

2022 Annual Report

Fiserv is a global technology leader enabling money movement for financial institutions, businesses and consumers.



FAST @MPANY











Business in more than 100 countries

Reaching nearly 100% of U.S. households



#1

in Merchant Acquiring

#1

in Issuer Processing

#'

in Account Processing

#1

in Mobile Banking

#'

in Online Banking

#1

Bill Payment Provider

#1

Person-to-Person Payment Provider

#1

in Account-to-Account Transfers

Dear Fellow Shareholders,

At Fiserv, we pride ourselves on being one of the original "fintechs," a provider of the technology used to support and enable financial institutions. This definition changed over the years as "fintech" came to represent companies with technology designed to disrupt



Frank J. Bisignano Chairman, President and Chief Executive Officer

financial services and its incumbent leaders. Now, there is a shift back in favor of technology providers that couple innovation with stability, profitability and scale to bring modern solutions to new and established merchants and financial institutions. Fintech has come full circle, and Fiserv is again being recognized as its leader.

To lead in fintech today means not just enabling commerce and money movement, but disrupting on behalf of, not in place of, its long-standing participants. Through a focus on innovation, talent and investment, we have demonstrated our ability to make strategic choices that enhance our clients' ability to grow. The result is business in more than 100 countries and reaching nearly 100% of U.S. households. Since 2020, we have invested more than \$5.5 billion of capital internally and on acquisitions, more than our closest competitors.

We have earned a privileged role as the operating system for our merchant and financial institution clients through our willingness to put capital to work to disrupt ourselves with the development, acquisition and integration of the latest technologies.

- Our acquisition of Clover® is an early example of our disruption and innovation on behalf of small businesses. Through continued investment, we now offer leading, integrated payment solutions to merchants, including omnichannel capability, SaaS-based services and optimized hardware for businesses of all sizes.
- With our Ondot acquisition, we gained a world-class digital card experience platform which we integrated into our mobile banking application. As a result, today, over 850 of our financial institution clients provide their customers with an industry-leading digital experience, natively integrated into their mobile banking application. Through internal development, we are helping financial institutions offer digital solutions across all payment rails, from card to ACH to real-time, via a single, secure network.
- Recently-acquired Finxact will allow us to take our bank and credit union clients
 to the next level of speed and efficiency on a real-time cloud-native platform.
 This innovation adds to our leading in-house software and outsourced data center
 solutions and will keep us essential to our clients, allow us to grow as they grow,
 and extend our solutions to financial service providers of all sizes, and companies
 looking to partner to embed such services.

Looking ahead to 2023, the pace of innovation will not slow as we seek to sustain our growth momentum. We are bringing more vertical-specific, integrated software and low-cost, high-tech point-of-sale solutions that include digital wallet and QR code capability for merchants; next-generation digital banking solutions with extended real-time capability; and Data-as-a-Service for banks and merchants to optimize business decisions as we harness the data we process on their behalf.

Growth Minded

For Fiserv, 2022 marked a year of strong growth, continued innovation, and significant wins across our range of businesses against a challenging macro backdrop. We hold a privileged position with the clients we serve, and our unparalleled reach and scale, broad portfolio of leading technology solutions, and commitment to excellence continued to resonate with them.

Our operating model, which enables us to invest in our business while expanding margins, is based on a virtuous cycle where investment begets growth. In turn, that growth drives higher incremental margins and generates strong cash flow for continued re-investment and capital returns to our shareholders.

Our focus remains on developing and delivering solutions that help our clients grow. For example, our Clover and CaratSM operating systems serve our clients better than the point products that they are replacing. This leads to faster-than-market growth and a meaningful uplift in revenue as revenue per customer increases and churn decreases.

Our high level of recurring revenue combined with a focus on operating excellence has allowed us to grow our adjusted earnings per share in a variety of economic environments, and, in 2022, led to double-digit adjusted earnings per share growth for an unprecedented 37th year in a row. Given our leading position and 2022 performance, I am confident that our stakeholders will increasingly look to Fiserv for value – our clients for innovative solutions and expertise, our people for career growth and programs that support their well-being, and our shareholders for an attractive total return.

Confirmed by Results

Financial institutions and businesses were again confronted with a difficult operating environment in 2022: uncertain economic conditions, geopolitical tension including the war in Ukraine, a recovering supply chain, and the pandemic and its effect on workplace dynamics. As always, we were there for our clients – businesses from the largest corporations to the corner store, and banks, credit unions, and fintechs of all sizes – providing a constant in the way money moves.

In 2022, we achieved a second consecutive year of 11% organic revenue growth, a reflection of our dedication to investing for growth and our commitment to achieving the

promised value creation from the merger. With our broader product set and cross-selling efforts, we've expanded our client list and deepened our relationships with existing merchant and financial institution clients to grow well beyond historical levels as we tap into new opportunities.

We continued to invest in organic innovation and acquisitions, in our technology platforms and product integration, and in our people and facilities. We increased our investment levels, which supported better-than-expected growth last year, while meeting our commitment to lower our debt leverage to historical levels. In 2022, we deployed \$2.5 billion across our business in investment spending, including on our cloud-based core banking platforms; on Clover, our merchant operating system for small businesses, and Carat for enterprise businesses; in our ISV and direct sales channels; on our digital payments products; and in modern campus environments for our people. Our investments were selected through our disciplined approach to capital allocation to drive significant risk-adjusted shareholder returns, where our benchmark for capital deployment has been and remains share repurchases.

I'm proud to say that we also delivered another strong year of adjusted operating margin, expanding 120 basis points. We grew adjusted earnings per share 16% and returned \$2.5 billion of cash to shareholders through share repurchase.

While we can celebrate having achieved our goals, we are not standing still. For us, 2023 is a year of operational excellence, extending our consistent track record of growth and margin expansion. I am eager to drive deeper process improvement now that merger integration and the acute phase of the pandemic are behind us. We are empowering operational leaders throughout the company with enhanced reporting capabilities to elevate our performance across the organization – from new business onboarding and service delivery to direct sales and our product deliverables. We are focused on achieving the world-class operating capability that should, in turn, create value for our shareholders.

Segment Highlights

Merchant Acceptance

Our Merchant Acceptance segment continues to lead in growth and global reach. This segment just completed two consecutive years of double-digit revenue growth as we've increased software penetration and optimized sales channels. Our Clover and Carat operating systems led the way, while the remaining merchant processing business continues to grow, and represents an attractive longer-term opportunity as those merchants convert to our newer platforms, adding to customer lifetime value.

In the small and medium-sized business (SMB) space, we serve merchants wherever they want to conduct business – through our Clover cloud-based operating system,

our channel partners, including ISVs, banks, and ISOs, and payment facilitators, or PayFacs. Our focus remains on value-added services penetration, which reached 16% for Clover at year end, from 13% a year earlier. One example is Clover Capital, where we make working capital cash advances to our small merchants. Their strong demand for this service has led to rapid growth and higher customer retention.

In 2023, we'll be emphasizing our e-commerce capabilities for SMB merchants as an easy way to access our full suite of value-added services. We've been building PayFac, marketplace and software platform solutions, including real-time boarding, underwriting, and split-pay services, and we anticipate that this year will be a breakout year for Fiserv in this high-growth customer segment.

For our enterprise merchants, we introduced several new Carat capabilities last year, such as Pay By Bank, digital checks, prepaid cards, and multi-purse wallets, including alternative payments. In 2023, we will round out our Commerce Hub, a single platform to manage in-person and online commerce with a growing set of easy-to-integrate hardware and software solutions.

Payments and Network

The Payments and Network segment offers credit card issuing services, debit card networks and processing, and digital payment services. In 2022, we outpaced our medium-term organic revenue growth expectations and continued to expand margins. This reflects several key wins over the past three years, including three of the top 25 U.S. card issuers, as well as a major retailer's private label card portfolio and a new outsourcing relationship with Canada's leading credit union consortium.

Following these wins, the pipeline of potential new deals is replenished, and we remain confident in our ability to continue winning based on our innovations. We've been investing in both our credit and debit processing capabilities to deliver a robust set of APIs, AI-based fraud management, cardholder experience technology via the Ondot solution set, and integrated output solutions, along with ongoing cloud-enablement of key features. Meanwhile, we've grown to be the largest implementer of Zelle® solutions outside of the founding banks.

Exciting opportunities for 2023 include our debit networks, where government regulation may drive added demand, and real-time payments (RTP); The Clearing House RTP® Network, Zelle and FedNowSM which enable various ways to move money in real time and may create new demand for an end-to-end solutions provider; and the NOW® Network from Fiserv.

Fintech

The Fintech segment is a source of technology innovation for our bank, credit union and emerging fintech clients. Revenue growth has accelerated from low single-digit levels as we deliver new products and share gains. Our multi-year contracts are diversified across thousands of financial institution clients, and represent high recurring revenue.

Our open-source approach is being well-received by clients. We've pre-integrated third-party digital solutions into many of our cores and made these solutions discoverable to clients via our app marketplace. We've also made our platform attractive to the developer community by exposing our microservice APIs through Developer Studio, which was recognized in January by DeveloperWeek for Best Innovation in Financial Services.

Another highlight of 2022 was the acquisition of Finxact, our new cloud-native banking solution which we've been integrating with our existing digital surrounds, selling to our existing clients as an innovation platform or side-car core, and winning new logo sales. Our pipeline for 2023 includes financial institutions of all sizes, from pioneering digital banks to large card issuers.

With these advancements, we are positioning Fiserv as the destination of choice for embedded finance – integrating card issuing and processing, merchant and core banking capabilities for a variety of non-traditional providers, including retailers, quick service restaurants, PayFacs and government entities, who can benefit from working with our banking customers as sponsors.

A Broader Impact

For our efforts in 2022, Fiserv was named a FORTUNE® World's Most Admired Company, a hard-earned distinction that is the definitive scorecard on corporate reputation. We're honored that our most highly rated attributes are Innovation and Financial Soundness, two important qualities in the current environment. In the U.S., we were named a top 10 overall performer on the inaugural American Opportunity Index, which ranks large companies by how well they create economic mobility for workers, and we were recognized by Forbes as one of America's Best Large Employers for 2022, which highlights the large employers that American workers would most recommend to others. The recognition we've earned reflects investments we are making in our people, as well as the focus and strength of our management team.

Fiserv was also recognized for programs that reflect the diversity of our workforce, including the Bloomberg Gender-Equality Index, the Disability Equality Index, the

Human Rights Campaign Corporate Equality Index, Military Times Best for Vets, and the 5-Star Employer by VETS Indexes. Distinctions such as these are complemented by our active and growing Employee Resource Groups (ERGs). In 2022, more than 6,500 associates in 17 countries were active members of an ERG. These groups held more than 250 events during the year, engaging our associates worldwide.

As we continued our return to Fiserv office locations in 2022, we opened our new Innovation Center @The Park in New Jersey, which is built to meet a LEED Platinum standard, and built our European headquarters in Dublin, Ireland, to the LEED Gold standard. We also announced plans to move our headquarters location to downtown Milwaukee, further strengthening our ties to our Wisconsin roots. Our commitment to green building principles for new real estate projects, including our LEED Gold office in New York, speaks to our focus on ESG strategy.

We are committed to assessing climate-related risks and opportunities in our Corporate Social Responsibility report in a manner consistent with the Task Force on Climate-Related Financial Disclosures (TCFD). We will also continue to provide disclosures in alignment with the Sustainability Accounting Standards Board (SASB) and Global Reporting Initiative (GRI) reporting standards. These enhancements are designed to improve transparency for our stakeholders and provide a strong foundation for future work in this area.

In alignment with our long-held belief that companies can be platforms for good, we began our Back2Business program in the U.S. in 2020 to help small, minority-owned businesses with their recovery during the pandemic. In 2021, we extended this \$50 million program to the UK, and I'm proud to say we continued this important work in 2022. Since inception we have provided more than 1,600 grants to eligible small businesses, along with educational opportunities and access to our small business consultants.

Enabling career growth and mobility remained a top priority in 2022. During the year, 45% of our exempt open roles were filled via internal moves with more than half of them for elevated positions within the company, and 14% percent of our global workforce was promoted to higher level positions. With technology roles being the largest component of our workforce, we have a significant emphasis on our software engineering practice. From recognizing our Distinguished and Expert Engineers who serve as role models for others, to programming that supports continuous learning for early- and mid-career technologists, we have created an environment that enables us to attract and retain top technology talent. And, for all our associates worldwide, we continued our focus on overall well-being with mental health resources and other wellness programs.

