of these claims.

Separately, settlement negotiations with the Rules Relief Class are ongoing. Briefing on summary judgment motions in the Rules Relief Class and opt-out merchant cases was completed in December 2020. In September 2021, the district court granted the Rules Relief Class's motion for class certification.

As of June 30, 2023 and December 31, 2022, Mastercard had accrued a liability of $1,067 million and $894 million, respectively, as a reserve for both the Damages Class litigation and the opt-out merchant cases. During the first quarter of 2023, Mastercard recorded an additional accrual of $211 million as a result of a change in estimate with respect to the claims of merchants who opted out of the Damages Class litigation. As of June 30, 2023 and December 31, 2022, Mastercard had $598 million and $589 million, respectively, in a qualified cash settlement fund related to the Damages Class litigation and classified as restricted cash on its consolidated balance sheet. The reserve as of June 30, 2023 for both the Damages Class litigation and the opt-out merchants represents Mastercard's best estimate of its probable liabilities in these matters. The portion of the accrued liability relating to both the opt-out merchants and the Damages Class litigation settlement does not represent an estimate of a loss, if any, if the matters were litigated to a final outcome. Mastercard cannot estimate the potential liability if that were to occur.

Europe. Since May 2012, a number of United Kingdom ("U.K.") merchants filed claims or threatened litigation against Mastercard seeking damages for excessive costs paid for acceptance of Mastercard credit and debit cards arising out of alleged anti-competitive conduct with respect to, among other things, Mastercard's cross-border interchange fees and its U.K. and Ireland domestic interchange fees (the "U.K. Merchant claimants"). In addition, Mastercard has faced similar filed or threatened litigation by merchants with respect to interchange rates in other countries in Europe (the "Pan-European Merchant claimants"). Mastercard has resolved a substantial amount of these damages claims through settlement or judgment. During the second quarter of 2023, Mastercard incurred charges of $20 million as a result of settlements with a number of U.K. and Pan-European merchants. Following these settlements, approximately £1.1 billion (approximately $1.4 billion as of June 30, 2023) of unresolved damages claims remain.

Mastercard continues to litigate with the remaining U.K. and Pan-European Merchant claimants and it has submitted statements of defense disputing liability and damages claims. A number of those matters are now progressing with motion practice and discovery. In one of the actions involving multiple merchant plaintiff claims, the U.K. trial court in November 2021 denied the plaintiffs' motion for summary judgment on certain liability issues. In October 2022, the appellate court rejected the plaintiffs' appeal.

During the third quarter of 2022, Mastercard and Visa were served with a proposed collective action complaint in the U.K. on behalf of merchants seeking damages for commercial card transactions and inter-regional consumer card transactions in both the U.K. and the European Union. The plaintiffs have claimed damages against Mastercard of approximately £0.5 billion (approximately $0.6 billion as of June 30, 2023). In June 2023, the court denied the plaintiffs' collective action application. The plaintiffs were granted two months from the date of the court decision in which to file an amended collective action application otherwise, the case will be dismissed.

In September 2016, a proposed collective action was filed in the United Kingdom on behalf of U.K. consumers seeking damages for intra-EEA and domestic U.K. interchange fees that were allegedly passed on to consumers by merchants between 1992 and 2008. The complaint, which seeks to leverage the European Commission's 2007 decision on intra-EEA interchange fees, claims damages in an amount that exceeds £10 billion (approximately $13 billion as of June 30, 2023). Following various hearings since July 2017 regarding collective action and scope, in August 2021, the trial court issued a decision in which it granted class certification to the plaintiffs but narrowed the scope of the class. In January 2023, the trial court held a hearing on Mastercard's request to narrow the number of years of damages sought by the plaintiffs on statute of limitations grounds. In July 2023, the trial court held an additional hearing regarding whether any causal connection existed between the levels of Mastercard's intra-EEA interchange fees and U.K. domestic interchange fees.

Mastercard has been named as a defendant in a proposed consumer collective action filed in Portugal on behalf of Portuguese consumers. The complaint, which seeks to leverage the 2019 resolution of the European Commission's investigation of Mastercard's central acquiring rules and interregional interchange fees, claims damages of approximately €0.4 billion (approximately $0.4 billion as of June 30, 2023) for interchange fees that were allegedly passed on to consumers by Portuguese merchants for a period of approximately 20 years. Mastercard has submitted a statement of defense that disputes both liability and damages.

In April 2023, the Serbian Competition Commission issued a Statement of Objections ("SO") against Mastercard. The SO covers historic domestic interchange fees from 2013 to 2018. The SO seeks monetary fines and costs but no business practices changes.

Australia. In May 2022, the Australian Competition & Consumer Commission ("ACCC") filed a complaint targeting certain agreements entered into by Mastercard and certain Australian merchants related to Mastercard's debit program. The ACCC alleges that by entering into such agreements, Mastercard engaged in conduct with the purpose of substantially lessening competition in the supply of debit card acceptance services. The ACCC seeks both declaratory relief and monetary fines and costs. A hearing on liability issues has been scheduled for July 2024.

ATM Non-Discrimination Rule Surcharge Complaints

United States. In October 2011, a trade association of independent Automated Teller Machine ("ATM") operators and 13 independent ATM operators filed a complaint styled as a class action lawsuit in the U.S. District Court for the District of Columbia against both Mastercard and Visa (the "ATM Operators Complaint"). Plaintiffs seek to represent a class of non-bank operators of ATM terminals that operate in the United States with the discretion to determine the price of the ATM access fee for the terminals they operate. Plaintiffs allege that Mastercard and Visa have violated Section 1 of the Sherman Act by imposing rules that require ATM operators to charge non-discriminatory ATM surcharges for transactions processed over Mastercard's and Visa's respective networks that are not greater than the surcharge for transactions over other networks accepted at the same ATM. Plaintiffs seek both injunctive and monetary relief equal to treble the damages they claim to have sustained as a result of the alleged violations and their costs of suit, including attorneys' fees.

Subsequently, multiple related complaints were filed in the U.S. District Court for the District of Columbia alleging both federal antitrust and multiple state unfair competition, consumer protection and common law claims against Mastercard and Visa on behalf of putative classes of users of ATM services (the "ATM Consumer Complaints"). The claims in these actions largely mirror the allegations made in the ATM

Operators Complaint, although these complaints seek damages on behalf of consumers of ATM services who pay allegedly inflated ATM fees at both bank and non-bank ATM operators as a result of the defendants' ATM rules. Plaintiffs seek both injunctive and monetary relief equal to treble the damages they claim to have sustained as a result of the alleged violations and their costs of suit, including attorneys' fees.

In January 2012, the plaintiffs in the ATM Operators Complaint and the ATM Consumer Complaints filed amended class action complaints that largely mirror their prior complaints. In September 2019, the plaintiffs filed with the district court their motions for class certification in which the plaintiffs, in aggregate, allege over $1 billion in damages against all of the defendants. In August 2021, the trial court issued an order granting the plaintiffs' request for class certification. Visa and Mastercard subsequently appealed the certification decision to the appellate court. In July 2023, the D.C. Circuit Court affirmed the district court order granting class certification. Mastercard has the opportunity to request permission to appeal the decision.

Europe. Mastercard has been named as a defendant in an action brought by Euronet 360 Finance Limited, Euronet Polska Spolka z.o.o. and Euronet Services spol. s.r.o. ("Euronet") alleging that certain rules affecting ATM access fees in Poland, the Czech Republic and Greece by Visa and Mastercard, and certain of their subsidiaries, breach various competition laws. Euronet seeks damages, costs and injunctive relief to prevent the defendants from enforcing these rules. A trial has been scheduled for October 2023.

U.S. Liability Shift Litigation

In March 2016, a proposed U.S. merchant class action complaint was filed in federal court in California alleging that Mastercard, Visa, American Express and Discover (the "Network Defendants"), EMVCo, and a number of issuing banks (the "Bank Defendants") engaged in a conspiracy to shift fraud liability for card present transactions from issuing banks to merchants not yet in compliance with the standards for EMV chip cards in the United States (the "EMV Liability Shift"), in violation of the Sherman Act and California law. Plaintiffs allege damages equal to the value of all chargebacks for which class members became liable as a result of the EMV Liability Shift on October 1, 2015. The plaintiffs seek treble damages, attorney's fees and costs and an injunction against future violations of governing law, and the defendants filed a motion to dismiss. In September 2016, the district court denied the Network Defendants' motion to dismiss the complaint, but granted such a motion for EMVCo and the Bank Defendants. In May 2017, the district court transferred the case to New York so that discovery could be coordinated with the U.S. merchant class interchange litigation described above. In August 2020, the district court issued an order granting the plaintiffs' request for class certification and in January 2021, the Network Defendants' request for permission to appeal that decision was denied. The plaintiffs have submitted expert reports that allege aggregate damages in excess of $1 billion against the four Network Defendants. The Network Defendants have submitted expert reports rebutting both liability and damages. Briefing on summary judgment concluded.

Telephone Consumer Protection Class Action

Mastercard is a defendant in a Telephone Consumer Protection Act ("TCPA") class action pending in Florida. The plaintiffs are individuals and businesses who allege that approximately 381,000 unsolicited faxes were sent to them advertising a Mastercard co-brand card issued by First Arkansas Bank ("FAB"). The TCPA provides for uncapped statutory damages of $500 per fax. Mastercard has asserted various defenses to the claims, and has notified FAB of an indemnity claim that it has (which FAB has disputed). In December 2019, the Federal Communications Commission ("FCC") issued a declaratory ruling clarifying that the TCPA does not apply to faxes sent to online fax services that are received online via email. In December 2021, the trial court granted plaintiffs' request for class certification, but narrowed the scope of the class to stand alone fax recipients only. Mastercard's request to appeal that decision was denied. Briefing on plaintiffs' motion to amend the class definition and Mastercard's cross-motion to decertify the stand alone fax recipient class was completed in April 2023.

U.S. Federal Trade Commission Investigation

In June 2020, the U.S. Federal Trade Commission's Bureau of Competition ("FTC") informed Mastercard that it initiated a formal investigation into compliance with the Durbin Amendment to the Dodd-Frank Wall Street Reform and Consumer Protection Act. In particular, the investigation focused on Mastercard's compliance with the debit routing provisions of the Durbin Amendment. In December 2022, the FTC voted to issue an administrative complaint and accept a consent agreement with Mastercard. Pursuant to this agreement, Mastercard agreed to provide primary account numbers (PANs) so that merchants can route tokenized online debit transactions to alternative networks. The consent agreement does not include any monetary penalty. Following a public comment period, the FTC finalized the consent agreement in May 2023.