Reaching Higher

Being deeply engaged in our clients' success is important to me. I'm energized by the opportunity to continue to drive strategy and results for the benefit of our clients and to further extend our position as an industry leader. While others may have been focused on disrupting financial services, we've been steadily delivering value, building significant scale, and deploying deep knowledge and insights from our decades of experience. We understand that leadership means we must continue to innovate and wisely invest capital, serve our clients with excellence, and lead the way to the future.

Our approach to innovation goes beyond our products and services to our talent management processes and workplace experience. During the pandemic, we re-imagined our physical location strategy, choosing to operate from larger strategic hub locations to best enable in-office collaboration and opportunities for career growth, and to mirror our clients' approach to serving their customers and members. We have an expectation of in-office roles being performed from the office a majority of the time and are doing well against this objective. Our clarity of workplace expectations, and the continuity, consistency and collaboration of our management team, enables us to attract and retain top talent.

We are privileged to work with clients that are highly motivated to create differentiated experiences for their customers and members by using Fiserv technology, and we believe that we have the best client base in the industry. This, along with our resilient business model, global focus, and unique set of assets, sets us apart; and our focus on driving operational excellence in our first full year of managing the company in a non-pandemic environment is wind at our backs for 2023.

I have long believed in the notion that optimism is a force multiplier. I'm thankful for the more than 41,000 people of Fiserv who look ahead and see opportunity. Together, we are working hard every day to deliver on our commitments and elevate our performance for our clients, each other and shareholders.

Thank you.

Frank J. Bisignano

Chairman, President and Chief Executive Officer

Fiserv

Our Aspiration

To move money and information in a way that moves the world

Our Values



Create with purpose.

Do the right thing.

Inspire & achieve excellence.

one Fisery.

Our Purpose

To deliver superior value for our clients through leading technology, targeted innovation and excellence in everything we do

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM 10-K

\checkmark	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended: December 31, 2022						
		OR					
	TRANSITION REPORT PURSUAN	NT TO SECTION 13 OR	15(d) OF THE SI	ECURITIES EXCHANG	E ACT OF		
	For the transition period from	_ to					
		Commission file number	r: 1-38962				
		Fiserv,	Inc.				
	(Exac	et Name of Registrant as S	pecified in Its Ch	narter)			
Wisconsin			39-1506125				
	(State or Other Jurisdiction Incorporation or Organization		(I. R. S. Employer Identification No.)				
		255 Fiserv Drive Brook	field. WI 53045	5			
		(Address of Principal Executive	•				
Secur	ities registered pursuant to Section 120	(262) 879-5 Registrant's Telephone Number (b) of the Act:		ə)			
	Title of each class	Trading Sym	bol(s) Name	e of each exchange on wh	ich registered		
(Common Stock, par value \$0.01 per sh			The NASDAQ Stock Mar			
	0.375% Senior Notes due 2023	FISV23		The NASDAQ Stock Mar	ket LLC		
	1.125% Senior Notes due 2027	FISV27		The NASDAQ Stock Mar	ket LLC		
	1.625% Senior Notes due 2030	FISV30		The NASDAQ Stock Mar	ket LLC		
	2.250% Senior Notes due 2025	FISV25		The NASDAQ Stock Mar	ket LLC		
	3.000% Senior Notes due 2031	FISV31		The NASDAQ Stock Mar			
Indica	ities registered pursuant to Section 120 ate by check mark if the registrant is a ✓ No □	(g) of the Act: Non	e				
Indica Excha repor	ate by check mark if the registrant is not ate by check mark whether the registra- ange Act of 1934 during the preceding its), and (2) has been subject to such fil ate by check mark whether the registra	nt: (1) has filed all report. 12 months (or for such sling requirements for the p	s required to be finorter period that past 90 days. Ye	led by Section 13 or 15(d the registrant was require es ☑ No □) of the Securities ed to file such		
pursu	ant to Rule 405 of Regulation S-T dure to such files). Yes \square No \square			-			
Indica repor	ate by check mark whether the registrating company, or an emerging growth ting company," and "emerging growth	company. See the definiti	ons of "large acce	elerated filer," "accelerate			
	Large accelerated filer	Z	Accelera	ated filer			
	Non-accelerated filer			reporting company			
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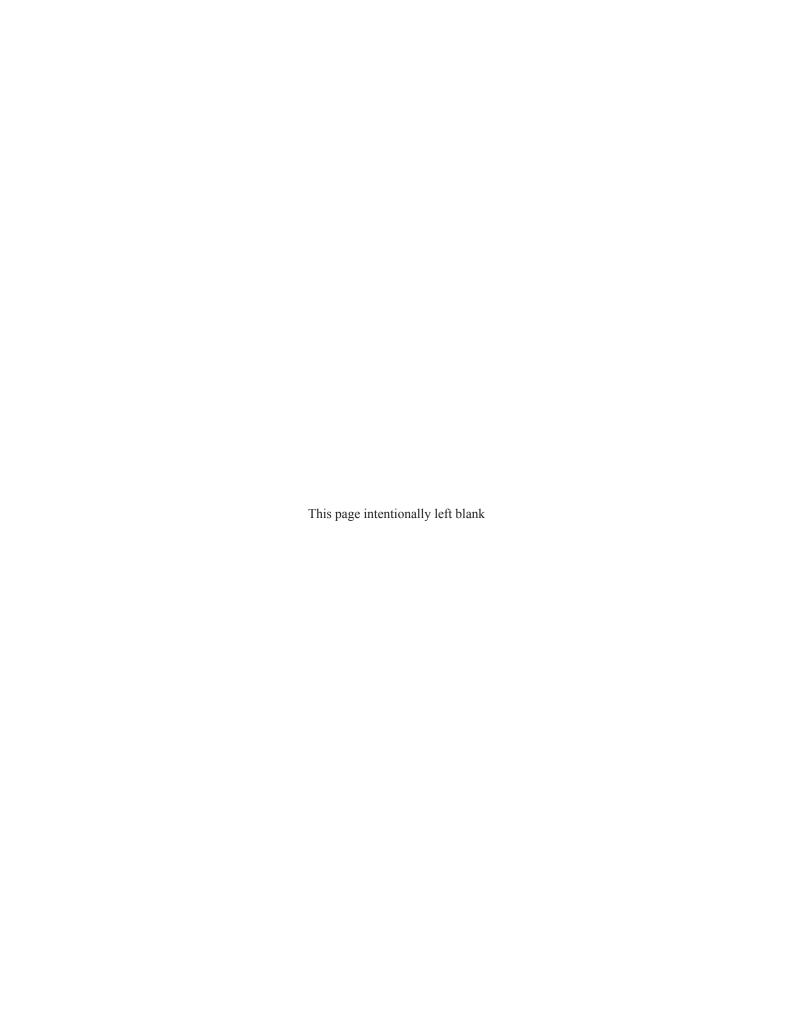
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box
Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.
If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. \Box
Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to $\$240.10D-1(b)$. \square
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes $\ \square$ No $\ \square$
The aggregate market value of the common stock of the registrant held by non-affiliates as of June 30, 2022 (the last trading day of the second fiscal quarter) was \$55,896,739,541 based on the closing price of the registrant's common stock on the NASDAQ Global Select Market on that date. The number of shares of the registrant's common stock, \$0.01 par value per share, outstanding at February 17, 2023 was 628,126,357.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this report incorporates information by reference to the registrant's proxy statement for its 2023 annual meeting of shareholders, which proxy statement will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2022.

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains "forward-looking statements" intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those that express a plan, belief, expectation, estimation, anticipation, intent, contingency, future development or similar expression, and can generally be identified as forward-looking because they include words such as "believes," "anticipates," "expects," "could," "should," or words of similar meaning. Statements that describe our future plans, objectives or goals are also forward-looking statements.

The forward-looking statements in this report involve significant risks and uncertainties, and a number of factors, both foreseen and unforeseen, could cause actual results to differ materially from our current expectations. The factors that may affect our results include, among others, the following: our ability to compete effectively against new and existing competitors and to continue to introduce competitive new products and services on a timely, cost-effective basis; changes in customer demand for our products and services; the ability of our technology to keep pace with a rapidly evolving marketplace; the success of our merchant alliances, some of which we do not control; the continuing impact of the COVID-19 pandemic on our employees, clients, vendors, supply chain, operations and sales; the impact of a security breach or operational failure on our business including disruptions caused by other participants in the global financial system; losses due to chargebacks, refunds or returns as a result of fraud or the failure of our vendors and merchants to satisfy their obligations; changes in local, regional, national and international economic or political conditions, including those resulting from heightened inflation, rising interest rates, a recession, or intensified international hostilities, and the impact they may have on us and our customers; the effect of proposed and enacted legislative and regulatory actions affecting us or the financial services industry as a whole; our ability to comply with government regulations and applicable card association and network rules; the protection and validity of intellectual property rights; the outcome of pending and future litigation and governmental proceedings; our ability to successfully identify, complete and integrate acquisitions, and to realize the anticipated benefits associated with the same; our ability to attract and retain key personnel; volatility and disruptions in financial markets that may impact our ability to access preferred sources of financing and the terms on which we are able to obtain financing or increase our costs of borrowing; adverse impacts from currency exchange rates or currency controls; changes in corporate tax and interest rates; and other factors identified in this Annual Report on Form 10-K for the year ended December 31, 2022 and in other documents that we file with the Securities and Exchange Commission. You should consider these factors carefully in evaluating forward-looking statements and are cautioned not to place undue reliance on such statements, which speak only as of the date of this report. We undertake no obligation to update forward-looking statements to reflect events or circumstances occurring after the date of this report. We are not including the information provided on the websites referenced herein as part of, or incorporating such information by reference into, this Annual Report on Form 10-K.

PART I

In this report, all references to "we," "us," "our" and "Fiserv" refer to Fiserv, Inc. ("Fiserv"), and, unless the context otherwise requires, its consolidated subsidiaries.

Item 1. Business

Overview

Fisery, Inc. is a leading global provider of payments and financial services technology solutions. We are publicly traded on the NASDAQ Global Select Market and part of the S&P 500 Index. We serve clients around the globe, including merchants, banks, credit unions, other financial institutions and corporate clients. We help clients achieve best-in-class results through a commitment to innovation and excellence in areas including account processing and digital banking solutions; card issuer processing and network services; payments; e-commerce; merchant acquiring and processing; and the Clover® cloud-based point-of-sale ("POS") and business management platform. Most of the products and services we provide are necessary for our clients to operate their businesses and are, therefore, non-discretionary in nature. We serve our global client base by working among our geographic teams across various regions, including the United States and Canada; Europe, Middle East and Africa; Latin America; and Asia Pacific.

In 2022, we had \$17.7 billion in total revenue, \$3.7 billion in operating income and \$4.6 billion of net cash provided by operating activities. Processing and services revenue, which in 2022 represented 82% of our total revenue, is primarily generated from account- and transaction-based fees under multi-year contracts that generally have high renewal rates. We have operations and offices located both within the United States (the "U.S." or "domestic") and outside of the U.S. ("international") with revenues from domestic and international products and services as a percentage of total revenue as follows for the years ended December 31:

(In millions)	 2022		2021		2020	
Total revenue	\$ 17,737	\$	16,226	\$	14,852	
Domestic	86 %)	86 %)	87 %	
International	14 %)	14 %)	13 %	

We have grown our business organically and through acquisitions, by signing new clients, expanding the products and services we provide to existing clients, offering new and enhanced products and services developed through innovation and acquisition, and extending our capabilities geographically, all of which have enabled us to deliver a wide range of integrated products and services and created new opportunities for growth. Our operations are comprised of the Merchant Acceptance ("Acceptance") segment, the Financial Technology ("Fintech") segment and the Payments and Network ("Payments") segment.

Our headquarters are located at 255 Fiserv Drive, Brookfield, Wisconsin 53045, and our telephone number is (262) 879-5000. On October 27, 2022, we announced that we plan to relocate our global headquarters location to Milwaukee, Wisconsin in 2023.

Acceptance

The businesses in our Acceptance segment provide a wide range of commerce-enabling solutions and serve merchants of all sizes around the world. Acceptance solutions enable businesses to securely accept payment transactions online or in-person. Payment transactions include credit, debit, stored-value and loyalty payments online or through a physical POS or mobile device, such as a smartphone or tablet.

The services in this segment include POS merchant acquiring and digital commerce services; mobile payment services; security and fraud protection products; Clover, our cloud-based POS and integrated commerce operating system for small and mid-sized businesses ("SMBs") and independent software vendors ("ISVs"); and CaratSM, our integrated operating system for large businesses. We distribute the products and services in the Acceptance segment businesses through a variety of channels, including direct sales teams, strategic partnerships with agent sales forces, ISVs, financial institutions, and other strategic partners in the form of joint venture alliances, revenue sharing alliances ("RSAs"), and referral agreements. Merchants, financial institutions and distribution partners in the Acceptance segment are frequently clients of our other segments.

Clover

Clover is our cloud-based POS and integrated operating system for SMBs and ISVs designed to enable businesses to maximize operating effectiveness. The Clover platform includes hardware and software technology necessary to enable SMB merchants

to accept payments, process transactions, provide online ordering, maintain an e-commerce presence, and generate consumer loyalty through Clover's customer engagement tools. By integrating next-generation hardware and software-as-a-service ("SaaS") applications, Clover has become a leader in enabling omnichannel commerce solutions for SMBs and ISVs, with touchless commerce through QR code-based payments, online ordering solutions, and virtual terminals. We also offer small business owners advance access to capital through our Clover Capital cash advance program.

Carat

Carat is our integrated operating system for large businesses, designed to enable clients to accept more payments, engage more customers, and optimize commerce. Carat helps clients maximize approval rates, reduce declines, lower fraud and chargebacks, reduce costs and improve the customer experience by enabling new capabilities, such as buying online, picking up in store or ordering ahead. Through this integrated operating system, a variety of payment and commerce solutions can be accessed, including payment acceptance, payments optimization, network routing, fraud detection, online electronic benefits transfers and digital payouts. This wide variety of services enables Carat to help clients create more revenue, reduce their cost of payments, reach more consumers, and enable innovative omnichannel transactions such as voice-enabled commerce and payments.

Distribution Channels and Partnerships

Acceptance segment businesses distribute solutions and services through direct sales teams, as well as indirect sales channels, such as agent sales forces, ISVs, value-added resellers ("VARs"), and payment service providers ("PSPs"). We provide agent sales forces, ISVs, VARs and PSPs with specialized sales capabilities and integrated merchant technology solutions to help them grow their businesses and manage their portfolios. Partner technology tools enable real-time access to portfolio activity and pricing management. We also provide marketing services, data analytics and other tools that enable partners to further expand their businesses through local communities, e-commerce channels and specific industry verticals.

In addition, the businesses in our Acceptance segment leverage powerful sales capabilities for financial institution and non-financial institution partners to distribute their products and solutions through strategic arrangements including joint venture alliances, RSAs and referral agreements. These strategic alliances combine our commerce-enabling technology, processing capabilities and management expertise with the distribution capabilities, footprint and customer relationships of our partners.

Fintech

The businesses in our Fintech segment provide financial institutions around the world with the technology solutions they need to run their operations, including products and services that enable financial institutions to process customer deposit and loan accounts and manage an institution's general ledger and central information files. As a complement to the core account processing functionality, the Fintech segment businesses also provide digital banking, financial and risk management, professional services and consulting, item processing and source capture, and other products and services that support numerous types of financial transactions. Certain of the businesses in the Fintech segment provide products or services to corporate clients to facilitate the management of financial processes and transactions. Many of the products and services offered in the Fintech segment are integrated with products and services provided by our other segments.

Account Processing

We provide account servicing and management technology products and services to our depository institution clients, as well as a range of integrated, value-added banking products and services. Account processing solutions enable a financial institution to operate systems that process customer deposit and loan accounts, an institution's general ledger, central information files and other financial information. These solutions also include security, report generation and other features that financial institutions need to process transactions for their customers, as well as to facilitate compliance with applicable regulations. Although many of our clients obtain a majority of their processing requirements from us, our software design allows clients to start with one application and, as needed, add applications and features developed by us or by third parties. We support a broad range of client-owned peripheral devices manufactured by a variety of vendors, which reduce a new client's initial conversion expenses, enhance existing clients' ability to change technology and broaden our market opportunity.

The principal account processing solutions used by our depository institution clients are Cleartouch®, DNA®, Precision®, Premier®, Signature® and Portico®. All of these systems are available in the U.S., and the DNA and Signature platforms are also available globally. In 2022, we acquired Finxact, Inc. ("Finxact") to enhance our digital banking offerings. Account processing solutions are offered primarily as an outsourced service or can be installed on client-owned computer systems or those hosted by third parties.

Our account processing business also provides consulting services, business operations services and related software products that enable the transition of check capture from branch and teller channels to digital self-service deposit channels, including

mobile, merchant and ATM. Through the Fiserv® Clearing Network, we provide check clearing and image exchange services. Other products and services include image archive with online retrieval, in-clearings, exceptions and returns, statements, and fraud detection.

Financial Risk Management Solutions

Our Financial Risk Management Solutions products and services deliver operating efficiencies and management insight that enable our clients to protect, manage and grow their businesses. Our Deposit Liquidity solutions enable our clients to retain, monetize and grow their deposit account base while analyzing customer demand and providing for customer short-term liquidity. Our commercial payments solutions provide financial institutions with the infrastructure they need to process, route and settle non-card-based electronic payments, including Automated Clearing House ("ACH"), wire and instant payments, and to efficiently manage associated information flows. Our Digital Efficiency solutions include Nautilus[®] (a content management product), Frontier[™] (a reconciliation product) and Prologue[™] Financials, which combines enterprise performance management and financial control offerings to deliver budgeting, planning, financial accounting and automated reconciliation and account certification tools to our clients. These solutions are further complemented by fraud detection and mitigation through our fraud and financial crime risk management solutions. Clients may use our payment platform applications on a licensed or hosted basis, and as an add-on to existing technology or as a stand-alone comprehensive modern payments platform.

Digital Solutions

Our Digital Solutions business includes Experience Digital ("XD"), our principal consumer and business digital banking platform, which includes our AbilitiSM, Architect[™], Corillian Online[®] and Mobiliti[™] products. XD is a cloud-based platform that enables customers to perform balance inquiries, view their transaction history and access electronic bill payments, person-toperson digital payments, card services, account and loan originations, funds transfer and personal financial management tools. XD can be highly customized and integrated to multiple products and services, allowing clients to deploy new services quickly and efficiently to increase customer acquisition, engagement and insights.

Our OriginateSM suite of products includes SecureNow[™], Credit SenseSM and LinkLive and enables digital account opening and loan origination services that support multi-channel strategies for financial institutions. Originate is designed to be a single point of origination that qualifies users across a wide range of digital opening and lending opportunities. SecureNow delivers real-time cybersecurity defense capability, integrating industry-leading controls into a single product. Credit Sense helps customers instantly access and monitor credit scores and enables digital marketing offers. LinkLive is a cloud-based multimedia communications solution that includes video communication, online chat and secure messaging, enabling customer engagement and servicing automation. These applications are pre-integrated with our XD platform for rapid deployment to improve digital experiences.

Payments

The businesses in our Payments segment provide financial institutions, corporate clients and the public sector with the products and services required to process digital payment transactions. This includes card transactions such as debit, credit and prepaid card processing and services; a range of network services; security and fraud protection products; and card production and print services. In addition, the Payments segment businesses offer non-card digital payment software and services, including bill payment, account-to-account transfers, person-to-person payments, real-time payments, electronic billing, and security and fraud protection products. Clients of the Payments segment businesses represent a wide range of industries around the world, including merchants, financial institutions and distribution partners in our other segments.

Network and Debit Processing

Our network and debit processing business is a leader in electronic funds transfer services and provides a comprehensive payments solution through a variety of products and services. We provide financial institution clients with a full range of debit processing services, including tokenization, loyalty and reward programs; customized authorization processing; gateway processing to payment networks; ATM managed services and cash and logistics management; and risk management products. We own and operate the Accel[®], MoneyPass[®] and STAR[®] networks, which provide access to funds at the point-of-sale and ATMs using CardFree CashSM and chip and traditional magnetic stripe cards. Our debit processing also provides a range of security, risk and fraud management solutions, which incorporate machine-learning-based predictive technology, that help financial institutions securely operate and grow their business by preventing fraud. Our networks' POS support delivers comprehensive coverage of PIN and PIN-less authentication support at physical and e-commerce merchants domestically. CardHub provides our clients' customers with mobile, customizable card management and alert tools that drive engagement and revenue for card issuers. In 2021, we introduced Credit Choice, a fully managed credit card issuing-as-a-service solution which allows community financial institutions to offer their customers a branded credit card that is fully integrated into their debit solutions without the operational burden of managing their own credit card portfolio.

Credit Processing

Our credit processing business provides solutions to financial institutions and other issuers of credit, such as group service providers, retailers and consumer finance companies, to enable them to process credit card transactions on behalf of their customers. Depending on the needs of our client, we deliver these solutions through our proprietary processing platforms, software application licenses, or software-as-a-service hosted in the cloud. Our solutions in North America primarily use our OptisSM platform to provide transaction authorization and posting, account maintenance and settlement. Our VisionPLUS[®] software is used globally as both a processing solution and a licensed software solution that enables some clients to process transactions on their own. We also provide financial institutions with solutions that support the lifecycle of a cardholder, including acquisition, fraud detection, credit risk management, servicing, collections and professional services.

Output Solutions

Our Output Solutions business provides business statement and card products and services to clients across a wide variety of industries, including financial services, healthcare, retail, utilities, telecommunications, insurance and travel and entertainment. Our products and services include electronic document management through our electronic document delivery products and services; card manufacturing, personalization and mailing; statement production and mailing; and design and fulfillment of direct mail services.

Digital and Bill Payments

Our digital and bill payments business is comprised of electronic bill payment and presentment services, as well as other digital payment solutions for businesses and consumers, including person-to-person payments, account-to-account transfers and account opening and funding. Our principal electronic bill payment and presentment product for financial and other institutions, CheckFree® RXP®, allows our clients' customers to manage household bills via an easy-to-use, online tool; view billing and payment information; pay and manage all of their bills in one place; and complete same-day or next-day bill payments to a wide range of billers and others.

Our person-to-person payments and account-to-account transfer services allow consumers a convenient way to send and receive money while offering financial institutions the opportunity to generate new transaction-based revenue, attract new accounts and increase loyalty among existing customers. We partner with Early Warning Services, LLC to offer a turnkey implementation of its Zelle® real-time person-to-person payments service. Our turnkey solution simplifies the implementation of Zelle by providing interface, risk management, alerting, settlement and other services to clients.

Biller Solutions

Our biller solutions business provides electronic billing and payment services to companies that deliver bills to their customers, such as utilities, telephone and cable companies, lending institutions and insurance providers. These services enable our clients to reduce costs, collect payments faster through multiple channels and increase customer satisfaction, and provide customers flexible, easy-to-use ways to view and pay their bills. Our clients' customers access our electronic billing and payment systems by viewing or paying a bill through a financial institution's bill payment application, using a biller's website, mobile application, automated phone system or customer service representative, or by paying in-person at one of the many nationwide walk-in payment locations. Because our biller clients are able to receive all of these services from us, we can eliminate the operational complexity and expense of supporting multiple vendor systems or in-house-developed systems.

Prepaid Solutions

Our prepaid solutions include stored value cards offered by our Gift Solutions and Money Network [®] businesses. The Gift Solutions business provides end-to-end, omnichannel solutions to securely implement and manage gift card programs that help clients drive revenue, engagement and loyalty. These solutions include physical and digital gift card fulfillment, program management, e-commerce gift card storefronts, security and fraud protection, transaction processing services, incentive and rebate cards as well as reloadable and non-reloadable prepaid cards that may be used with a variety of mobile applications. The Money Network service simplifies payment distribution for organizations while reducing or eliminating expenses associated with issuing traditional paper checks. This service also provides consumers without bank accounts with fast, digital access to their money, including wages. Money Network solutions include Electronic Payroll Delivery, government disbursements, digital disbursements and corporate incentives as well as single-load and reloadable prepaid account options. Account holders of the Money Network Electronic Payroll Delivery Service have access to a Money Network Card, Money Network Checks and a robust mobile app to manage their account anytime, anywhere.