U.S. Department of Justice Investigation

In March 2023, Mastercard received a Civil Investigative Demand ("CID") from the U.S. Department of Justice Antitrust Division ("DOJ") seeking documents and information regarding a potential violation of Sections 1 or 2 of the Sherman Act. The CID focuses on Mastercard's U.S. debit program and competition with other payment networks and technologies. Mastercard is cooperating with the DOJ in connection with the CID.

Note 16. Settlement and Other Risk Management

Mastercard's rules guarantee the settlement of many of the transactions between its customers ("settlement risk"). Settlement exposure is the settlement risk to customers under Mastercard's rules due to the difference in timing between the payment transaction date and subsequent settlement. For those transactions the Company guarantees, the guarantee will cover the full amount of the settlement obligation to the extent the settlement obligation is not otherwise satisfied. The duration of the settlement exposure is short-term and generally limited to a few days.

Gross settlement exposure is estimated using the average daily payment volume during the three months prior to period end multiplied by the estimated number of days of exposure. The Company has global risk management policies and procedures, which include risk standards, to provide a framework for managing the Company's settlement risk and exposure. In the event of failed settlement by a customer, Mastercard may pursue one or more remedies available under the Company's rules to recover potential losses. Historically, the Company has experienced a low level of losses from customer settlement failures.

As part of its policies, Mastercard requires certain customers that are not in compliance with the Company's risk standards to enter into risk mitigation arrangements, including cash collateral and/or forms of credit enhancement such as letters of credit and guarantees. This requirement is based on a review of the individual risk circumstances for each customer. Mastercard monitors its credit risk portfolio and the adequacy of its risk mitigation arrangements on a regular basis. Additionally, from time to time, the Company reviews its risk management methodology and standards. As such, the amounts of estimated settlement exposure are revised as necessary.

The Company's estimated settlement exposure was as follows:

	June 30, 2023	December 31, 2022
	(in millions)	
Gross settlement exposure	$ 70,079	$ 64,885
Risk mitigation arrangements applied to settlement exposure [1]	(10,568)	(9,224)
Net settlement exposure [1]	**$ 59,511**	**$ 55,661**

[1] The Company corrected its estimated net settlement exposure as of December 31, 2022. The correction was not material to the net settlement exposures previously reported and had no impact to any of the Company's financial statement line items.

Mastercard also provides guarantees to customers and certain other counterparties indemnifying them from losses stemming from failures of third parties to perform duties. This includes guarantees of Mastercard-branded travelers cheques issued, but not yet cashed of $341 million and $342 million at June 30, 2023 and December 31, 2022, respectively, of which the Company has risk mitigation arrangements for $273 million at June 30, 2023 and December 31, 2022. In addition, the Company enters into agreements in the ordinary course of business under which the Company agrees to indemnify third parties against damages, losses and expenses incurred in connection with legal and other proceedings arising from relationships or transactions with the Company. Certain indemnifications do not provide a stated maximum exposure. As the extent of the Company's obligations under these agreements depends entirely upon the occurrence of future events, the Company's potential future liability under these agreements is not determinable. Historically, payments made by the Company under these types of contractual arrangements have not been material.

Note 17. Derivative and Hedging Instruments

The Company monitors and manages its foreign currency and interest rate exposures as part of its overall risk management program which focuses on the unpredictability of financial markets and seeks to reduce the potentially adverse effects that the volatility of these markets may have on its operating results. A primary objective of the Company's risk management strategies is to reduce the financial impact that may arise from volatility in foreign currency exchange rates principally through the use of both foreign exchange derivative contracts and foreign currency denominated debt. In addition, the Company may enter into interest rate derivative contracts to manage the effects of interest rate movements on the Company's aggregate liability portfolio, including potential future debt issuances.

Cash Flow Hedges

The Company may enter into foreign exchange derivative contracts, including forwards and options, to manage the impact of foreign currency variability on anticipated revenues and expenses, which fluctuate based on currencies other than the functional currency of the entity. The objective of these hedging activities is to reduce the effect of movement in foreign exchange rates for a portion of revenues and expenses forecasted to occur. As these contracts are designated as cash flow hedging instruments, gains and losses resulting from changes in fair value of these contracts are deferred in accumulated other comprehensive income (loss) and subsequently reclassified to the consolidated statement of operations when the underlying hedged transactions impact earnings.

In addition, the Company may enter into interest rate derivative contracts to manage the effects of interest rate movements on the Company's aggregate liability portfolio, including potential future debt issuances, and designate such derivatives as hedging instruments in a cash flow hedging relationship. Gains and losses resulting from changes in fair value of these contracts are deferred in accumulated other comprehensive income (loss) and are subsequently reclassified as an adjustment to interest expense over the respective terms of the hedged debt issuances.

Fair Value Hedges

The Company may enter into interest rate derivative contracts, including interest rate swaps, to manage the effects of interest rate movements on the fair value of the Company's fixed-rate debt and designate such derivatives as hedging instruments in a fair value hedging relationship. Changes in fair value of these contracts and changes in fair value of fixed-rate debt attributable to changes in the hedged benchmark interest rate generally offset each other and are recorded in interest expense on the consolidated statement of operations. Gains or losses related to the net settlements of interest rate swaps are also recorded in interest expense on the consolidated statement of operations. The periodic cash settlements are included in operating activities on the consolidated statement of cash flows.

In 2021, the Company entered into an interest rate swap designated as a fair value hedge related to $1.0 billion of the 3.850% Senior Notes due March 2050. In effect, the interest rate swap synthetically converts the fixed interest rate on this debt to a variable interest rate based on the Secured Overnight Financing Rate (“SOFR”) Overnight Index Swap Rate. The net impact to interest expense for the three and six months ended June 30, 2023 and 2022 was not material.

Net Investment Hedges

The Company may use foreign currency denominated debt and/or foreign exchange derivative contracts to hedge a portion of its net investment in foreign subsidiaries against adverse movements in exchange rates. The effective portion of the net investment hedge is recorded as a currency translation adjustment in accumulated other comprehensive income (loss). Forward points are excluded from the effectiveness assessment and are recognized in general and administrative expenses on the consolidated statement of operations over the hedge period. The amounts recognized in earnings related to forward points for the three and six months ended June 30, 2023 and 2022 were not material.

As of June 30, 2023 and December 31, 2022, the Company had €1.7 billion euro-denominated debt outstanding designated as hedges of a portion of its net investment in its European operations. For the three and six months ended June 30, 2023 and 2022, the Company recorded pre-tax net foreign currency gains (losses) of $(4) million and $(39) million and $148 million and $199 million, respectively, in other comprehensive income (loss).

As of June 30, 2023 and December 31, 2022, the Company had net foreign currency gains of $243 million and $309 million, respectively, after tax, in accumulated other comprehensive income (loss) associated with this hedging activity.

Non-designated Derivatives

The Company may also enter into foreign exchange derivative contracts to serve as economic hedges, such as to offset possible changes in the value of monetary assets and liabilities due to foreign exchange fluctuations, without designating these derivative contracts as hedging instruments. In addition, the Company is subject to foreign exchange risk as part of its daily settlement activities. This risk is typically limited to a few days between when a payment transaction takes place and the subsequent settlement with customers. To manage this risk, the Company may enter into short duration foreign exchange derivative contracts based upon anticipated receipts and disbursements for the respective currency position. The objective of these activities is to reduce the Company’s exposure to volatility arising from gains and losses resulting from fluctuations of foreign currencies against its functional currencies. Gains and losses resulting from changes in fair value of these contracts are recorded in general and administrative expenses on the consolidated statement of operations, net, along with the foreign currency gains and losses on monetary assets and liabilities.

The following table summarizes the fair value of the Company's derivative financial instruments and the related notional amounts:

	June 30, 2023			December 31, 2022		
	Notional	Derivative assets	Derivative liabilities	Notional	Derivative assets	Derivative liabilities
	(in millions)					
Derivatives designated as hedging instruments						
Foreign exchange contracts in a cash flow hedge [1]	$ 714	$ 5	$ 26	$ 642	$ 4	$ 15
Interest rate contracts in a fair value hedge [2]	1,000	—	105	1,000	—	105
Foreign exchange contracts in a net investment hedge [1]	2,235	12	17	1,814	103	4
Derivatives not designated as hedging instruments						
Foreign exchange contracts [1]	2,193	32	12	521	1	2
Total derivative assets/liabilities	**$ 6,142**	**$ 49**	**$ 160**	**$ 3,977**	**$ 108**	**$ 126**

1 Foreign exchange derivative assets and liabilities are included within prepaid expenses and other current assets and other current liabilities, respectively, on the consolidated balance sheet.

2 Interest rate derivative liabilities are included within other current liabilities and other liabilities on the consolidated balance sheet.

The pre-tax gain (loss) related to the Company's derivative financial instruments designated as hedging instruments are as follows:

	Gain (Loss) Recognized in OCI		Location of Gain (Loss) Reclassified from AOCI into Earnings	Gain (Loss) Reclassified from AOCI	
	Three Months Ended June 30,			Three Months Ended June 30,	
	2023	2022		2023	2022
	(in millions)			(in millions)	
Derivative financial instruments in a cash flow hedge relationship:					
Foreign exchange contracts	$ (14)	$ 6	Net revenue	$ (8)	$ 1
Interest rate contracts	$ —	$ —	Interest expense	$ (1)	$ (1)
Derivative financial instruments in a net investment hedge relationship:					
Foreign exchange contracts	$ (7)	$ 166			

	Gain (Loss) Recognized in OCI		Location of Gain (Loss) Reclassified from AOCI into Earnings	Gain (Loss) Reclassified from AOCI	
	Six Months Ended June 30,			Six Months Ended June 30,	
	2023	2022		2023	2022
	(in millions)			(in millions)	
Derivative financial instruments in a cash flow hedge relationship:					
Foreign exchange contracts	$ (24)	$ 7	Net revenue	$ (14)	$ 8
Interest rate contracts	$ —	$ —	Interest expense	$ (3)	$ (3)
Derivative financial instruments in a net investment hedge relationship:					
Foreign exchange contracts	$ (46)	$ 201			

The Company estimates that $28 million, pre-tax, of the net deferred loss on cash flow hedges recorded in accumulated other comprehensive income (loss) at June 30, 2023 will be reclassified into the consolidated statement of operations within the next 12 months. The term of the foreign exchange derivative contracts designated in hedging relationships are generally less than 18 months.