Our Strategy

Our aspiration is to move money and information in a way that moves the world. Our purpose is to deliver superior value for our clients through leading technology, targeted innovation and excellence in everything we do. We are focused on operating businesses where we have: deep industry expertise that enables us to serve the market with high effectiveness; a strong competitive position, currently or via a clear path in the foreseeable future; long-term, trusted client relationships that are based on recurring services and transactions; differentiated solutions that deliver value to our clients through integration and innovation; and strong management to execute strategies in a disciplined manner. Consistent with this focus, we continue to operate our business in accordance with the following strategic framework:

- Client Relationship Value. We plan to increase the number and breadth of our client relationships by, among other actions: continuing to integrate our products and services; introducing new products and services that are aligned with market needs; combining products and services to deliver enhanced, integrated value propositions; and delivering quality service and support for our clients.
- *Innovation*. We seek to be an innovation leader, utilizing our assets and capabilities to be at the forefront of our industry and enable our clients to deliver best-in-class results.
- Operational Effectiveness. We believe we can further improve the quality of our client delivery while reducing our costs by using the opportunities created by our size and scale.
- *Portfolio Management*. We expect to acquire businesses when we identify: a compelling strategic need, such as a product, service or technology that helps meet client demand; an opportunity to change industry dynamics; a way to achieve business scale that enables competition and operational efficiency; or similar considerations. We expect to divest businesses that are not in line with our market, product or financial strategies.
- *Capital Discipline*. We intend to make capital allocation decisions that offer the best prospects for our long-term growth and profitability, which may include, among other matters: internal investment; repayment of debt; repurchases of our own shares; or acquisitions.

Servicing the Market

The financial technology industry is highly dynamic, with new innovations entering the market and driving the expectations of our clients globally. The markets for our solutions have specific needs and requirements, with strong emphasis placed by clients on quality, security, service reliability, timely introduction of new capabilities and features, flexibility and value. This requires us to continue our focus on product and service delivery, integration and innovation to meet and exceed the specific needs of our clients. We believe that our financial strength and specialized market knowledge enable us to support our clients to meet their changing preferences. In addition, we believe that our focus on quality, innovation, client service and our commitment of substantial resources to training and technical support helps us to identify and fulfill the needs of our clients.

Product Development

To meet the changing technology needs of our clients, we continually develop, maintain and enhance our products and systems. Our development and technology operations apply the expertise of multiple teams to design, develop and maintain specialized products and processing systems. Our products and solutions are designed to meet the preferences and diverse requirements of the international, national, regional or local market-specific merchant and financial services environments of our clients. In developing our products, we use current software development principles, such as service-oriented architecture, to create efficiencies, and we stress interaction with and responsiveness to the needs of our clients.

Resources

Our business depends on a variety of resources to operate including products and services provided to us by third parties. For example, we rely on our human capital resources for product development (including product design and coding), sales, operations (including customer service, technology support, security and compliance) and management; access to financial and telecommunication networks; computers, servers, mainframes, microchips and other computer equipment; and Clover and other POS devices. We periodically review our resource requirements and sources, as well as our relationships with key vendors, to best meet the needs of our business including global sourcing efforts and alternate supplier resourcing. We believe we have access to the resources necessary for our current business needs. More information regarding supply chain risks can be found under the heading "Competitive and Business Risks" in the Risk Factors section of this report and our human capital resources can be found below under the heading "Human Capital."

Intellectual Property

We regard our software, transaction processing services and related products as proprietary, and we use a combination of patent, copyright, trademark and trade secret laws, internal security practices, employee confidentiality and assignment agreements, and third-party non-disclosure agreements to protect our intellectual property assets. Our patents cover innovations relating to numerous financial software and hardware products and services, and we continue, where appropriate, to seek and secure patents with respect to our ongoing innovations. We believe that we possess all proprietary rights necessary to conduct our business.

Competition

The market for technology products and services in the industries we serve is fragmented, highly competitive, and served by a multitude of large and small businesses. Our principal competitors include other large, integrated providers of financial services technology and payment systems, data processing affiliates of large companies, processing centers owned or operated as user cooperatives, financial institutions, merchant acquirers, ISOs, ISVs, payments companies and payment network operators. Our competitors also include global and local IT product and services companies and payment service providers and processors. We expect competition to continue to increase as new companies enter our markets and existing competitors expand or consolidate their product lines and services. Some of these competitors possess substantial financial, sales and marketing resources and can compete with us in various ways, including through the use of integrated product offerings and through pricing and long-standing relationships. Depending on the product or service, competitive factors may include quality, security, innovation, breadth or novelty of features and functionality, client satisfaction, market opportunity, integration, reliability, agility, global reach, multiple distribution channels, service reliability and performance standards, timely introduction of new products and features, platform scalability and flexibility, and value. We believe that we compete favorably in each of these categories. Additional information about competition in our segments is provided below.

Acceptance

Our Acceptance segment competes with merchant acquirers and financial institutions that provide acquiring and processing services to businesses on their own. In many cases, our alliance and commercial partners, such as ISOs and ISVs, compete against each other. We also compete with merchant services providers and, in a number of countries outside of the U.S., our Acceptance segment competes with a growing number of local and regional providers. In addition, payment networks and large technology, media and other integrated payments software providers are increasingly offering products and services that compete with our suite of merchant acquiring solutions.

Fintech

Our products and services in the Fintech segment compete with large, diversified software and service companies and independent suppliers of software products. Existing and potential financial institution clients may also develop and use their own in-house systems. In addition, we compete with vendors that offer similar transaction processing products and services to financial institutions.

Payments

The businesses in our Payments segment primarily compete with businesses that offer consumer payment solutions and a number of payment and card issuer processors. In addition to traditional payments competitors, large technology, media and other emerging financial technology providers are increasingly seeking to provide alternative payment and financing solutions. Existing and potential financial institution and other corporate clients could also develop and use their own in-house systems or custom-designed solutions instead of our products and services.

Government Regulation

Our operations, and the products and services that we offer, are subject to various U.S. federal, state and local regulation, as well as regulation outside the U.S. We are also subject to non-government-issued rules and requirements, such as those promulgated by various payment networks. Failure to comply with these rules and regulations may result in the suspension or revocation of licenses or registrations, the limitation, suspension or termination of service and the imposition of civil and criminal penalties, including fines. We may also be required, among other things, to make significant additional investments to comply with rules and regulations, to modify our products or services or the manner in which they are provided, or to limit or change the amount or types of revenue we are able to generate.

Financial Institution Regulations. Because a number of our businesses provide services to regulated financial institutions, we are subject to examination by the U.S. Federal Financial Institutions Examination Council ("FFIEC"). The FFIEC is a formal interagency body empowered to examine significant service providers to financial institutions. The member agencies of the

FFIEC include the Federal Reserve Board, the Federal Deposit Insurance Corporation, the Office of the Comptroller of the Currency, the National Credit Union Administration, and the Consumer Financial Protection Bureau ("CFPB"), which is empowered to conduct rule-making and supervision related to, and enforcement of, "federal consumer financial laws," some of which apply to products and services offered by our clients. We are also subject to examination by the first three of these agencies which refer to themselves as the Federal Banking Agencies when acting together. We also have a subsidiary that engages in trust activities and is subject to regulation, examination and oversight by the Division of Banking of the Colorado Department of Regulatory Agencies.

In the U.S., we are also subject to the Dodd-Frank Wall Street Reform and Consumer Protection Act, which, among other things, caps debit interchange rates for certain card issuers; prohibits debit payment card networks from restricting card issuers from contracting with other payment card networks; prohibits card issuers and payment networks from restricting the ability of merchants to direct the routing of debit card transactions; requires all debit card issuers in the U.S. to participate in at least two unaffiliated debit payment card networks; and generally prohibits network exclusivity arrangements for prepaid card and healthcare debit card issuers. These regulations impact our card processing businesses and our clients' ability to generate revenue.

Certain of our subsidiaries hold payment institution or electronic money licenses. These subsidiaries are subject to regulation and oversight in the jurisdictions in which they operate, and may be required to meet minimum capital maintenance requirements or other obligations. In addition, several of our subsidiaries outside of the U.S. provide services such as merchant terminal leasing, debit processing, acquiring, issuing, factoring and settlement that make them subject to regulation by financial services supervisory agencies, including the Financial Conduct Authority ("FCA") in the United Kingdom ("U.K."), the Federal Financial Supervision Agency in Germany, the National Bank of Poland, the Reserve Bank of Australia, the Central Bank of Brazil and the Monetary Authority of Singapore.

Association and Network Rules. We are subject to rules of Mastercard, Visa, INTERAC, PULSE and other payment networks. In order to provide processing services, a number of our subsidiaries are registered with Visa and/or Mastercard as service providers for member institutions. A number of our subsidiaries outside the U.S. are direct members or associate members of Visa and Mastercard for purposes of conducting merchant acquiring. Various subsidiaries are also processor level members of numerous debit and electronic benefits transaction networks or are otherwise subject to various network rules in connection with processing services and other services we provide. As such, we are subject to applicable card association, network and national scheme rules that could subject us to fines or penalties. We are subject to network operating rules promulgated by Nacha relating to payment transactions processed by us using the ACH network and to various federal and state laws regarding such operations, including laws pertaining to electronic benefits transactions.

Privacy and Information Security Regulations. We provide services that are subject to various federal, state and foreign privacy laws and regulations, as well as association and network privacy rules, which govern, among other things, the collection, processing, storage, deletion, use and disclosure of personal information. These laws and rules contain a variety of obligations including the safeguarding of personal information, the provision of notices and use and disclosure rights. The regulations and rules are complex and evolving and can provide for significant penalties or the suspension or termination of our registrations or certifications for non-compliance.

In the U.S., we are subject to various federal and state privacy and security laws. The U.S. Gramm-Leach-Bliley Act ("GLBA") requires financial institutions to explain their information sharing practices to their customers and to safeguard sensitive data. We are subject to the GLBA and have privacy and security obligations to our clients who are regulated by the GLBA. The U.S. Health Insurance Portability and Accountability Act of 1996 ("HIPAA") governs the use and disclosure of protected health information in healthcare treatment, payment and operations by covered entities. We are also subject to the U.S. Federal Trade Commission Act, which empowers the Federal Trade Commission ("FTC") to prohibit unfair and deceptive privacy practices. In addition to the FTC Act, the FTC is also responsible for overseeing and enforcing the privacy provisions over certain aspects of the GLBA and the Fair Credit Reporting Act ("FCRA"), each of which is applicable to our businesses in certain circumstances.

We have obligations under state laws, such as the California Privacy Rights Act, which gives California consumers more control over the personal information businesses hold about them, as both a "business" and as a "service provider." In addition, Virginia, Colorado, Utah and Connecticut have passed comprehensive privacy acts that govern the personal data of their residents. We are also subject to the separate security breach notification laws of each of the 50 states, the District of Columbia, Guam, Puerto Rico and the U.S. Virgin Islands.

In the European Union ("E.U.") and the U.K., we are subject to the General Data Protection Regulation ("GDPR"), which impose a comprehensive approach to personal data protection and include penalties for non-compliance of up to the greater of 20 million Euro or four percent of a company's consolidated global revenue. There are numerous additional privacy laws and

regulations that apply to our businesses around the world which also provide for significant penalties. Some of these data protection laws, including in the E.U., India, United Arab Emirates and China, impose requirements regarding data rights and security and either prohibit the international transfer of personal data or restrict such transfers absent lawfully recognized transfer mechanisms.

Money Transmission and Payment Instrument Licensing and Regulations. We are subject to various U.S. federal, state and foreign laws and regulations governing money transmission and the issuance and sale of payment instruments, including some of our prepaid products. In the U.S., most states license money transmitters and issuers of payment instruments. Many states exercise authority over the operations of our services related to money transmission and payment instruments and, as part of this authority, subject us to periodic examinations. Many states require money transmitters, issuers of payment instruments and their agents to comply with federal and state anti-money laundering laws and regulations and often require the licensee to maintain certain levels of net worth.

Credit Reporting and Debt Collections Regulations. TeleCheck, our check acceptance business, is subject to FCRA and various similar state laws. The collection business within our subsidiary TRS Recovery Services, Inc. ("TRS") is subject to the U.S. federal Fair Debt Collection Practices Act and various similar state laws. TRS maintains licenses in a number of states in order to engage in collection in those states. TeleCheck and TRS are also subject to regulation, supervision and examination from the CFPB. In addition, several of our subsidiaries are subject to comparable local laws regarding collection activities and obtaining credit reports and our U.K. branch described above also holds FCA permissions for debt collection activities.

Unfair Trade Practice Regulations. We and our clients are subject to various federal, state and foreign laws prohibiting unfair or deceptive trade practices. Various regulatory enforcement agencies, including the FTC and state attorneys general, have authority to take action against parties that engage in unfair or deceptive trade practices or violate other laws, rules and regulations. If we process payments for a merchant or other client in violation of laws, rules and regulations, we could be subject to enforcement actions and incur losses and liabilities that may impact our business.

Anti-Money Laundering, Anti-Bribery, and Sanctions Regulations. We are subject to anti-money laundering laws and regulations, including the Bank Secrecy Act (the "BSA"). Among other things, the BSA requires money services businesses (such as money transmitters, issuers of money orders and official checks, and providers of prepaid access) to develop and implement anti-money laundering programs. Our acquiring businesses outside the U.S. are subject to anti-money laundering laws and regulations in the countries where they operate. Our Money Network Financial, LLC subsidiary provides prepaid access for various open loop prepaid programs for which it is the program manager and therefore must meet the requirements of the Financial Crimes Enforcement Network.

We are subject to anti-corruption laws and regulations, including the U.S. Foreign Corrupt Practices Act ("FCPA") and similar laws outside of the U.S. such as the U.K. Bribery Act, that prohibit the making or offering of improper payments to foreign government officials and political figures. The FCPA has a broad reach and requires maintenance of appropriate records and adequate internal controls to prevent and detect possible FCPA violations.

We are also subject to certain economic and trade sanctions programs that are administered by the U.S. Treasury Department's Office of Foreign Assets Control ("OFAC"), which prohibit or restrict transactions to or from, or dealings with, specified countries, governments, individuals and entities that are specially designated nationals of those countries, including narcotics traffickers and terrorists or terrorist organizations. Other group entities may be subject to additional local sanctions requirements in other relevant jurisdictions.

Similar anti-money laundering, counter terrorist financing and proceeds of crime laws apply to movements of currency and payments through electronic transactions and to dealings with persons specified in lists maintained by the country equivalents to OFAC lists in several other countries and require specific data retention obligations to be observed by intermediaries in the payment process. Our businesses in those jurisdictions are subject to those data retention obligations.

Communications Laws. We are subject to various federal and state laws that govern telephone calls and the issuance of text messages to clients and consumers in the U.S. as well as to regulations that impose requirements on marketing emails sent to U.S residents. Our international subsidiaries are subject to equivalent laws in applicable jurisdictions.

Indirect Regulatory Requirements. A number of our clients are subject to various regulations and compliance obligations that do not apply directly to us but impact the services that we provide to our clients. To remain competitive, we have expended, and expect to expend in the future, significant resources to develop and update our products and services to assist our clients to meet various compliance obligations. In addition, independent auditors annually review many of our operations to provide internal control evaluations for our clients and their auditors.

Human Capital

The Talent and Compensation Committee of our Board of Directors assists the Board of Directors in establishing our compensation philosophy and strategy and overseeing our human capital management strategy which includes maintaining a culture committed to attracting, developing and retaining top talent, supporting diversity and inclusion, fostering innovation, and promoting employee engagement, safety and well-being.

Development and Retention

We are committed to creating a high-performance culture that consistently delivers excellence for our clients and long-term value for our shareholders while providing a workplace experience for our employees that values collaboration, innovation and diversity. Career development and internal mobility are important aspects of our value proposition for employees. We provide employees with numerous training and development opportunities, including through an e-learning platform specifically geared toward global technology associates; our Leading Women program, designed to accelerate the professional growth of female top talent across each of our global regions; our Leading Fiserv program, designed to develop critical leadership skills for frontline managers; our Vision to Results leadership program, focused on driving enterprise goals; and an online learning platform that provides global access to over 25,000 courses. Internal mobility is our primary approach for filling open positions and fostering career advancement for our employees. In an effort to further encourage internal mobility, we launched a global awareness campaign intended to create a sustainable internal talent pipeline while increasing associate retention, job satisfaction and personal and professional growth opportunities.

We have adopted a pay-for-performance philosophy that is designed to recognize performance and reward achievement of our strategic business objectives and financial results. Total compensation consists of a competitive base pay and annual incentive opportunity delivered in a mix of cash and equity that is designed to promote retention and reward the attainment of defined performance goals. We are committed to providing fair pay to our employees regardless of gender, race, ethnicity or any other protected characteristic, and we conduct periodic pay audits to track, measure and evaluate employee compensation. In addition, throughout the year, we celebrate employee contributions and achievements through a peer-based global recognition program that enables recognition and financial rewards.

Diversity and Inclusion

We are committed to cultivating a diverse, respectful and inclusive workplace by:

- Advancing diversity at all levels in the organization, including increasing the representation of women and minorities
 in leadership positions, requiring consideration of diverse candidates for our Board of Directors and senior leadership
 positions, dedicating talent acquisition resources focused on hiring diverse individuals, providing career opportunities
 to the military community, and deepening relationships with historically black colleges and universities, industry
 networks, and military and veterans' organizations that provide access to underrepresented populations; and
- Promoting employee awareness through education and participation in diversity and inclusion programs, such as our inclusive leader assessment and coaching program, to develop the competencies necessary to create an inclusive workplace; eight Employee Resource Groups ("ERGs") with over 6,500 associate members who support each other and mutually elevate professional development; and a host of diversity and inclusion training courses available to all employees.

As of December 31, 2022, we had over 41,000 employees worldwide, approximately 41% of whom were female. In the U.S., approximately 37% of our employees self-identified as racially/ethnically diverse.

We continue to focus on our efforts on supporting our community with several initiatives, including:

- Investing in small, minority-owned businesses by providing financial support, business expertise, and leading technology solutions, as well as through strategic partnerships and community engagement; and
- Strengthening partnerships with organizations focused on human rights, racial equity and social justice, including through work by our ERGs with over 100 community organizations and groups.

Employee Engagement

We value employee engagement and feedback. Throughout the year, we engage with our employees through events such as lunch-and-learns, quarterly all-hands meetings, town halls, leadership meetings and other forums. We encourage managers to meet regularly with their teams and encourage skip-level discussions.

To assess employee engagement, we periodically collect employee feedback through employee engagement surveys, including annual enterprise-wide surveys and issue-specific surveys. These surveys cover a variety of topics, such as engagement, well-being, client experience, communication, teamwork, manager effectiveness, trust and diversity and inclusion. In addition to assessing engagement, the survey results enable us to gain insight into employee perspectives and issues which we use to enhance processes, set priorities and respond to associate concerns.

Safety and Well-Being

We are committed to the safety of our workforce and maintain a global safety program that is designed to protect the safety and well-being of our employees in the workplace, minimize injury and accident frequency and severity, minimize loss to property, equipment and operational disruption, and enable greater associate satisfaction and productivity.

We are also committed to providing comprehensive and competitive benefits to our associates that are responsive to their physical, financial, social and emotional needs. Our benefit offerings include a variety of medical and dental plan choices, mental health and counseling programs, caregiver support programs, enhanced family forming and planning resources, and paid time off. Significantly, we have not increased the cost of health care benefits for our employees in the past two years despite the increased cost of such benefits to the company. Investing in our associates in this way helps us retain top talent and demonstrates our commitment to our employees, our most important asset.

Available Information

Our website address is www.fiserv.com. We are not including the information provided on our website as a part of, or incorporating it by reference into, this Annual Report on Form 10-K. We make available free of charge (other than an investor's own internet access charges) through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to these reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the Securities and Exchange Commission.

Item 1A. Risk Factors

You should carefully consider each of the risks described below, together with all of the other information contained in this Annual Report on Form 10-K, before making an investment decision with respect to our securities. If any of the following risks develop into actual events, our business, results of operations or financial condition could be materially and adversely affected, and you may lose all or part of your investment.

Competitive and Business Risks

We operate in a competitive business environment and may not be able to compete effectively.

The markets for our products and services are highly competitive from new and existing competitors. Our principal competitors include other vendors and providers of financial services technology and payment systems, data processing affiliates of large companies, processing centers owned or operated as user cooperatives, financial institutions, independent sales organizations ("ISOs"), independent software vendors, payments companies and payment network operators. Our competitors vary in size and in the scope and breadth of the services they offer. Many of our larger existing and potential clients have historically developed their key applications in-house. As a result, we may compete against our existing or potential clients' in-house capabilities. In addition, we expect that the markets in which we compete will continue to attract new technologies and well-funded competitors, including large technology, telecommunication, media and other companies not historically in the financial services and payments industries, start-ups and international providers of products and services similar to ours. In addition, participants in the financial services, payments and technology industries may merge, create joint ventures or engage in other business combinations, alliances and consolidations that may strengthen their existing products and services or create new products and services that compete with ours. We cannot provide any assurance that we will be able to compete successfully against current or future competitors or that competitive pressures faced by us in the markets in which we operate will not materially and adversely affect our business, results of operations and financial condition.

If we fail to keep pace with technological change, we could lose clients or have trouble attracting new clients, and our ability to grow may be limited.

The markets for our products and services are characterized by constant and rapid technological change, evolving industry standards, frequent introduction of new products and services, and increasing client expectations. Our ability to respond timely to these changes, including by enhancing our current products and services and developing and introducing new products and services, will significantly affect our future success. In addition, the success of certain of our products and services rely, in part, on financial institutions, business partners and other third parties promoting the use of or distributing our products and services. If we are unsuccessful in developing, marketing and selling products or services that gain market acceptance, or if third parties

insufficiently promote or distribute our products and services, it would likely have a material adverse effect on our ability to retain existing clients, to attract new ones and to grow profitably.

If we are unable to renew contracts on favorable terms or if contracts are terminated prematurely, we could lose clients and our results of operations and financial condition may be adversely affected.

Failure to achieve favorable renewals of client contracts could negatively impact our business. At the end of the contract term, clients have the opportunity to renegotiate their contracts with us or to consider whether to engage one or more of our competitors to provide products and services or to perform the services in-house. Some of our competitors may offer more attractive prices, features or other services that we do not offer, and some clients may desire to perform the services themselves. Larger clients may be able to seek lower prices from us when they renew or extend a contract or the client's business has significant volume changes. In addition, larger clients may reduce the services we provide if they decide to move services inhouse. Further, our small merchant business clients may seek reduced fees due to pricing competition, their own financial condition or pressure from their customers.

We also have contracts with U.S. federal, state and local governments. The contracts with these clients may contain terms that are not typical for non-government clients, such as the right to terminate for convenience, the right to unilaterally modify or reduce work to be provided under the contract, significant or unlimited indemnification obligations and being subject to appropriation of funds for the government contract program. In addition, if any of our government contracts were to be terminated for default, we could be suspended or debarred from contracting with that entity in the future, which could also provide other government clients the right to terminate.

These factors could result in lower revenue from a client than we had anticipated based on our agreement with that client. If we are not successful in achieving high contract renewal rates and favorable contract terms, if contracts are terminated, or if we are prevented from performing work for these clients in the future, our results of operations and financial condition may be materially and adversely affected.

Our business depends, in part, on our merchant relationships and alliances, and if we are unable to maintain these relationships and alliances, our business may be adversely affected.

Under our alliance program, a bank or other institution forms an alliance with us, generally on an exclusive basis, either contractually or through a separate legal entity. Merchant contracts may be contributed to the alliance by us and/or the bank or institution. The banks and other institutions generally provide card association sponsorship, clearing and settlement services and typically act as a merchant referral source when the institution has an existing banking or other relationship with such merchant. We provide transaction processing and related functions to the alliance. Both we and our alliance partners may also provide management, sales, marketing and other administrative services. The alliance structure allows us to be the processor for multiple financial institutions, any one of which may be selected by the merchant as its bank partner. Our merchant acquiring business depends, in part, on our merchant relationships, alliances and other distribution channels. There can be no guarantee that we will achieve growth in our merchant relationships, alliances or other distribution channels. In addition, our contractual arrangements with merchants and merchant alliance partners are for fixed terms and may allow for early termination upon the occurrence of certain events. There can be no assurance that we will be able to renew our contractual arrangements with these merchants or merchant alliance partners on similar terms or at all. The loss of merchant relationships or alliance partners could negatively impact our business and have a material adverse effect on our results of operations and financial condition.

The ongoing COVID-19 pandemic has had, and may continue to have, adverse impacts on our business and may amplify many of our other known risks.

The ongoing COVID-19 pandemic and the related government actions taken to prevent the spread of COVID-19 have increased economic uncertainty and financial market volatility and caused a decline in consumer and business confidence, and could further negatively impact the demand for our products and services, including merchant acquiring and payment processing. Ultimately, the extent of the adverse impact of the COVID-19 pandemic on our business, results of operations, liquidity and financial condition will depend on, among other matters, the duration and intensity of the pandemic; the level of success of global vaccination efforts; governmental and private sector responses to the pandemic and the impact of such responses on us; and the impact of the pandemic on our employees, clients, vendors, supply chain, operations and sales, all of which are uncertain, difficult to predict and may remain prevalent for a significant period of time even after the pandemic subsides. These and other potential negative impacts relating to the COVID-19 pandemic may also heighten or exacerbate the other risk factors described in this Annual Report on Form 10-K.