The amount of gain (loss) recognized on the consolidated statement of operations for non-designated derivative contracts is summarized below:

Derivatives not designated as hedging instruments:	**Three Months Ended June 30,**		**Six Months Ended June 30,**	
	2023	**2022**	**2023**	**2022**
	(in millions)			
Foreign exchange derivative contracts				
General and administrative	$ 10	$ 12	$ 25	$ 13

The Company's derivative financial instruments are subject to both market and counterparty credit risk. Market risk is the potential for economic losses to be incurred on market risk sensitive instruments arising from adverse changes in market factors such as foreign currency exchange rates, interest rates and other related variables. Counterparty credit risk is the risk of loss due to failure of the counterparty to perform its obligations in accordance with contractual terms. The Company's derivative contracts are subject to enforceable master netting arrangements, which contain various netting and setoff provisions. However, the Company has elected to present derivative assets and liabilities on a gross basis on the consolidated balance sheet. To mitigate counterparty credit risk, the Company enters into derivative contracts with a diversified group of selected financial institutions based upon their credit ratings and other factors. Generally, the Company does not obtain collateral related to derivatives because of the high credit ratings of the counterparties.

Item 2. Management's discussion and analysis of financial condition and results of operations

The following supplements management's discussion and analysis of Mastercard Incorporated for the year ended December 31, 2022 as contained in the Company's Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission on February 14, 2023. It also should be read in conjunction with the consolidated financial statements and notes of Mastercard Incorporated and its consolidated subsidiaries, including Mastercard International Incorporated (together, "Mastercard" or the "Company"), included elsewhere in this Report. Percentage changes provided throughout "Management's Discussion and Analysis of Financial Condition and Results of Operations" were calculated on amounts rounded to the nearest thousand. During the fourth quarter of 2022, the Company updated its disaggregated net revenue presentation by category and geography to reflect the nature of its payment services and to align such information with the way in which management views its categories of net revenue. Prior period amounts have been reclassified to conform to the updated presentation. The reclassification had no impact on previously reported total net revenue, operating income or net income.

Financial Results Overview

The following table provides a summary of our key GAAP operating results, as reported:

	Three Months Ended June 30,		Increase/ (Decrease)	Six Months Ended June 30,		Increase/ (Decrease)
	2023	2022		2023	2022	
	($ in millions, except per share data)					
Net revenue	$ 6,269	$ 5,497	14%	$ 12,017	$ 10,664	13%
Operating expenses	$ 2,613	$ 2,479	5%	$ 5,225	$ 4,696	11%
Operating income	$ 3,656	$ 3,018	21%	$ 6,792	$ 5,968	14%
Operating margin	58.3 %	54.9 %	3.4 ppt	56.5 %	56.0 %	0.6 ppt
Income tax expense	$ 859	$ 523	64%	$ 1,351	$ 665	**
Effective income tax rate	23.2 %	18.7 %	4.5 ppt	20.6 %	11.9 %	8.7 ppt
Net income	$ 2,845	$ 2,275	25%	$ 5,206	$ 4,906	6%
Diluted earnings per share	$ 3.00	$ 2.34	28%	$ 5.47	$ 5.02	9%
Diluted weighted-average shares outstanding	949	974	(3)%	952	977	(3)%

** Not meaningful.

The following table provides a summary of our key non-GAAP operating results[1], adjusted to exclude the impact of gains and losses on our equity investments, Special Items (which represent litigation judgments and settlements and certain one-time items) and the related tax impacts on our non-GAAP adjustments. In addition, we have presented growth rates, adjusted for the impact of currency:

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)	
	2023	2022	As adjusted	Currency-neutral	2023	2022	As adjusted	Currency-neutral
	($ in millions, except per share data)							
Adjusted net revenue	$ 6,269	$ 5,491	14%	15%	$ 12,017	$ 10,627	13%	15%
Adjusted operating expenses	$ 2,592	$ 2,313	12%	13%	$ 4,993	$ 4,496	11%	12%
Adjusted operating margin	58.6 %	57.9 %	0.8 ppt	0.8 ppt	58.4 %	57.7 %	0.7 ppt	0.9 ppt
Adjusted effective income tax rate	23.9 %	18.8 %	5.1 ppt	5.1 ppt	21.2 %	12.3 %	8.9 ppt	9.0 ppt
Adjusted net income	$ 2,742	$ 2,497	10%	11%	$ 5,420	$ 5,199	4%	6%
Adjusted diluted earnings per share	$ 2.89	$ 2.56	13%	14%	$ 5.69	$ 5.32	7%	9%

[1] See "Non-GAAP Financial Information" for further information on our non-GAAP adjustments and the reconciliation to GAAP reported amounts.

Key highlights for the three and six months ended June 30, 2023, versus the comparable periods in 2022:

Net revenue	Adjusted net revenue	
Three Months Ended June 30, 2023		
GAAP	Non-GAAP (currency-neutral)	
up 14%	up 15%	Adjusted net revenue increased 15% on a currency-neutral basis. The increase was attributable to growth in both our payment network and value-added services and solutions.
Six Months Ended June 30, 2023		
GAAP	Non-GAAP (currency-neutral)	
up 13%	up 15%	Adjusted net revenue increased 15% on a currency-neutral basis. The increase was attributable to growth in both our payment network and value-added services and solutions.

Operating expenses	Adjusted operating expenses	
Three Months Ended June 30, 2023		
GAAP	Non-GAAP (currency-neutral)	
up 5%	up 13%	Adjusted operating expenses increased 13% on a currency-neutral basis. The increase was primarily due to higher personnel costs.
Six Months Ended June 30, 2023		
GAAP	Non-GAAP (currency-neutral)	
up 11%	up 12%	Adjusted operating expenses increased 12% on a currency-neutral basis, which includes 1 percentage point of growth due to acquisitions. The remaining increase was primarily due to higher personnel costs.

Effective income tax rate	Adjusted effective income tax rate	
Three Months Ended June 30, 2023		
GAAP	Non-GAAP	
23.2%	23.9%	The adjusted effective income tax rate of 23.9% was higher than the prior year rate of 18.8% primarily due to the establishment of a valuation allowance in 2023 of $212 million and the U.K. statutory tax rate increase, effective in 2023.
Six Months Ended June 30, 2023		
GAAP	Non-GAAP	
20.6%	21.2%	The adjusted effective income tax rate of 21.2% was higher than the prior year rate of 12.3% primarily due to the establishment of a $212 million valuation allowance in 2023 and the release of a $333 million valuation allowance in 2022. The U.K. statutory tax rate increase, effective in 2023, also contributed to the higher adjusted effective income tax rate in 2023.

Other financial highlights for the six months ended June 30, 2023 were as follows:

- We generated net cash flows from operations of $4.6 billion.
- We repurchased 14.4 million shares of our common stock for $5.3 billion and paid dividends of $1.1 billion.
- We completed a debt offering for an aggregate principal amount of $1.5 billion and entered into an Indian rupee-denominated term loan for $0.1 billion.

Non-GAAP Financial Information

Non-GAAP financial information is defined as a numerical measure of a company's performance that excludes or includes amounts so as to be different than the most comparable measure calculated and presented in accordance with accounting principles generally accepted in the United States ("GAAP"). Our non-GAAP financial measures exclude the impact of gains and losses on our equity investments which includes mark-to-market fair value adjustments, impairments and gains and losses upon disposition and the related tax impacts. Our non-GAAP financial measures also exclude the impact of special items, where applicable, which represent litigation judgments and settlements and certain one-time items, as well as the related tax impacts ("Special Items"). Our non-GAAP financial measures for the comparable periods exclude the impact of the following:

Gains and Losses on Equity Investments

- In the three and six months ended June 30, 2023, we recorded net gains of $123 million ($118 million after tax, or $0.12 per diluted share) and net losses of $89 million ($58 million after tax, or $0.06 per diluted share), respectively, primarily related to unrealized fair market value adjustments on marketable and nonmarketable equity securities.
- In the three and six months ended June 30, 2022, we recorded net losses of $117 million ($113 million after tax, or $0.12 per diluted share) and $193 million ($181 million after tax, or $0.18 per diluted share), respectively, primarily related to unrealized fair market value adjustments on marketable and non-marketable equity securities.

Special Items

Litigation provisions

- In the three months ended June 30, 2023, we recorded charges of $20 million ($15 million after tax, or $0.02 per diluted share) as a result of settlements with a number of U.K. and Pan-European merchants. In the six months ended June 30, 2023, we recorded charges of $231 million ($156 million after tax, or $0.16 per diluted share) primarily as a result of a change in estimate related to the claims of merchants who opted out of the U.S. merchant class litigation.
- In the three and six months ended June 30, 2022, we recorded charges of $133 million ($89 million after tax, or $0.09 per diluted share) as a result of a change in estimate related to the claims of merchants who opted out of the U.S. merchant class litigation.

Russia-related impacts

- In the three and six months ended June 30, 2022, we recorded net charges of $26 million ($20 million after tax, or $0.02 per diluted share) and $30 million ($24 million after tax, or $0.02 per diluted share), respectively, directly related to imposed sanctions and the suspension of our business operations in Russia. The net charges are comprised of general and administrative expenses of $33 million and $67 million, respectively, primarily related to incremental employee-related costs and reserves on uncollectible balances with certain sanctioned customers. These charges are partially offset by net benefits of $6 million and $37 million, respectively, in net revenue, primarily related to a reduction in payment network rebates and incentives liabilities as a result of lower estimates of customer performance for certain customer business agreements due to the suspension of our business operations in Russia.

See Note 6 (Investments) and Note 15 (Legal and Regulatory Proceedings) to the consolidated financial statements included in Part I, Item 1 of this Report and "Management Discussion and Analysis of Financial Condition and Results of Operations - Russia and Ukraine" in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2022 for further discussion related to certain of our non-GAAP financial measures. We excluded these items because management evaluates the underlying operations and performance of the Company separately from these recurring and nonrecurring items.

We believe that the non-GAAP financial measures presented facilitate an understanding of our operating performance and provide a meaningful comparison of our results between periods. We use non-GAAP financial measures to, among other things, evaluate our ongoing operations in relation to historical results, for internal planning and forecasting purposes and in the calculation of performance-based compensation.