Changes in card association and debit network fees or products could increase costs or otherwise limit our operations.

From time to time, card associations and debit networks, including the card networks which we own and operate, increase the processing and other fees (including what is commonly called "interchange fees") that they charge. It is possible that competitive and other pressures will result in us absorbing a portion of such increases in the future, or not being able to increase our own fees, which would increase our operating costs, reduce our profit margin, limit our growth, and adversely affect our business, results of operations and financial condition. In addition, the various card associations and networks prescribe certain capital requirements. Any increase in the capital level required would further limit our use of capital for other purposes.

Consolidations in the banking and financial services industry could adversely affect our revenue by eliminating existing or potential clients and making us more dependent on fewer clients.

Mergers, consolidations and failures of financial institutions reduce the number of our clients and potential clients, which could adversely affect our revenue. If our clients merge with or are acquired by other entities that are not our clients, or that use fewer of our services, they may discontinue or reduce their use of our services. Our alliance strategy could also be negatively affected by consolidations, especially where the financial institutions involved are committed to their internal merchant processing businesses that compete with us. It is also possible that the larger financial institutions that result from mergers or consolidations could have an increased ability to negotiate terms with us or could decide to perform in-house some or all of the services which we currently provide or could provide. Any of these developments could have a material adverse effect on our business, results of operations and financial condition.

Operational and Security Risks

Security incidents or other technological risks involving our systems and data, or those of our clients, partners or vendors, could expose us to liability or damage our reputation.

Our operations depend on receiving, storing, processing and transmitting sensitive information pertaining to our business, our employees, our clients and their customers. Under the card network rules, various federal, state and international laws, and client contracts, we are responsible for information provided to us by financial institutions, merchants, ISOs, third-party service providers and others. Preserving the confidentiality of sensitive business and personal information is critical to our business. Any unauthorized access, intrusion, infiltration, network disruption, ransom, denial of service or similar incident could disrupt the integrity, continuity, security and trust of our systems or data, or the systems or data of our clients, partners or vendors. These incidents are often difficult to detect and are constantly evolving. We expect that unauthorized parties will continue to attempt to gain access to our systems or facilities, and those of our clients, partners and vendors, through various means and with increasing sophistication, particularly as cybercriminals attempt to profit from increased online banking, e-commerce and other online activity. These events could create costly litigation, significant financial liability, increased regulatory scrutiny, financial sanctions and a loss of confidence in our ability to serve clients and cause current or potential clients to choose another service provider, all of which could have a material adverse impact on our business. In addition, we expect to continue to invest significant resources to maintain and enhance our information security and controls or to investigate and remediate any security vulnerabilities. Although we believe that we maintain a robust program of information security and controls and that none of the events that we have encountered to date have materially impacted us, we cannot be certain that the security measures and procedures we have in place to detect security incidents and protect sensitive data, including protection against unauthorized access and use by our employees, will be successful or sufficient to counter all current and emerging risks and threats. The impact of a material event involving our systems and data, or those of our clients, partners or vendors, could have a material adverse effect on our business, results of operations and financial condition.

Operational failures and resulting interruptions in the availability of our products or services could harm our business and reputation.

Our business depends heavily on the reliability of our systems. An operational failure that results in an interruption in the availability of our products and services could harm our business or cause us to lose clients. An operational failure could involve the hardware, software, data, networks or systems upon which we rely to deliver our services and could be caused by our actions, the actions of third parties or events over which we may have limited or no control. Events that could cause operational failures include, but are not limited to, hardware and software defects or malfunctions, ransomware, denial-of-service and other cyberattacks, human error, earthquakes, hurricanes, floods, fires, natural disasters, pandemics, power losses, disruptions in telecommunications services, fraud, military or political conflicts, terrorist attacks, computer viruses or other malware, or other events. In the event of operational failures or damage or disruption to our business due to these occurrences, we may not be able to successfully or quickly recover all of our critical business functions, assets and data through our business continuity program. Implementation delays, interruptions of service or hardware device defects could damage our relationship with clients and could cause us to incur substantial expenses, including those related to the payment of service credits, product recalls or other liabilities. A prolonged interruption of our services or network could cause us to experience data loss or a

reduction in revenue, and significantly impact our clients' businesses and the customers they serve. In addition, a significant interruption of service or product recall could have a negative impact on our reputation and could cause our current and potential clients to choose another service provider. As a provider of payments solutions and other financial services, clients, regulators and others may require enhanced business continuity and disaster recovery plans including frequent testing of such plans. Meeting these various requirements may require a significant investment of time and money. Any of these developments could have a material adverse impact on our business, results of operations and financial condition.

Disruptions of operations of other participants in the global financial system could prevent us from delivering our products and services.

The operations and systems of many participants in the global financial system are interconnected. Many of the transactions involving our products and services rely on multiple participants in the global financial system to move funds and communicate information to the next participant in the transaction chain. A disruption for any reason of the operations of a participant in the global financial system could impact our ability to obtain or provide information or cause funds to be moved in a manner to successfully deliver our products and services. Although we work with other participants to avoid any disruptions, there is no assurance that such efforts will be effective. Such a disruption could lead to our inability to deliver products and services, reputational damage, lost clients and revenue, loss of clients' and their customers' confidence, as well as additional costs, all of which could have a material adverse effect on our business, results of operations and financial condition.

We rely on third parties to provide products and services and if we are unable to obtain such products or services in the future or if these third parties fail to perform these services adequately, our business may be materially and adversely affected.

We rely on third parties we do not control to provide us with products and services, including payment card networks, acquiring processors, payment card issuers, financial institutions and the Automated Clearing House ("ACH") network which transmit transaction data, process chargebacks and refunds, and perform clearing services in connection with our settlement activities. If, for example, such third parties stop providing clearing services or limit our volumes, we would need to find other financial institutions to provide those services. In the event these third parties fail to provide these services adequately or in a timely manner, including as a result of errors in their systems or events beyond their control, or refuse to provide these services on terms acceptable to us or at all, and we are not able to find timely suitable alternatives, we may no longer be able to provide certain services to customers, which could expose us and our clients to information security, financial, compliance and reputational risks. We may be negatively impacted by a disruption to our supply chain or third-party delivery service providers, including if the factories that manufacture our point-of-sale devices, payment cards or computer chips for payment cards, or paper stock are temporarily closed or experience workforce shortages; shipping services are interrupted or delayed; there are increased lead times, shortages or higher costs for certain materials and components; or there are workforce shortages at our third-party customer support, software development or technology hosting facilities. If we are unable to renew our existing contracts with key vendors and service providers, we might not be able to replace the related product or service at all or at the same cost. Any of these risks could have a material adverse effect on our business, results of operations and financial condition.

We may experience software defects, development delays or installation difficulties, which would harm our business and reputation and expose us to potential liability.

Our services are based on sophisticated software and computer systems and we may encounter delays when developing new applications and services. Further, the software underlying our services may contain undetected errors or defects when first introduced or when new versions are released. We may also experience difficulties in installing or integrating our technology on systems or with other programs used by our clients. Defects in our software, errors or delays in the processing of electronic transactions or other difficulties could result in interruption of business operations, delay in market acceptance, additional development and remediation costs, diversion of technical and other resources, loss of clients or client data, negative publicity or exposure to liability claims. Although we attempt to limit our potential liability through disclaimers and limitation of liability provisions in our license and client agreements, we cannot be certain that these measures will successfully limit our liability.

Global Market Risks

Our business may be adversely affected by geopolitical and other risks associated with operations outside of the U.S. and, as we continue to expand internationally, we may incur higher than anticipated costs and may become more susceptible to these risks.

We offer merchant acquiring, processing and issuing services outside of the U.S., including in the U.K., Germany, Mexico, Uruguay, Argentina, India and Brazil. Our facilities outside of the U.S., and those of our suppliers and vendors, including manufacturing, customer support, software development and technology hosting facilities, are subject to risks, including natural disasters, public health crises, political crises, terrorism, war (such as the war in Ukraine), political instability and other events

outside of our or our suppliers' control. As we continue to expand internationally and grow our client base outside of the U.S., we may face challenges due to the presence of more established competitors and our relative lack of experience in such non-U.S. markets, and we may incur higher than anticipated costs. If we are unable to successfully manage the risks associated with the international operation and expansion of our business, our results of operations and financial condition could be negatively impacted.

Our business has been and may continue to be adversely impacted by U.S. and global market and economic conditions.

For the foreseeable future, we expect to continue to derive revenue primarily from products and services we provide to the financial services industry and from our merchant acquiring business. Given this focus, we are exposed to global economic conditions and adverse economic trends may accelerate the timing, or increase the impact of, risks to our financial performance. Such trends may include, but are not limited to, the following:

- inflation, foreign currency fluctuations, declining economies, social unrest, natural disasters, public health crises, including the occurrence of a contagious disease or illness, and the pace of economic recovery can change consumer spending behaviors, on which a significant portion of our revenues are dependent;
- low levels of consumer and business confidence typically associated with recessionary environments and those markets experiencing relatively high inflation and/or unemployment, may cause decreased spending by cardholders;
- budgetary concerns in the U.S. and other countries around the world could affect the U.S. and other specific sovereign credit ratings, impact consumer confidence and spending, and increase the risks of operating in those countries;
- emerging market economies tend to be more volatile than the more established markets we serve in the U.S. and Europe, and adverse economic trends, including high rates of inflation, may be more pronounced in such emerging markets;
- financial institutions may restrict credit lines to cardholders or limit the issuance of new cards to mitigate cardholder defaults;
- uncertainty and volatility in the performance of our clients' businesses may make estimates of our revenues, rebates, incentives, and realization of prepaid assets less predictable;
- our clients may decrease spending for value-added services; and
- government intervention, including the effect of laws, regulations, treaties and/or government investments in our clients, may have potential negative effects on our business, operations and our relationships with our clients or otherwise alter their strategic direction away from our products.

A further weakening in the economy or competition from other retailers could also force some retailers to close, resulting in exposure to potential credit losses and declines in transactions, and reduced earnings on transactions due to a potential shift to large discount merchants. Additionally, credit card issuers may reduce credit limits and become more selective in their card issuance practices.

A prolonged poor economic environment, including a potential recession in the U.S. or other economies in which our business operates, could result in significant decreases in demand by current and potential clients for our products and services and in the number and dollar amount of transactions we process or accounts we service, which could have a material adverse effect on our business, results of operations and financial condition.

In Europe, we are continuing to assess the implications of the U.K. leaving the E.U. ("Brexit"). We cannot predict the impact that Brexit, including any future trade agreements, divergence in law or currency fluctuations, will have on our business and our clients, and it is possible that it may adversely affect our operations and financial results.

Potential tariffs or trade wars could increase the cost of our products, which could adversely impact the competitiveness of our products and our financial results.

The U.S. has imposed tariffs on certain imports from China, including on some of our hardware devices manufactured in China. If the U.S. administration imposes additional tariffs, or if additional tariffs or trade restrictions are implemented by the U.S. or other countries, our hardware devices produced in China could be impacted. Although it is difficult to predict how current or future tariffs on items imported from China or elsewhere will impact our business, the cost of our products manufactured in China and imported into the U.S. or other countries could increase, which in turn could adversely affect the demand for these products and have a material adverse effect on our business and results of operations.

Regulatory and Compliance Risks

If we or third parties with whom we partner or contract fail to comply with applicable laws and regulations, we could be subject to liability and our business could be harmed.

If we or third parties with whom we partner or contract fail to comply with laws and regulations applicable to our business, including state and federal payment, cybersecurity, consumer protection, trade and data privacy laws and regulations, we could be exposed to litigation or regulatory proceedings, our client relationships and reputation could be harmed, and our ability to obtain new clients could be inhibited, which could have a material adverse impact on our business, results of operations and financial condition. Our clients are also subject to numerous laws and regulations applicable to banks, financial institutions and card issuers in the U.S. and abroad, and, consequently, we are at times affected by these federal, state, local and foreign laws and regulations. These laws and regulations are subject to change, and new laws, regulations and interpretations are regularly adopted.

Certain of our subsidiaries are licensed as money transmitters and are required, among other matters, to demonstrate and maintain certain levels of net worth and liquidity and to file periodic reports. Our direct-to-consumer payments businesses are subject to state and federal regulations in the U.S., including state money transmission regulations, anti-money laundering regulations, economic and trade sanctions administered by the U.S. Treasury Department's Office of Foreign Asset Control ("OFAC") and certain privacy regulations, such as the U.S. Gramm-Leach-Bliley Act. Our Money Network Financial, LLC subsidiary must meet the requirements of the Financial Crimes Enforcement Network because it is the program manager for various prepaid card programs. We operate businesses that are subject to credit reporting and debt collection laws and regulations in the U.S. and certain of our subsidiaries are subject to privacy, anti-money laundering, debt collection, and payment institution or electronic money licensing regulations outside the U.S.

We operate our business around the world, including in certain foreign countries with developing economies where companies often engage in business practices that are prohibited by laws applicable to us, including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act. These laws prohibit, among other things, improper payments or offers of payments to foreign governments and their officials and political parties for the purpose of obtaining or retaining business. We also derive revenue from transactions involving sales to U.S. federal, state and local governments and their respective agencies, and are subject to various procurement laws, regulations, and contract provisions relating to those contracts. We have implemented policies and training programs to comply with applicable laws, regulations and obligations; however, there can be no assurance that all of our employees, consultants and agents will comply with our policies and all applicable laws and any noncompliance could subject us to fines, penalties and loss of business.

We are also subject to certain economic and trade sanctions programs, including those that are administered by OFAC, which prohibit or restrict transactions to or from, or dealings with, specified countries, their governments, individuals and entities that are specially-designated nationals of those countries, narcotics traffickers and terrorists or terrorist organizations. Similar antimoney laundering, counter terrorist financing and proceeds of crime laws apply to movements of currency and payments through electronic transactions and to dealings with persons specified in lists equivalent to OFAC lists in several other countries and require specific data retention obligations to be observed by intermediaries in the payment process. Our businesses in those jurisdictions are subject to those data retention obligations.

The volume and complexity of the regulations that impact our business, directly or indirectly, will continue to increase our cost of doing business. Failure to comply with these laws and regulations, or changes in the regulatory environment, including changing interpretations and the implementation of new, varying or more restrictive laws and regulations by federal, state, local or foreign governments, may result in significant financial penalties, reputational harm, suspension or termination of our ability to provide certain services, or change or restrict the manner in which we currently conduct our business, all of which could have a material adverse impact on our business, results of operations and financial condition.

If we fail to comply with the applicable requirements of the payment card networks and Nacha, they could seek to fine us, suspend us or terminate our registrations, which could adversely affect our business.

In order to provide our transaction processing services, several of our subsidiaries are registered with Visa and Mastercard and other networks as members or service providers for member institutions. A number of our subsidiaries outside the U.S. are direct members or associate members of Visa and Mastercard for purposes of conducting merchant acquiring, and various subsidiaries are also processor level members of numerous debit and electronic benefits transaction networks. As such, we are subject to card association and network rules that could subject us or our clients to a variety of fines or penalties that may be levied by the card associations or networks for certain acts or omissions by us, acquiring clients, processing clients or merchants. In addition, we are subject to Nacha rules relating to payment transactions processed by us using the ACH network and to various federal and state laws regarding such operations, including laws pertaining to electronic benefits transactions, as well as the Payment Card Industry Data Security Standard enforced by the major card brands. The rules of Nacha and the card

networks are set by their respective boards, some of which are our competitors, and the card network rules may be influenced by card issuers, some of which offer competing transaction processing services.

If we fail to comply with these rules, we could be fined and our member registrations or certifications could be suspended or terminated. The suspension or termination of our member registrations or certifications, or any changes to the association and network rules, that we do not successfully address, or any other action by the card networks to restrict our ability to process transactions over such networks, could limit our ability to provide transaction processing services to clients and result in a reduction of revenue or increased costs of operation, which, in either case, could have a material adverse effect on our business and results of operations.

A heightened regulatory environment in the financial services industry may have an adverse impact on our clients and our business.

Since the enactment of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"), a number of substantial regulations affecting the supervision and operation of the financial services industry within the U.S. have been adopted, including those that establish the Consumer Financial Protection Bureau ("CFPB"). The CFPB has issued guidance that applies to, and conducts direct examinations of, "supervised banks and nonbanks" as well as "supervised service providers" like us. CFPB rules, examinations and enforcement actions may require us to adjust our activities and may increase our compliance costs. Changes to the Dodd-Frank Act or regulations could adversely impact our debit network business. In addition, certain of our alliance partners are subject to regulation by federal and state authorities and, as a result, could pass through some of those compliance obligations to us.

Additional regulation, examination or oversight of our business could require us to modify the manner in which we contract with or provide products and services to our clients; directly or indirectly limit how much we can charge for our services; require us to invest additional time and resources to comply with such oversight and regulations, including in respect of audits, investigations or enforcement actions related to us or third parties; or limit our ability to update our existing products and services, or require us to develop new ones. If this oversight or regulation negatively impacts the business, operations or financial condition of our clients, our business and results of operations could be materially and adversely affected because, among other matters, our clients could have less capacity to purchase products and services from us, could decide to avoid or abandon certain lines of business, or could seek to pass on increased costs to us by negotiating price reductions. Any of these events, if realized, could have a material adverse effect on our business, results of operations and financial condition.

Legislative or regulatory initiatives on cybersecurity and data privacy could adversely impact our business and financial results.

Cybersecurity and data privacy risks have received heightened legislative and regulatory attention. In Europe, the General Data Protection Regulation ("GDPR") extends the scope of the E.U. data protection law to all companies processing data of individuals within the E.U., regardless of the company's location, subject to certain limitations. The law requires companies to meet stringent requirements regarding the handling of personal data. E.U. data protection law continuously develops and requires significant changes to our policies and procedures. For example, in 2020, the Court of Justice of the E.U. issued a decision that invalidated the European Commission's adequacy decision for the E.U.-U.S. Privacy Shield Framework and placed additional safeguards necessary for transfers of personal data to the U.S., requiring companies and regulators to conduct case-by-case analyses to determine whether foreign protections concerning government access to transferred data meet E.U. standards. Together with our vendors and clients, we have been directly impacted by this decision, and our ability to transfer data outside the E.U. may be further impacted by determinations made by regulators in the E.U. We are also subject to U.K. GDPR following the U.K.'s exit from the E.U. Single Market and Customs Union. Our efforts to comply with E.U., U.K. and other privacy and data protection laws around the world that apply to our businesses could involve substantial expenses, divert resources from other initiatives and projects and limit the services we are able to offer. There is also increased focus on data localization requirements around the world in countries such as the United Arab Emirates, China and India which could impact our business model with respect to our storage and transfer of personal data. Failure to comply with applicable laws in this area could also result in significant fines, penalties and reputational damage.

In addition, U.S. banking agencies have adopted or proposed enhanced cyber risk management standards that would apply to us and our financial institution clients and that would address cyber risk governance and management, management of internal and external dependencies, and incident response, cyber resilience and situational awareness. Several states also have adopted or proposed new privacy and cybersecurity laws targeting these issues. Legislation and regulations on cybersecurity, data privacy and data localization may compel us to enhance or modify our systems, invest in new systems or alter our business practices or our policies on data governance and privacy. If any of these outcomes were to occur, our operational costs could increase significantly.

Failure to comply with state and federal antitrust requirements could adversely affect our business.

Through our merchant alliances, we hold an ownership interest in several competing merchant acquiring businesses while serving as an electronic processor for those businesses. In order to satisfy state and federal antitrust requirements, we actively maintain an antitrust compliance program. Notwithstanding our compliance program, it is possible that perceived or actual violations of state or federal antitrust requirements could give rise to regulatory enforcement investigations or actions. Regulatory scrutiny of, or regulatory enforcement action in connection with, compliance with state and federal antitrust requirements could have a material adverse effect on our reputation and business.

We may be sued for infringing the intellectual property rights of others.

Third parties may claim that we are infringing their intellectual property rights. We expose ourselves to additional liability when we agree to defend or indemnify our clients against third-party infringement claims. If the owner of intellectual property establishes that we are, or a client which we are obligated to indemnify is, infringing its intellectual property rights, we may be forced to change our products or services, and such changes may be expensive or impractical, or we may need to seek royalty or license agreements from the owner of such rights. If we are unable to agree on acceptable terms, we may be required to discontinue the sale of key products or halt other aspects of our operations. We may also be liable for financial damages for a violation of intellectual property rights, and we may incur expenses in connection with indemnifying our clients against losses suffered by them. Any adverse result related to violation of third-party intellectual property rights could materially and adversely harm our business, results of operations and financial condition. Even if intellectual property claims brought against us are without merit, they may result in costly and time-consuming litigation and may require significant attention from our management and key personnel.

Misappropriation of our intellectual property and proprietary rights could impair our competitive position.

Our ability to compete depends upon proprietary systems and technology. We actively seek to protect our intellectual property and proprietary rights. Nevertheless, unauthorized parties may attempt to copy aspects of our services or to obtain and use information that we regard as proprietary. The steps we have taken may not prevent misappropriation of technology. Agreements entered into for that purpose may not be enforceable or provide us with an adequate remedy. It is also possible that others will independently develop the same or similar technology. Further, we use open source software in connection with our solutions. Companies that incorporate open source software into their solutions have, from time to time, faced claims challenging the ownership of solutions developed using open source software. As a result, we could be subject to suits by parties claiming ownership of what we believe to be open source software. Effective patent, trademark, service mark, copyright and trade secret protection may not be available in every country in which our applications and services are made available. The laws of certain non-U.S. countries where we do business or contemplate doing business in the future may not recognize intellectual property rights or protect them to the same extent as do the laws of the U.S. Misappropriation of our intellectual property or potential litigation concerning such matters could have a material adverse effect on our business, results of operations and financial condition.

Changes in tax laws and regulations could adversely affect our results of operations and cash flows from operations.

Our operations are subject to tax by federal, state, local, and international taxing jurisdictions. Changes in tax laws or their interpretations in our significant tax jurisdictions could materially increase the amount of taxes we owe, thereby negatively impacting our results of operations as well as our cash flows from operations. Additionally, future tax laws, regulations or guidance from the Internal Revenue Service, the Securities and Exchange Commission or the Financial Accounting Standards Board could cause us to adjust current estimates in future periods, which could impact our earnings and have an adverse effect on our results of operations and cash flow.

The U.S. Congress, the Organization for Economic Co-operation and Development (the "OECD") and other government agencies in jurisdictions in which we do business remain focused on the taxation of multinational corporations. The OECD, which represents a coalition of member countries, including the U.S., is contemplating changes to numerous longstanding tax principles, including ensuring all companies pay a global minimum tax and expanding taxing rights of market countries. Because the timing of implementation and the specific measures adopted will vary among participating countries, significant uncertainty remains regarding the impact of these initiatives and their implementation could adversely affect our business or financial results.

Furthermore, our implementation of new practices and processes designed to comply with changing tax laws and regulations could require us to make substantial changes to our business practices, allocate additional resources, and increase our costs, which could negatively affect our business, results of operations and financial condition.

Unfavorable resolution of tax contingencies could adversely affect our results of operations and cash flows from operations.

Our tax returns and positions are subject to review and audit by federal, state, local and international taxing authorities. An unfavorable outcome to a tax audit could result in higher tax expense, thereby negatively impacting our results of operations as well as our cash flows from operations. We have established contingency reserves for known tax exposures relating to deductions, transactions and other matters involving some uncertainty as to the proper tax treatment of the item. These reserves reflect what we believe to be reasonable assumptions as to the likely final resolution of each issue if raised by a taxing authority. While we believe that the reserves are adequate to cover reasonably expected tax risks, there is no assurance that, in all instances, an issue raised by a tax authority will be finally resolved at a financial cost not in excess of any related reserve. An unfavorable resolution, therefore, could negatively impact our effective tax rate, financial position, results of operations, and cash flows in the current and/or future periods.

Organizational and Financial Risks

The failure to attract and retain key personnel could have a material adverse effect on our business.

We depend on the experience, skill and contributions of our senior management and other key employees. If we fail to attract, motivate and retain highly qualified management, technical, compliance and sales personnel, our future success could be harmed. Our senior management provides strategic direction for our company, and if we lose members of our leadership team, our management resources may have to be diverted from other priorities to address this loss. Our products and services require sophisticated knowledge of the financial services industry, applicable regulatory and industry requirements, computer systems, and software applications, and if we cannot hire or retain the necessary skilled personnel, we could suffer delays in new product development, experience difficulty complying with applicable requirements or otherwise fail to satisfy our clients' demands.

Losses due to chargebacks, refunds or returns could have a material adverse effect on our business, results of operations and financial condition.