Currency-neutral Growth Rates

We present growth rates adjusted for the impact of currency which is a non-GAAP financial measure. Currency-neutral growth rates are calculated by remeasuring the prior period's results using the current period's exchange rates for both the translational and transactional impacts on operating results. The impact of currency translation represents the effect of translating operating results where the functional currency is different than our U.S. dollar reporting currency. The impact of the transactional currency represents the effect of converting revenue and expenses occurring in a currency other than the functional currency of the entity. The impact of the related realized gains and losses resulting from our foreign exchange derivative contracts designated as cash flow hedging instruments is recognized in the respective financial statement line item on the statement of operations when the underlying forecasted transactions impact earnings. We believe the presentation of currency-neutral growth rates provides relevant information to facilitate an understanding of our operating results.

The translational and transactional impact of currency and the related impact of our foreign exchange derivative contracts designated as cash flow hedging instruments ("Currency impact") has been excluded from our currency-neutral growth rates and has been identified in our “Drivers of Change” tables. See “Foreign Currency - Currency Impact” for further information on our currency impacts and “Financial Results - Net Revenue” and “Financial Results - Operating Expenses” for our "Drivers of Change” tables.

Net revenue, operating expenses, operating margin, other income (expense), effective income tax rate, net income and diluted earnings per share adjusted for the impact of gains and losses on our equity investments, Special Items and/or the impact of currency, are non-GAAP financial measures and should not be relied upon as substitutes for measures calculated in accordance with GAAP.

The following tables reconcile our reported financial measures calculated in accordance with GAAP to the respective adjusted non-GAAP financial measures:

	Three Months Ended June 30, 2023						
	Net revenue	Operating expenses	Operating margin	Other income (expense)	Effective income tax rate	Net income	Diluted earnings per share
	($ in millions, except per share data)						
Reported - GAAP	$ 6,269	$ 2,613	58.3 %	$ 48	23.2 %	$ 2,845	$ 3.00
(Gains) losses on equity investments	**	**	**	(123)	0.7 %	(118)	(0.12)
Litigation provisions	**	(20)	0.3 %	**	— %	15	0.02
Adjusted - Non-GAAP	$ 6,269	$ 2,592	58.6 %	$ (75)	23.9 %	$ 2,742	$ 2.89

	Six Months Ended June 30, 2023						
	Net revenue	Operating expenses	Operating margin	Other income (expense)	Effective income tax rate	Net income	Diluted earnings per share
	($ in millions, except per share data)						
Reported - GAAP	$ 12,017	$ 5,225	56.5 %	$ (235)	20.6 %	$ 5,206	$ 5.47
(Gains) losses on equity investments	**	**	**	89	0.2 %	58	0.06
Litigation provisions	**	(231)	1.9 %	**	0.4 %	156	0.16
Adjusted - Non-GAAP	$ 12,017	$ 4,993	58.4 %	$ (146)	21.2 %	$ 5,420	$ 5.69

	Three Months Ended June 30, 2022						
	Net revenue	Operating expenses	Operating margin	Other income (expense)	Effective income tax rate	Net income	Diluted earnings per share
	($ in millions, except per share data)						
Reported - GAAP	$ 5,497	$ 2,479	54.9 %	$ (220)	18.7 %	$ 2,275	$ 2.34
(Gains) losses on equity investments	**	**	**	117	(0.6)%	113	0.12
Litigation provisions	**	(133)	2.4 %	**	0.7 %	89	0.09
Russia-related impacts	(6)	(33)	0.5 %	**	— %	20	0.02
Adjusted - Non-GAAP	$ 5,491	$ 2,313	57.9 %	$ (104)	18.8 %	$ 2,497	$ 2.56

	Six Months Ended June 30, 2022						
	Net revenue	Operating expenses	Operating margin	Other income (expense)	Effective income tax rate	Net income	Diluted earnings per share
	($ in millions, except per share data)						
Reported - GAAP	$ 10,664	$ 4,696	56.0 %	$ (397)	11.9 %	$ 4,906	$ 5.02
(Gains) losses on equity investments	**	**	**	193	(0.2)%	181	0.18
Litigation provisions	**	(133)	1.2 %	**	0.5 %	89	0.09
Russia-related impacts	(37)	(67)	0.5 %	**	0.1 %	24	0.02
Adjusted - Non-GAAP	$ 10,627	$ 4,496	57.7 %	$ (205)	12.3 %	$ 5,199	$ 5.32

Note: Tables may not sum due to rounding.

** Not applicable.

The following tables represent the reconciliation of our growth rates reported under GAAP to our non-GAAP growth rates:

	Three Months Ended June 30, 2023 as compared to the Three Months Ended June 30, 2022					
	Increase/(Decrease)					
	Net revenue	Operating expenses	Operating margin	Effective income tax rate	Net income	Diluted earnings per share
Reported - GAAP	14%	5%	3.4 ppt	4.5 ppt	25%	28%
(Gains) losses on equity investments	**	**	**	1.3 ppt	(11)%	(11)%
Litigation provisions	**	5%	(2.1) ppt	(0.7) ppt	(3)%	(3)%
Russia-related impacts	—%	2%	(0.5) ppt	— ppt	(1)%	(1)%
Adjusted - Non-GAAP	14%	12%	0.8 ppt	5.1 ppt	10%	13%
Currency impact [1]	1%	1%	— ppt	— ppt	1%	1%
Adjusted - Non-GAAP - currency-neutral	15%	13%	0.8 ppt	5.1 ppt	11%	14%

	Six Months Ended June 30, 2023 as compared to the Six Months Ended June 30, 2022					
	Increase/(Decrease)					
	Net revenue	Operating expenses	Operating margin	Effective income tax rate	Net income	Diluted earnings per share
Reported - GAAP	13%	11%	0.6 ppt	8.7 ppt	6%	9%
(Gains) losses on equity investments	**	**	**	0.4 ppt	(3)%	(3)%
Litigation provisions	**	(2)%	0.7 ppt	(0.1) ppt	1%	1%
Russia-related impacts	—%	2%	(0.3) ppt	(0.1) ppt	—%	—%
Adjusted - Non-GAAP	13%	11%	0.9 ppt	8.9 ppt	4%	7%
Currency impact [1]	2%	1%	— ppt	0.1 ppt	2%	2%
Adjusted - Non-GAAP - currency-neutral	15%	12%	0.9 ppt	9.0 ppt	6%	9%

Note: Tables may not sum due to rounding.

** Not applicable.

1 See “Non-GAAP Financial Information” for further information on Currency impact.

Key Metrics and Drivers

In addition to the financial measures described above in “Financial Results Overview”, we review the following metrics to evaluate and identify trends in our business, measure our performance, prepare financial projections and make strategic decisions. We believe that the key metrics presented facilitate an understanding of our operating and financial performance and provide a meaningful comparison of our results between periods.

Operating Margin measures how much profit we make on each dollar of sales after our operating costs but before other income (expense) and income tax expense. Operating margin is calculated by dividing our operating income by net revenue.

Key Drivers

Gross Dollar Volume (“GDV”)[1] measures dollar volume of activity, including both domestic and cross-border volume, on cards carrying our brands during the period, on a local currency basis and U.S. dollar-converted basis. GDV represents purchase volume plus cash volume; “purchase volume” means the aggregate dollar amount of purchases made with Mastercard-branded cards for the relevant period; and “cash volume” means the aggregate dollar amount of cash disbursements and includes the impact of balance transfers and convenience checks obtained with Mastercard-branded cards for the relevant period. Information denominated in U.S. dollars relating to GDV is calculated by applying an established U.S. dollar/local currency exchange rate for each local currency in which our volumes are reported. These exchange rates are calculated on a quarterly basis using the average exchange rate for each quarter. We report period-over-period rates of change in purchase volume and cash volume on the basis of local currency information, in order to eliminate the impact of changes in the value of currencies against the U.S. dollar in calculating such rates of change.

1 Data used in the calculation of GDV is provided by Mastercard customers and is subject to verification by Mastercard and partial cross-checking against information provided by Mastercard’s transaction switching systems. All data is subject to revision and amendment by Mastercard or Mastercard’s customers. Starting in the first quarter of 2022, data related to sanctioned Russian banks was not reported to us and therefore such amounts are not included. Subsequent to the suspension of our business operations in Russia in March 2022, there is no Russian data to be reported.

Cross-border Volume Growth[2] measures the growth of cross-border dollar volume during the period, on a local currency basis and U.S. dollar-converted basis, for all Mastercard-branded programs.

Switched Transactions[2] measures the number of transactions switched by Mastercard, which is defined as the number of transactions initiated and switched through our network during the period.

2 Growth rates are normalized to eliminate the effects of differing switching and carryover days between periods, as needed. Carryover days are those where transactions and volumes from days where the Company does not clear and settle are processed.

The following tables provide a summary of the growth trends in our key drivers:

	Three Months Ended June 30,				Six Months Ended June 30,			
	2023		2022		2023		2022	
	Increase/(Decrease)				Increase/(Decrease)			
	USD	Local	USD	Local	USD	Local	USD	Local
Mastercard-branded GDV growth [1]	10%	12%	8%	14%	10%	14%	10%	15%
United States	6%	6%	10%	10%	7%	7%	12%	12%
Worldwide less United States	12%	16%	7%	16%	12%	17%	9%	17%
Cross-border volume growth [1]	23%	24%	46%	58%	26%	29%	45%	56%
Mastercard-branded GDV growth adjusted for Russia [1,2]	10%	12%	13%	20%	11%	14%	14%	20%
Worldwide less United States GDV growth adjusted for Russia [1,2]	12%	16%	14%	25%	12%	18%	15%	24%
Cross-border volume growth adjusted for Russia [1,2]	23%	24%	50%	64%	27%	31%	48%	59%

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	Increase/(Decrease)		Increase/(Decrease)	
Switched transactions growth	17%	12%	15%	16%
Switched transactions growth adjusted for Russia [2]	17%	22%	18%	23%

1 Excludes volume generated by Maestro and Cirrus cards.

2 Starting in the first quarter of 2022, as a result of imposed sanctions and the suspension of our business operations in Russia, we have provided adjusted growth rates for our key drivers excluding activity from Russian issued cards from the prior periods. See "Management Discussion and Analysis of Financial Condition and Results of Operations - Russia and Ukraine" in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2022 for further information.

Key Metrics related to the Payment Network

Assessments represent agreed-upon standard pricing provided to our customers based on various forms of payment-related activity. Assessments are used internally by management to monitor operating performance as it allows for comparability and provides visibility into cardholder trends. Assessments do not represent our net revenue.

The following provides additional information on our key metrics related to the payment network:

- **Domestic assessments** are charges based on activity related to cards that carry the Company's brands where the merchant country and the country of issuance are the same. These assessments are primarily driven by the domestic dollar volume of activity (e.g., domestic purchase volume, domestic cash volume) or the number of cards issued.
- **Cross-border assessments** are charges based on activity related to cards that carry the Company's brands where the merchant country and the country of issuance are different. These assessments are primarily driven by the cross-border dollar volume of activity (e.g., cross-border purchase volume, cross-border cash volume).

- **Transaction processing assessments** are charges primarily driven by the number of switched transactions on our payment network. Switching activities include:
  - Authorization, the process by which a transaction is routed to the issuer for approval
  - Clearing, the determination and exchange of financial transaction information between issuers and acquirers after a transaction has been successfully conducted at the point of interaction
  - Settlement, which facilitates the determination and exchange of funds between parties

  These assessments can also include connectivity services and network access which are based on the volume of data transmitted and the number of authorization and settlement messages.
- **Other network assessments** are charges for licensing, implementation and other franchise fees.

The following table provides a summary of our key metrics related to the payment network:

	Three Months Ended June 30,		Increase/(Decrease)		Six Months Ended June 30,		Increase/(Decrease)	
	2023	2022	As reported	Currency-neutral	2023	2022	As reported	Currency-neutral
	($ in millions)				($ in millions)			
Domestic assessments	$ 2,468	$ 2,251	10%	11%	$ 4,722	$ 4,359	8%	10%
Cross-border assessments	2,050	1,612	27%	29%	3,899	3,002	30%	33%
Transaction processing assessments	2,979	2,572	16%	16%	5,731	5,029	14%	15%
Other network assessments	270	213	28%	30%	483	381	27%	29%

Foreign Currency

Currency Impact

Our primary revenue functional currencies are the U.S. dollar, euro, Brazilian real and the British pound. Our overall operating results are impacted by currency translation, which represents the effect of translating operating results where the functional currency is different than our U.S. dollar reporting currency.

Our operating results are also impacted by transactional currency. The impact of the transactional currency represents the effect of converting revenue and expense transactions occurring in a currency other than the functional currency. Changes in currency exchange rates directly impact the calculation of gross dollar volume ("GDV"), which are used in the calculation of our key metrics related to domestic assessments and cross-border assessments as well as certain volume-related rebates and incentives. GDV is calculated based on local currency spending volume converted to U.S. dollars and euro using average exchange rates for the period. As a result, our key metrics related to domestic assessments and cross-border assessments as well as certain volume-related rebates and incentives are impacted by the strengthening or weakening of the U.S. dollar and euro versus local currencies. For example, our billing in Australia is in the U.S. dollar, however, consumer spend in Australia is in the Australian dollar. The currency transactional impact of converting Australian dollars to our U.S. dollar billing currency will have an impact on the revenue generated. The strengthening or weakening of the U.S. dollar is evident when GDV growth on a U.S. dollar-converted basis is compared to GDV growth on a local currency basis. For the three and six months ended June 30, 2023, GDV on a U.S. dollar-converted basis increased 10% and 10%, respectively, while GDV on a local currency basis increased 12% and 14%, respectively, versus the comparable periods in 2022. Further, the impact from transactional currency occurs in our key metric related to transaction processing assessments as well as value-added services and solutions revenue and operating expenses when the transacting currency of these items is different than the functional currency of the entity.

To manage the impact of foreign currency variability on anticipated revenues and expenses, we may enter into foreign exchange derivative contracts and designate such derivatives as hedging instruments in a cash flow hedging relationship as discussed further in Note 17 (Derivative and Hedging Instruments) to the consolidated financial statements included in Part I, Item 1.

Foreign Exchange Activity

We incur foreign currency gains and losses from remeasuring monetary assets and liabilities, including settlement assets and obligations, that are denominated in a currency other than the functional currency of the entity. To manage this foreign exchange risk, we may enter into foreign exchange derivative contracts to economically hedge the foreign currency exposure of a portion of our nonfunctional currency monetary assets and liabilities. The gains or losses resulting from the changes in fair value of these contracts are intended to reduce the potential effect of the underlying hedged exposure and are recorded net within general and administrative expenses on the consolidated statement of operations. The impact of this foreign exchange activity, including the related hedging activities, has not been eliminated in our currency-neutral results.

Our foreign exchange risk management activities are discussed further in Note 17 (Derivative and Hedging Instruments) to the consolidated financial statements included in Part I, Item 1.

Risk of Currency Devaluation

We are exposed to currency devaluation in certain countries. In addition, we are subject to exchange control regulations that restrict the conversion of financial assets into U.S. dollars. While these revenues and assets are not material to us on a consolidated basis, we can be negatively impacted should there be a continued and sustained devaluation of local currencies relative to the U.S. dollar and/or a continued and sustained deterioration of economic conditions in these countries.

Financial Results

Net Revenue

The components of net revenue were as follows:

	Three Months Ended June 30,			Increase/ (Decrease)		Six Months Ended June 30,			Increase/ (Decrease)	
	2023	2022	2021	2023	2022	2023	2022	2021	2023	2022
	($ in millions)					($ in millions)				
Payment network	$ 4,073	$ 3,609	$ 2,875	13%	26%	$ 7,723	$ 7,008	$ 5,523	10%	27%
Value-added services and solutions	2,196	1,888	1,653	16%	14%	4,294	3,656	3,160	17%	16%
Total net revenue	6,269	5,497	4,528	14%	21%	12,017	10,664	8,683	13%	23%
Special Items [1]	—	(6)	—	**	**	—	(37)	—	**	**
Adjusted net revenue (excluding Special Items [1])	$ 6,269	$ 5,491	$ 4,528	14%	21%	$ 12,017	$ 10,627	$ 8,683	13%	22%

Note: Table may not sum due to rounding.

** Not meaningful.

1 See “Non-GAAP Financial Information” for further information on our non-GAAP adjustments and the reconciliation to GAAP reported amounts.

2023

For the three months ended June 30, 2023, net revenue increased 14% versus the comparable period in 2022. Adjusted net revenue increased 14%, or 15% on a currency-neutral basis. The increase in net revenue was attributable to both our payment network and value-added services and solutions.

Net revenue from our payment network increased 13%, or 14% on a currency-neutral basis, versus the comparable period in 2022. The increase was primarily driven by growth in domestic and cross-border dollar volumes and an increase in the number of switched transactions, reflecting trends of growth in our key drivers. Net revenue from our payment network includes $3,694 million of rebates and incentives provided to customers, which increased 22% as reported and on a currency-neutral basis, versus the comparable period in 2022, primarily due to an increase in our key drivers as well as new and renewed deals.

Net revenue from our value-added services and solutions increased 16% as reported and on a currency-neutral basis, versus the comparable period in 2022. The increase was driven primarily by the continued growth of (i) our cyber and intelligence solutions, driven by our underlying key drivers and demand for our fraud and security solutions and (ii) continued demand for our consulting and marketing services, partially offset by other solutions.

For the six months ended June 30, 2023, net revenue increased 13% versus the comparable period in 2022. Adjusted net revenue increased 13%, or 15% on a currency-neutral basis. The increase in net revenue was attributable to both our payment network and value-added services and solutions.

Net revenue from our payment network increased 10%, or 12% on a currency-neutral basis, versus the comparable period in 2022. The increase was primarily driven by growth in domestic and cross-border dollar volumes and an increase in the number of switched transactions, reflecting trends of growth in our key drivers. The 12% increase on a currency-neutral basis is 1 percentage point lower due to the Russia-related Special Item in 2022. Net revenue from our payment network includes $7,111 million of rebates and incentives provided to customers, which increased 23%, or 25% on a currency-neutral basis, versus the comparable period in 2022, primarily due to an increase in our key drivers as well as new and renewed deals. The 25% increase on a currency-neutral basis is 1 percentage point higher due to the Russia-related Special Item in 2022.

Net revenue from our value-added services and solutions increased 17%, or 18% on a currency-neutral basis, versus the comparable period in 2022, which includes a 1 percentage point increase from acquisitions. The remaining increase was driven primarily by the continued growth of (i) our cyber and intelligence solutions, driven by our underlying key drivers and (ii) demand for our fraud and security solutions, and demand for our consulting and marketing services, as well as our loyalty solutions.

2022

For the three months ended June 30, 2022, net revenue increased 21% versus the comparable period in 2021. Adjusted net revenue increased 21%, or 27% on a currency-neutral basis. The increase in net revenue was attributable to both our payment network and value-added services and solutions.

Net revenue from our payment network increased 26%, or 31% on a currency-neutral basis, versus the comparable period in 2021. The increase was primarily driven by growth in domestic and cross-border dollar volumes and an increase in the number of switched transactions, reflecting trends of growth in our key drivers. Net revenue from our payment network includes $3,039 million of rebates and incentives provided to customers, which increased 18%, or 22% on a currency-neutral basis, versus the comparable period in 2021, primarily due to an increase in our key drivers as well as new and renewed deals.

Net revenue from our value-added services and solutions increased 14%, or 19% on a currency-neutral basis, versus the comparable period in 2021, which includes a 3 percentage point increase from acquisitions. The remaining increase was driven primarily by the continued growth of (i) our cyber and intelligence solutions, driven by growth in our underlying key drivers as well as the scaling of our authentication solutions and (ii) our data analytics services.

For the six months ended June 30, 2022, net revenue increased 23% versus the comparable period in 2021. Adjusted net revenue increased 22%, or 27% on a currency-neutral basis. The increase in net revenue was attributable to both our payment network and value-added services and solutions and included 2 percentage points of growth from acquisitions.

Net revenue from our payment network increased 27%, or 32% on a currency-neutral basis, versus the comparable period in 2021. The increase was primarily driven by growth in domestic and cross-border dollar volumes and an increase in the number of switched transactions, reflecting trends of growth in our key drivers. The 32% increase on a currency-neutral basis is 1 percentage point higher due to the Russia-related Special Item in 2022. Net revenue from our payment network includes $5,763 million of rebates and incentives provided to customers, which increased 21%, or 25% on a currency-neutral basis, versus the comparable period in 2021, primarily due to an increase in our key drivers as well as new and renewed deals. The 25% increase on a currency-neutral basis is 1 percentage point lower due to the Russia-related Special Item in 2022.

Net revenue from our value-added services and solutions increased 16%, or 20% on a currency-neutral basis, versus the comparable period in 2021, which includes a 5 percentage point increase from acquisitions. The remaining increase was driven primarily by the continued growth of (i) our cyber and intelligence solutions, driven by growth in our underlying key drivers as well as the scaling of our authentication solutions and (ii) our data analytics services.

See Note 3 (Revenue) to the consolidated financial statements included in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2022 for a further discussion of how we recognize revenue.

Drivers of Change

The following tables summarize the drivers of change in net revenue:

	Three Months Ended June 30, Increase/(Decrease)									
	Operational		Acquisitions		Currency Impact [3]		Special Items [4]		Total	
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Payment network	14 % [1]	31 % [1]	**	**	(1)%	(6)%	— %	— %	13 %	26 %
Value-added services and solutions	16 % [2]	16 % [2]	— %	3 %	— %	(5)%	**	**	16 %	14 %
Net revenue	15 %	26 %	— %	1 %	(1)%	(6)%	— %	— %	14 %	21 %

	Six Months Ended June 30, Increase/(Decrease)									
	Operational		Acquisitions		Currency Impact [3]		Special Items [4]		Total	
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Payment network	13 % [1]	31 % [1]	**	**	(2)%	(5)%	(1)%	1 %	10 %	27 %
Value-added services and solutions	18 % [2]	15 % [2]	1 %	5 %	(1)%	(4)%	**	**	17 %	16 %
Net revenue	15 %	25 %	— %	2 %	(2)%	(5)%	— %	— %	13 %	23 %

Note: Tables may not sum due to rounding.

** Not applicable.

1 Includes impacts from our key drivers and metrics, offset by rebates and incentives.

2 Includes impacts from cyber and intelligence, data and services, processing and gateway, ACH batch and real-time account-based domestic and cross-border payments and solutions, opening banking and digital identity, offset by rebates and incentives.

3 Includes the translational and transactional impact of currency and the related impact of our foreign exchange derivative contracts designated as cash flow hedging instruments.

4 See “Non-GAAP Financial Information” for further information on our non-GAAP adjustments and the reconciliation to GAAP reported amounts.

Operating Expenses

For the three months ended June 30, 2023, operating expenses increased 5% versus the comparable period in 2022. Adjusted operating expenses increased 12%, or 13% on a currency-neutral basis, versus the comparable period in 2022, primarily due to higher personnel costs.

For the six months ended June 30, 2023, operating expenses increased 11% versus the comparable period in 2022. Adjusted operating expenses increased 11%, or 12% on a currency-neutral basis, versus the comparable period in 2022, which includes a 1 percentage point increase from acquisitions. The remaining increase was primarily due to higher personnel costs.

The components of operating expenses were as follows:

	Three Months Ended June 30,		Increase/ (Decrease)	Six Months Ended June 30,		Increase/ (Decrease)
	2023	2022		2023	2022	
	($ in millions)					
General and administrative	$ 2,200	$ 1,947	13%	$ 4,243	$ 3,791	12%
Advertising and marketing	201	210	(4)%	368	391	(6)%
Depreciation and amortization	192	189	2%	383	381	1%
Provision for litigation	20	133	**	231	133	**
Total operating expenses	2,613	2,479	5%	5,225	4,696	11%
Special Items [1]	(20)	(166)	**	(231)	(200)	**
Adjusted total operating expenses (excluding Special Items [1])	$ 2,592	$ 2,313	12%	$ 4,993	$ 4,496	11%

Note: Table may not sum due to rounding.

** Not meaningful.

1 See “Non-GAAP Financial Information” for further information on our non-GAAP adjustments and the reconciliation to GAAP reported amounts.

Drivers of Change

The following tables summarize the drivers of changes in operating expenses:

	Three Months Ended June 30, 2023				
	Increase/(Decrease)				
	Operational	Acquisitions	Currency Impact [1]	Special Items [2]	Total
General and administrative	15%	—%	(1)%	(2)%	13%
Advertising and marketing	(4)%	—%	—%	**	(4)%
Depreciation and amortization	1%	—%	—%	**	2%
Provision for litigation	**	**	**	**	**
Total operating expenses	12%	—%	(1)%	(7)%	5%

	Six Months Ended June 30, 2023				
	Increase/(Decrease)				
	Operational	Acquisitions	Currency Impact [1]	Special Items [2]	Total
General and administrative	14%	1%	(1)%	(2)%	12%
Advertising and marketing	(5)%	—%	(1)%	**	(6)%
Depreciation and amortization	1%	1%	(1)%	**	1%
Provision for litigation	**	**	**	**	**
Total operating expenses	11%	1%	(1)%	—%	11%

Note: Tables may not sum due to rounding.

** Not applicable/meaningful.

1 Represents the translational and transactional impact of currency.

2 See "Non-GAAP Financial Information" for further information on our non-GAAP adjustments and the reconciliation to GAAP reported amounts.

General and Administrative

For the three months ended June 30, 2023, general and administrative expenses increased 13%, or 14% on a currency-neutral basis, versus the comparable period in 2022. The increase was primarily due to higher personnel costs to support our continued investment in our strategic initiatives across payments, services and new network capabilities, partially offset by a decrease of 2 percentage points from the Special Item for Russia-related impacts in 2022.

For the six months ended June 30, 2023, general and administrative expenses increased 12%, or 13% on a currency-neutral basis, versus the comparable period in 2022. Current period results include growth of 1 percentage points from acquisitions. The remaining increase was primarily due to higher personnel costs to support our continued investment in our strategic initiatives across payments, services and new network capabilities, partially offset by a decrease of 2 percentage points from the Special Item for Russia-related impacts in 2022.

The components of general and administrative expenses were as follows:

	Three Months Ended June 30,		Increase/ (Decrease)	Six Months Ended June 30,		Increase/ (Decrease)
	2023	2022		2023	2022	
	($ in millions)					
Personnel [1]	$ 1,495	$ 1,319	13%	$ 2,921	$ 2,500	17%
Professional fees	114	109	5%	214	195	10%
Data processing and telecommunications	246	225	9%	481	460	5%
Foreign exchange activity [2]	24	35	**	40	71	**
Other [1]	321	259	24%	587	565	4%
Total general and administrative expenses	$ 2,200	$ 1,947	13%	$ 4,243	$ 3,791	12%

Note: Table may not sum due to rounding.

** Not meaningful.

1 For the three months ended June 30, 2022, total general and administrative expenses includes a Special Item for Russia-related impacts of $33 million, of which $31 million is included within Personnel and $2 million is included within Other. For the six months ended June 30, 2022, total general and administrative expenses includes a Special Item for Russia-related impacts of $67 million, of which $35 million is included within Personnel and $32 million is included within Other. See “Non-GAAP Financial Information” for further information on our non-GAAP adjustments and the reconciliation to GAAP reported amounts.

2 Foreign exchange activity includes the impact of remeasurement of assets and liabilities denominated in foreign currencies net of the impact of gains and losses on foreign exchange derivative contracts. See Note 17 (Derivative and Hedging Instruments) to the consolidated financial statements included in Part I, Item 1 for further discussion.

Advertising and Marketing

For the three months ended June 30, 2023, advertising and marketing expenses decreased 4% on both an as reported and a currency-neutral basis, versus the comparable period in 2022, primarily due to a decrease in spending on marketing campaigns and advertising, partially offset by an increase in spending on sponsorships. For the six months ended June 30, 2023, advertising and marketing expenses decreased 6%, or 5% on a currency-neutral basis, versus the comparable period in 2022, primarily due to a decrease in spending on marketing campaigns and advertising, partially offset by an increase in spending on sponsorships.

Depreciation and Amortization

For the three and six months ended June 30, 2023, depreciation and amortization expenses were relatively flat on both an as reported and a currency-neutral basis, versus the comparable periods in 2022.

Provision for Litigation

For the three months ended June 30, 2023, we recorded litigation provisions of $20 million as a result of settlements with a number of U.K. and Pan-European merchants. For the six months ended June 30, 2023, we recorded litigation provisions of $231 million as a result of a change in estimate related to the claims of merchants who opted out of the U.S. merchant class litigation as well as settlements with a number of U.K. and Pan-European merchants. See Note 15 (Legal and Regulatory Proceedings) to the consolidated financial statements included in Part I, Item 1 of this Report and “Non-GAAP Financial Information” in this section for further discussion.

Other Income (Expense)

For the three months ended June 30, 2023, other income (expense) was favorable $268 million, versus the comparable period in 2022, primarily due to net gains in the current year versus the net losses in the prior year related to unrealized fair market value adjustments on marketable equity securities. Adjusted other income (expense) was favorable $29 million versus the prior year, primarily due to an increase in our investment income, partially offset by increased interest expense related to our 2022 and 2023 debt issuances.

For the six months ended June 30, 2023, other income (expense) was favorable $162 million, versus the comparable period in 2022, primarily due to lower net losses in the current year versus the prior year related to unrealized fair market value adjustments on marketable and nonmarketable equity securities. Adjusted other income (expense) was favorable $59 million versus the prior year, primarily due to an increase in our investment income, partially offset by increased interest expense related to our 2022 and 2023 debt issuances.

The components of other income (expense) were as follows:

	Three Months Ended June 30,		Increase/ (Decrease)	Six Months Ended June 30,		Increase/ (Decrease)
	2023	2022		2023	2022	
	($ in millions)					
Investment income	$ 59	$ 7	**	$ 114	$ 12	**
Gains (losses) on equity investments, net	123	(117)	**	(89)	(193)	**
Interest expense	(144)	(114)	27%	(276)	(224)	23%
Other income (expense), net	10	4	**	16	8	**
Total other income (expense)	48	(220)	**	(235)	(397)	**
(Gains) losses on equity investments [1]	(123)	117	**	89	193	**
Adjusted total other income (expense) [1]	$ (75)	$ (104)	(28)%	$ (146)	$ (205)	(29)%

Note: Table may not sum due to rounding.

** Not meaningful.

1 See “Non-GAAP Financial Information” for further information on our non-GAAP adjustments and the reconciliation to GAAP reported amounts.

Income Taxes

The effective income tax rates were 23.2% and 18.7% for the three months ended June 30, 2023 and 2022, respectively. The adjusted effective income tax rates were 23.9% and 18.8% for the three months ended June 30, 2023 and 2022, respectively. Both the as reported and as adjusted effective income tax rates were higher versus the comparable period in 2022, primarily due to a $212 million discrete tax expense to establish a valuation allowance associated with the U.S. foreign tax credit carryforward deferred tax asset resulting from foreign tax legislation enacted in Brazil in the current period. The U.K. statutory tax rate increase, effective in 2023, also contributed to the higher as reported and as adjusted effective income tax rates for the current period.

The effective income tax rates were 20.6% and 11.9% for the six months ended June 30, 2023 and 2022, respectively. The adjusted effective income tax rates were 21.2% and 12.3% for the six months ended June 30, 2023 and 2022, respectively. Both the as reported and as adjusted effective income tax rates were higher versus the comparable period in 2022, primarily due to changes in the valuation allowance associated with the U.S. foreign tax credit carryforward deferred tax asset. In 2022, we recognized a discrete tax benefit related to final U.S. tax regulations published in the first quarter of 2022 (“2022 Regulations”), which resulted in a valuation allowance release of $333 million. In the second quarter of 2023, foreign tax legislation was enacted in Brazil which changed the treatment of foreign taxes paid under the 2022 Regulations. Therefore, we recognized a $212 million discrete tax expense in 2023 to establish the valuation allowance on the remaining U.S. foreign tax credit carryforward deferred tax asset. The foreign tax legislation allows us the ability to generate additional foreign tax credits going forward. The U.K. statutory tax rate increase, effective in 2023, also contributed to the higher effective income tax rate in 2023.

On July 21, 2023, the U.S. Department of Treasury released Notice 2023-55 (the “Notice”), providing taxpayers relief from certain aspects of the 2022 Regulations for 2022 and 2023. We are evaluating the impacts of the Notice to our effective tax rate, as well as deferred tax assets and corresponding valuation allowance.

Liquidity and Capital Resources

We rely on existing liquidity, cash generated from operations and access to capital to fund our global operations, capital expenditures, investments in our business and current and potential obligations. The following table summarizes the cash, cash equivalents, investments and credit available to us:

	June 30, 2023	December 31, 2022
	(in billions)	
Cash, cash equivalents and investments [1]	$ 6.5	$ 7.4
Unused line of credit	8.0	8.0

[1] Investments include available-for-sale securities and held-to-maturity securities. This amount excludes restricted cash and restricted cash equivalents of $2.4 billion and $2.2 billion at June 30, 2023 and December 31, 2022, respectively.

We believe that our existing cash, cash equivalents and investment securities balances, our cash flow generating capabilities, and our access to capital resources are sufficient to satisfy our future operating cash needs, capital asset purchases, outstanding commitments and other liquidity requirements associated with our existing operations and potential obligations which include litigation provisions and credit and settlement exposure.

Our liquidity and access to capital could be negatively impacted by global credit market conditions. We guarantee the settlement of many of the transactions between our customers. Historically, payments under these guarantees have not been significant; however, historical trends may not be an indication of potential future losses. The risk of loss on these guarantees is specific to individual customers, but may also be driven by regional or global economic conditions, including, but not limited to the health of the financial institutions in a country or region. See Note 16 (Settlement and Other Risk Management) to the consolidated financial statements in Part I, Item 1 for a description of these guarantees.

Our liquidity and access to capital could also be negatively impacted by the outcome of any of the legal or regulatory proceedings to which we are a party. For additional discussion of these and other risks facing our business, see Part I, Item 1A - Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2022 and Note 15 (Legal and Regulatory Proceedings) to the consolidated financial statements included in Part I, Item 1 of this Report.

Cash Flow

The table below shows a summary of the cash flows from operating, investing and financing activities:

	Six Months Ended June 30,	
	2023	2022
	(in millions)	
Net cash provided by operating activities	$ 4,617	$ 4,239
Net cash used in investing activities	(615)	(812)
Net cash used in financing activities	(4,734)	(4,975)

Net cash provided by operating activities increased $378 million for the six months ended June 30, 2023, versus the comparable period in 2022, primarily due to higher net income after adjusting for non-cash items and an increase in restricted security deposits held for customers, partially offset by higher employee incentives and customer incentive payments.

Net cash used in investing activities decreased $197 million for the six months ended June 30, 2023, versus the comparable period in 2022, primarily due to less cash paid for business acquisitions in the current year partially offset by an increase in capitalized software.

Net cash used in financing activities decreased $241 million for the six months ended June 30, 2023, versus the comparable period in 2022, primarily due to higher proceeds from debt issuances partially offset by higher repurchases of our Class A common stock in the current year.

Debt and Credit Availability

In March 2023, we issued $750 million principal amount of notes due March 2028 and $750 million principal amount of notes due March 2033 (collectively the “2023 USD Notes”). The net proceeds from the issuance of the 2023 USD Notes, after deducting the original issue discount, underwriting discount and offering expenses, were $1.489 billion. In April 2023, we entered into an additional unsecured INR4.97 billion ($61 million as of June 30, 2023) term loan, originally due July 2023 (the “April 2023 INR Term Loan”). Our total debt outstanding was $15.6 billion and $14.0 billion at June 30, 2023 and December 31, 2022, respectively, with the earliest maturity of INR28 billion ($338 million as of June 30, 2023) of principal occurring in July 2023.

In July 2023, we modified and combined each of the 2022 INR Term Loan and April 2023 INR Term Loan, increasing the total amount of the unsecured loans to INR28 billion ($342 million as of the date of settlement), which was an increase of INR412 million ($5 million as of the date of settlement) due July 2024.

As of June 30, 2023, we have a commercial paper program (the “Commercial Paper Program”), under which we are authorized to issue up to $8 billion in outstanding notes, with maturities up to 397 days from the date of issuance. In conjunction with the Commercial Paper Program, we have a committed unsecured $8 billion revolving credit facility (the “Credit Facility”) which expires in November 2027.

Borrowings under the Commercial Paper Program and the Credit Facility are to be used to provide liquidity for general corporate purposes, including providing liquidity in the event of one or more settlement failures by our customers. In addition, we may borrow and repay amounts under these facilities for business continuity purposes. We had no borrowings outstanding under the Commercial Paper Program or the Credit Facility at June 30, 2023 and December 31, 2022.

See Note 10 (Debt) to the consolidated financial statements included in Part I, Item 1 for further discussion on our debt and Note 15 (Debt) to the consolidated financial statements included in Part II, Item 8 of our Annual Report on Form 10-K for the year ended December 31, 2022 for further discussion on our debt, the Commercial Paper Program and the Credit Facility.

Dividends and Share Repurchases

We have historically paid quarterly dividends on our outstanding Class A common stock and Class B common stock. Subject to legally available funds, we intend to continue to pay a quarterly cash dividend. The declaration and payment of future dividends is at the sole discretion of our Board of Directors after taking into account various factors, including our financial condition, operating results, available cash and current and anticipated cash needs.

Aggregate payments for quarterly dividends totaled $1,086 million for the six months ended June 30, 2023.

On December 6, 2022, our Board of Directors declared a quarterly cash dividend of $0.57 per share paid on February 9, 2023 to holders of record on January 9, 2023 of our Class A common stock and Class B common stock. The aggregate amount of this dividend was $545 million.

On February 14, 2023, our Board of Directors declared a quarterly cash dividend of $0.57 per share paid on May 9, 2023 to holders of record on April 7, 2023 of our Class A common stock and Class B common stock. The aggregate amount of this dividend was $541 million.

On June 26, 2023, our Board of Directors declared a quarterly cash dividend of $0.57 per share payable on August 9, 2023 to holders of record on July 7, 2023 of our Class A common stock and Class B common stock. The aggregate amount of this dividend is estimated to be $538 million.

Repurchased shares of our common stock are considered treasury stock. In December 2022 and November 2021, our Board of Directors approved share repurchase programs of our Class A common stock authorizing us to repurchase up to $9.0 billion and $8.0 billion, respectively. The program approved in 2022 became effective in April 2023 after the completion of the share repurchase program approved in 2021. The timing and actual number of additional shares repurchased will depend on a variety of factors, including cash requirements to meet the operating needs of the business, legal requirements, as well as the share price and economic and market conditions. The following table summarizes our share repurchase authorizations and repurchase activity of our Class A common stock through June 30, 2023:

		(in millions, except average price data)
Remaining authorization at December 31, 2022	$	12,174
Dollar-value of shares repurchased during the six months ended June 30, 2023 [1]	$	5,294
Remaining authorization at June 30, 2023	$	6,880
Shares repurchased during the six months ended June 30, 2023		14.4
Average price paid per share during the six months ended June 30, 2023	$	367.00

[1] The dollar-value of shares repurchased does not include a 1% excise tax on share repurchases that became effective January 1, 2023. The incremental tax is recorded in treasury stock on the consolidated balance sheet and is payable annually beginning in 2024.

Recent Accounting Pronouncements

For a description of recent accounting pronouncements, if any, and the potential impact of these pronouncements refer to Note 1 (Summary of Significant Accounting Policies) to the consolidated financial statements included in Part I, Item 1.

Item 3. Quantitative and qualitative disclosures about market risk

Market risk is the potential for economic losses to be incurred on market risk sensitive instruments arising from adverse changes in factors such as interest rates and foreign currency exchange rates. Our exposure to market risk from changes in interest rates and foreign exchange rates is limited. Management monitors risk exposures on an ongoing basis and establishes and oversees the implementation of policies governing our funding, investments and use of derivative financial instruments to manage these risks.

Foreign currency and interest rate exposures are managed through our risk management activities, which are discussed further in Note 17 (Derivative and Hedging Instruments) to the consolidated financial statements included in Part I, Item 1.

Foreign Exchange Risk

We enter into foreign exchange derivative contracts to manage currency exposure associated with anticipated receipts and disbursements occurring in a currency other than the functional currency of the entity. We may also enter into foreign currency derivative contracts to offset possible changes in value of assets and liabilities due to foreign exchange fluctuations. The objective of these activities is to reduce our exposure to transaction gains and losses resulting from fluctuations of foreign currencies against our functional currencies, principally the U.S. dollar and euro. The effect of a hypothetical 10% adverse change in the value of the functional currencies could result in a fair value gain of approximately $26 million and loss of approximately $94 million on our foreign exchange derivative contracts outstanding at June 30, 2023 and December 31, 2022, respectively, before considering the offsetting effect of the underlying hedged activity.

We are also subject to foreign exchange risk as part of our daily settlement activities. To manage this risk, we enter into short duration foreign exchange contracts based upon anticipated receipts and disbursements for the respective currency position. This risk is typically limited to a few days between when a payment transaction takes place and the subsequent settlement with our customers. A hypothetical 10% adverse change in the value of the functional currencies would not have a material impact to the fair value of our short duration foreign exchange derivative contracts outstanding at June 30, 2023 and December 31, 2022, respectively.

We are further exposed to foreign exchange rate risk related to translation of our net investment in foreign subsidiaries where the functional currency is different than our U.S. dollar reporting currency. To manage this risk, we may enter into foreign exchange derivative contracts to hedge a portion of our net investment in foreign subsidiaries. The effect of a hypothetical 10% adverse change in the value of the U.S. dollar could result in a fair value loss of approximately $251 million and $203 million on our foreign exchange derivative contracts designated as a net investment hedge at June 30, 2023 and December 31, 2022, respectively, before considering the offsetting effect of the underlying hedged activity.

Interest Rate Risk

Our available-for-sale debt investments include fixed and variable rate securities that are sensitive to interest rate fluctuations. Our policy is to invest in high quality securities, while providing adequate liquidity and maintaining diversification to avoid significant exposure. A hypothetical 100 basis point adverse change in interest rates would not have a material impact to the fair value of our investments at June 30, 2023 and December 31, 2022.

We are also exposed to interest rate risk related to our fixed-rate debt. To manage this risk, we may enter into interest rate derivative contracts to hedge a portion of our fixed-rate debt that is exposed to changes in fair value attributable to changes in a benchmark interest rate. The effect of a hypothetical 100 basis point adverse change in interest rates would not have a material impact to the fair value of our interest rate derivative contracts designated as a fair value hedge of our fixed-rate debt at June 30, 2023 and December 31, 2022, respectively, before considering the offsetting effect of the underlying hedged activity.

Item 4. Controls and procedures

Evaluation of Disclosure Controls and Procedures

Our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) are designed to ensure that information that is required to be disclosed in the reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission and to ensure that information required to be disclosed is accumulated and communicated to management, including our

President and Chief Executive Officer and our Chief Financial Officer, to allow timely decisions regarding disclosure. The President and Chief Executive Officer and the Chief Financial Officer, with assistance from other members of management, have reviewed the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Report and, based on their evaluation, have concluded that the disclosure controls and procedures were effective as of such date.

Changes in Internal Control over Financial Reporting

There was no change in Mastercard's internal control over financial reporting that occurred during the three months ended June 30, 2023 that has materially affected, or is reasonably likely to materially affect, Mastercard's internal control over financial reporting.

PART II

Item 1. Legal proceedings

Refer to Note 15 (Legal and Regulatory Proceedings) to the consolidated financial statements included in Part I, Item 1.

Item 1A. Risk factors

For a discussion of our risk factors, see Part I, Item 1A - Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2022.

Item 2. Unregistered sales of equity securities and use of proceeds

Issuer Purchases of Equity Securities

During the second quarter of 2023, we repurchased 6.5 million shares for $2.4 billion at an average price of $373.52 per share of Class A common stock. The following table presents our repurchase activity on a cash basis during the second quarter of 2023:

Period	Total Number of Shares Purchased	Average Price Paid per Share (including commission cost)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Shares that may yet be Purchased under the Plans or Programs [1, 2]
April 1 - 30	2,070,540	$ 367.29	2,070,540	$ 8,535,407,807
May 1 - 31	2,250,153	$ 379.19	2,250,153	$ 7,682,181,892
June 1 - 30	2,148,089	$ 373.59	2,148,089	$ 6,879,666,632
Total	6,468,782	$ 373.52	6,468,782	

1 Dollar value of shares that may yet be purchased under the repurchase programs is as of the end of the period.

2 In December 2022 and November 2021, our Board of Directors approved share repurchase programs of our Class A common stock authorizing us to repurchase up to $9.0 billion and $8.0 billion, respectively.

Item 5. Other information

Rule 10b5-1 and Non-Rule 10b5-1 Trading Arrangements

During the three months ended June 30, 2023, certain of our officers and directors adopted or terminated trading arrangements for the sale of shares of our common stock as follows:

			Plans			
	Action	**Date**	**Rule 10b5-1 [1]**	**Non-Rule 10b5-1 [2]**	**Number of Securities to be Sold**	**Expiration**
Sachin Mehra, Chief Financial Officer	Adoption	May 1, 2023	X	-	16,838 shares of Class A Common Stock underlying employee stock options	The earlier of (i) date when all securities under plan are exercised and sold and (ii) December 31, 2023
Timothy Murphy, Chief Administrative Officer	Adoption	May 3, 2023	X	-	14,761 shares of Class A Common Stock underlying employee stock options and 256 shares of Class A Common Stock	The earlier of (i) date when all securities under plan are exercised and sold and (ii) December 31, 2023
Julius Genachowski, Director	Adoption	May 15, 2023	X	-	622 shares of Class A Common Stock	The earlier of (i) date when all shares under plan are sold and (ii) February 29, 2024
Ajay Bhalla, President, Cyber and Intelligence Solutions	Adoption	June 15, 2023	X	-	13,996 shares of Class A Common Stock underlying employee stock options	The earlier of (i) date when all securities under plan are exercised and sold and (ii) March 1, 2024
					12,292 shares of Class A Common Stock underlying employee stock options	The earlier of (i) date when all securities under plan are exercised and sold and (ii) May 15, 2024

1 Intended to satisfy the affirmative defense conditions of Rule 10b5-1(c)

2 Not intended to satisfy the affirmative defense conditions of Rule 10b5-1(c)

Other Information

Pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012, we hereby incorporate by reference herein the disclosure contained in Exhibit 99.1.

Item 6. Exhibits

Refer to the Exhibit Index included herein.

Exhibit index

Exhibit Number	Exhibit Description
10.1*+	Mastercard International Senior Executive Annual Incentive Compensation Plan, as amended and restated June 12, 2023.
10.2*+	Mastercard Incorporated Employee Stock Purchase Plan, effective as of June 27, 2023.
10.3*	Schedule of Non-Employee Directors' Annual Compensation effective as of July 1, 2023.
10.4*	Form of Deferred Stock Unit Agreement for awards granted under 2006 Non-Employee Director Equity Compensation Plan (effective for awards granted on and subsequent to June 27, 2023).
10.5*	Form of Restricted Stock Agreement for awards granted under 2006 Non-Employee Director Equity Compensation Plan (effective for awards granted on and subsequent to June 27, 2023).
31.1*	Certification of Michael Miebach, President and Chief Executive Officer, pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2*	Certification of Sachin Mehra, Chief Financial Officer, pursuant to Rule 13a-14(a)/15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1*	Certification of Michael Miebach, President and Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Sachin Mehra, Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
99.1*	Disclosure pursuant to Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012.
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

+ Management contracts or compensatory plans or arrangements.

* Filed or furnished herewith.

The agreements and other documents filed as exhibits to this Report are not intended to provide factual information or other disclosure other than with respect to the terms of the agreements or other documents themselves, and should not be relied upon for that purpose. In particular, any representations and warranties made by the Company in these agreements or other documents were made solely within the specific context of the relevant agreement or document and may not describe the actual state of affairs as of the date they were made or at any other time.

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

MASTERCARD INCORPORATED
(Registrant)

Date:	July 27, 2023	By:	/S/ MICHAEL MIEBACH **Michael Miebach** **President and Chief Executive Officer** **(Principal Executive Officer)**
Date:	July 27, 2023	By:	/S/ SACHIN MEHRA **Sachin Mehra** **Chief Financial Officer** **(Principal Financial Officer)**
Date:	July 27, 2023	By:	/S/ SANDRA ARKELL **Sandra Arkell** **Corporate Controller** **(Principal Accounting Officer)**

EXHIBIT 31.1

CERTIFICATION PURSUANT TO
RULE 13a-14(a)/15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Michael Miebach, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Mastercard Incorporated for the three months ended June 30, 2023;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 27, 2023

By: /s/ Michael Miebach

Michael Miebach

President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION PURSUANT TO RULE 13a-14(a)/15d-14(a), AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Sachin Mehra, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Mastercard Incorporated for the three months ended June 30, 2023;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: July 27, 2023

By: /s/ Sachin Mehra

Sachin Mehra

Chief Financial Officer

EXHIBIT 32.1

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the quarterly report of Mastercard Incorporated (the "Company") on Form 10-Q for the three month period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael Miebach, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

July 27, 2023

/s/ Michael Miebach

Michael Miebach

President and Chief Executive Officer

EXHIBIT 32.2

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the quarterly report of Mastercard Incorporated (the "Company") on Form 10-Q for the three month period ended June 30, 2023 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sachin Mehra, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

July 27, 2023

/s/ Sachin Mehra

Sachin Mehra

Chief Financial Officer

EXHIBIT 99.1

Section 13(r) Disclosure

Mastercard Incorporated ("Mastercard") has established a risk-based compliance program designed to prevent us from having business dealings with Iran, as well as other prohibited countries, regions, individuals or entities. This includes obligating issuers and acquirers to screen account holders and merchants, respectively, against the U.S. Office of Foreign Assets Control's ("OFAC") sanctions lists, including the List of Specially Designated Nationals ("SDN list").

We identified through our compliance program that:

- for the three months ended June 30, 2023, Mastercard processed transactions resulting from acquirers located in the Europe and Eastern Europe/Middle East/Africa regions having each acquired transactions for an Iranian airline

- for some or all of the three years ended December 31, 2022 and the three months ended March 31, 2023, Mastercard processed transactions resulting from an acquirer located in the Asia/Pacific region having acquired transactions for consular services with an Iranian embassy

OFAC regulations and other legal authorities provide exemptions for certain activities involving dealings with Iran. However, Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 requires us to disclose whether we, or any of our affiliates, have knowingly engaged in certain transactions or dealings involving the Government of Iran or with certain persons or entities found on the SDN list, regardless of whether these dealings constitute a violation of OFAC regulations.

We do not calculate net revenues or net profits associated with specific merchants (our customers' customers). However, we used our fee schedule and the aggregate number and amount of transactions involving the above merchants to estimate the net revenue and net profit we obtained with respect to the relevant periods described above. Both the number of transactions and our estimated net revenue and net profits for these periods are de minimis.