We may be liable if our merchants or other parties that have obligations to deliver goods or services to cardholders fail to satisfy their obligations. For example, we and our merchant acquiring alliances may be subject to contingent liability for transactions originally acquired by us that are disputed by the cardholder and charged back to the merchants or other parties. These disputes could arise from fraud, misuse, unintentional use, settlement delay or failure, insufficiency of funds, returns, a failure to perform a service, or other reasons. If we or the alliance is unable to collect this amount from the merchant or other party because of the merchant's or other party's insolvency or other reasons, we or the alliance will bear the loss for the amount of the refund paid to the cardholder. Although we have an active program to manage our credit risk, and often mitigate our risk by obtaining collateral, a default on such obligations by one or more of our merchants or others could have a material adverse effect on our business, and results of operations and financial condition.

Additionally, we may be subject to potential liability for fraudulent transactions, including electronic payment and card transactions or credits initiated by merchants or others. Examples of merchant fraud include when a merchant or other party knowingly uses a stolen or counterfeit credit, debit or prepaid card, card number or other credentials to record a false sales transaction, processes an invalid card or intentionally fails to deliver the merchandise or services sold in an otherwise valid transaction. Criminals are using increasingly sophisticated methods to engage in illegal activities such as counterfeiting and fraud. We also rely on ISOs to sell our merchant processing services, which they may do by contracting with their own sub-ISOs. We rely on these ISOs and sub-ISOs to exercise appropriate controls to avoid fraudulent transactions. It is possible that incidents of fraud could increase in the future. Failure to effectively manage risk and prevent fraud, or otherwise effectively administer our chargeback responsibilities, would increase our chargeback liability and expose us to fines or other liabilities. Increases in chargebacks, fines or other liabilities could have a material adverse effect on our business, results of operations and financial condition.

Acquisitions subject us to risks, including assumption of unforeseen liabilities and difficulties in integrating operations.

A major contributor to our growth in revenue and earnings since our inception has been our ability to identify, acquire and integrate complementary businesses. We anticipate that we will continue to seek to acquire complementary businesses, products and services. We may not be able to identify suitable acquisition candidates or complete acquisitions in the future, which could adversely affect our future growth; or businesses that we acquire may not perform as well as expected or may be more difficult or expensive to integrate and manage than expected, which could adversely affect our business and results of operations. We may not be able to integrate all aspects of acquired businesses successfully or realize the potential benefits of bringing them together. In addition, the process of integrating these acquisitions may disrupt our business and divert our resources.

In addition, acquisitions outside of the U.S. often involve additional or increased risks including, for example:

- · managing geographically separated organizations, systems and facilities;
- integrating personnel with diverse business backgrounds and organizational cultures;
- complying with non-U.S. regulatory requirements;
- fluctuations in currency exchange rates;
- enforcement of intellectual property rights in some non-U.S. countries;
- difficulty entering new non-U.S. markets due to, among other things, consumer acceptance and business knowledge of these new markets; and
- general economic and political conditions.

These risks may arise for a number of reasons: we may not be able to find suitable businesses to acquire at affordable valuations or on other acceptable terms; we may face competition for acquisitions from other potential acquirers; we may need to borrow money or sell equity or debt securities to the public to finance acquisitions and the terms of these financings may be adverse to us; changes in accounting, tax, securities or other regulations could increase the difficulty or cost for us to complete acquisitions; we may incur unforeseen obligations or liabilities in connection with acquisitions; we may need to devote unanticipated financial and management resources to an acquired business; we may not realize expected operating efficiencies or product integration benefits from an acquisition; we could enter markets where we have minimal prior experience; and we may experience decreases in earnings as a result of non-cash impairment charges.

We may be obligated to indemnify the purchasers of businesses pursuant to the terms of the relevant purchase and sale agreements.

We have in the past and may in the future sell businesses. In connection with sales of businesses, we may make representations and warranties about the businesses and their financial affairs and agree to retain certain liabilities associated with our operation of the businesses prior to their sale. Our obligation to indemnify the purchasers and agreement to retain liabilities could have a material adverse effect on our business, results of operations and financial condition.

Our balance sheet includes significant amounts of goodwill and intangible assets. The impairment of a significant portion of these assets would negatively affect our results of operations.

Our balance sheet includes goodwill and intangible assets that represent 59% of our total assets at December 31, 2022. These assets consist primarily of goodwill and identified intangible assets associated with our acquisitions. On at least an annual basis, we assess whether there have been impairments in the carrying value of goodwill. In addition, we review intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. If the carrying value of the asset is determined to be impaired, then it is written down to fair value by a non-cash charge to operating earnings. An impairment of a significant portion of goodwill or intangible assets could have a material negative effect on our results of operations.

Existing or future leverage may harm our financial condition and results of operations.

At December 31, 2022, we had approximately \$21.4 billion of debt. We and our subsidiaries may incur additional indebtedness in the future. Our indebtedness could: decrease our ability to obtain additional financing for working capital, capital expenditures, general corporate or other purposes; limit our flexibility to make acquisitions; increase our cash requirements to support the payment of interest; limit our flexibility in planning for, or reacting to, changes in our business and our industry; and increase our vulnerability to adverse changes in general economic and industry conditions. Our ability to make payments of principal and interest on our indebtedness depends upon our future performance, which will be subject to general economic conditions and financial, business and other factors affecting our consolidated operations, many of which are beyond our control. In addition, if certain of our outstanding senior notes or commercial paper notes are downgraded to below investment grade, we may incur additional interest expense. If we are unable to generate sufficient cash flow from operations in the future to service our debt and meet our other cash requirements, including due to further deterioration in economic and market conditions, we may be required, among other things: to seek additional financing in the debt or equity markets; to refinance or restructure all or a portion of our indebtedness; or to reduce or delay planned capital or operating expenditures. Such measures might not be sufficient to enable us to service our debt and meet our other cash requirements. In addition, any such financing, refinancing or sale of assets might not be available at all or on economically favorable terms.

An increase in interest rates may negatively impact our operating results and financial condition.

Certain of our borrowings, including borrowings under our revolving credit facility, term loan, foreign lines of credit and commercial paper programs, are at variable rates of interest. During 2022, interest rates increased significantly and interest rates may continue to increase or remain at higher than recent historical levels in the future. An increase in interest rates would have a negative impact on our results of operations by causing an increase in interest expense. At December 31, 2022, we had approximately \$4.0 billion in variable rate debt, which includes \$200 million on our term loan, \$233 million drawn on our revolving credit facility and foreign lines of credit, and an aggregate amount of \$3.5 billion outstanding under our U.S. dollar and Euro commercial paper programs. Based on outstanding debt balances and interest rates at December 31, 2022, a 1% increase in variable interest rates would result in an increase to annual interest expense of \$40 million.

Our results of operations may be adversely affected by changes in foreign currency exchange rates.

We are subject to risks related to changes in currency rates as a result of our investments in foreign operations and from revenues generated in currencies other than the U.S. dollar. Revenues and profit generated by such international operations will increase or decrease compared to prior periods as a result of changes in foreign currency exchange rates. From time to time, we utilize foreign currency forward contracts and other hedging instruments to mitigate the market value risks associated with foreign currency-denominated transactions and investments. These hedging strategies may not, however, eliminate all of the risks related to foreign currency translation, and we may forgo the benefits we would otherwise experience if currency exchange rates were to change in our favor. We have also issued foreign currency-denominated senior notes and commercial paper notes for which payments of interest and principal are to be made in foreign currency, and fluctuations in foreign currency exchange rates could cause the expense associated with such payments to increase. In addition, we may become subject to exchange control regulations that restrict or prohibit the conversion of our foreign revenue currencies into U.S. dollars. Any of these factors could decrease the value of revenues and earnings we derive from our international operations and have a material adverse effect on our business.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

At December 31, 2022, we owned 19 and leased 141 properties globally. Our real estate strategy includes developing state-of-the art centralized campus environments in strategic locations across the U.S., including in Florida, Georgia, Nebraska, New Jersey and Wisconsin. These locations are used for operational, sales, management and administrative purposes. As a normal part of our business operations, including in connection with the integration of companies that we acquire, we regularly review our real estate portfolio. We may choose to acquire or dispose of properties in order to maintain a real estate footprint designed to maximize collaboration, innovation and communication in ways that enable us to best serve our clients and to create more opportunities for professional growth and development for our associates.

Item 3. Legal Proceedings

In the normal course of business, we or our subsidiaries are named as defendants in lawsuits in which claims are asserted against us. In the opinion of management, the liabilities, if any, which may ultimately result from such lawsuits are not expected to have a material adverse effect on our consolidated financial statements.

Item 4. Mine Safety Disclosures

Not applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The names of our executive officers as of February 23, 2023, together with their ages, positions and business experience are described below:

<u>Name</u>	<u>Age</u>	<u>Title</u>
Frank J. Bisignano	63	Chairman, President and Chief Executive Officer
Guy Chiarello	63	Chief Operating Officer
Christopher M. Foskett	65	Chief Revenue Officer
Robert W. Hau	57	Chief Financial Officer
Suzan Kereere	57	Executive Vice President, Head of Global Business Solutions
Adam L. Rosman	57	Chief Administrative Officer and Chief Legal Officer

Mr. Bisignano has served as Chairman of the Board since May 2022, Chief Executive Officer since 2020 and a director and President since 2019. He served as Chief Operating Officer from 2019 to 2020. Mr. Bisignano joined Fiserv as part of the acquisition of First Data Corporation in 2019, where he served as chief executive officer since 2013 and chairman since 2014. From 2005 to 2013, he held various executive positions with JPMorgan Chase & Co., a global financial services firm, including co-chief operating officer, chief executive officer of mortgage banking and chief administrative officer. From 2002 to 2005, Mr. Bisignano served as chief executive officer for Citigroup's Global Transactions Services business and a member of Citigroup's Management Committee.

Mr. Chiarello has served as Chief Operating Officer since 2021 and previously served as Chief Administrative Officer since 2019. Mr. Chiarello joined Fiserv as part of the acquisition of First Data Corporation in 2019, where he served as president since 2013. From 2007 to 2013, he served as chief information officer of JPMorgan Chase & Co., a global financial services firm. From 1985 to 2007, Mr. Chiarello served in various technology and leadership roles including chief information officer at Morgan Stanley, a global financial services firm.

Mr. Foskett has served as Chief Revenue Officer since 2021 and previously served as Executive Vice President, Global Sales since 2019. Mr. Foskett joined Fiserv as part of the acquisition of First Data Corporation in 2019, where he served as executive vice president, head of corporate and business development since 2015 and co-head of global financial services since 2018. He joined First Data Corporation in 2014 as head of global, strategic and national accounts. From 2011 to 2014, Mr. Foskett served as managing director, head of North American treasury services and global head of sales for treasury services at JPMorgan Chase & Co., a global financial services firm. From 2009 to 2011, he was managing director, global head of financial institutions at National Australia Bank, an Australian financial institution. From 1991 to 2008, Mr. Foskett was managing director in Citigroup's Corporate & Investment Bank leading several global businesses. Prior to that, he was employed by Goldman Sachs & Co. and Merrill Lynch & Co. focusing on mergers and acquisitions.

Mr. Hau has served as Chief Financial Officer since 2016. Before joining Fiserv, Mr. Hau served as executive vice president and chief financial officer at TE Connectivity Ltd., a global technology and manufacturing company, from 2012 to 2016. From 2009 to 2012, he served as executive vice president and chief financial officer at Lennox International Inc., a provider of products and services in the heating, air conditioning, and refrigeration markets; and from 2006 to 2009, he served as vice president and chief financial officer for the aerospace business group of Honeywell International, Inc., a technology and manufacturing company.

Ms. Kereere has served as Executive Vice President, Head of Global Business Solutions since December 2021 after joining the company as its Chief Growth Officer in June 2021. Prior to joining Fiserv, Ms. Kereere held several senior management roles at Visa Inc., a global payments technology company, including global head of merchant sales and acquiring from 2018 to 2021, head of Europe merchant sales and acquiring from 2017 to 2018 and head of the global merchant client group from 2016 to 2017. From 1996 to 2016, Ms. Kereere held various leadership positions at American Express Company, a global integrated payments company, including head of U.S. national merchant business and head of global network business.

Mr. Rosman has served as Chief Administrative Officer and Chief Legal Officer since 2021. Prior to joining Fiserv, Mr. Rosman was general counsel of OneMain Financial, a consumer lender, from 2020 to 2021. Previously, he served as general counsel of First Data Corporation from 2014 to 2019. Before joining First Data, Mr. Rosman was group general counsel of Willis Group Holdings plc, a multinational risk advisor, insurance brokerage and reinsurance brokerage company, from 2012 to 2014 and deputy general counsel from 2009 to 2012. Mr. Rosman also previously served as an assistant United States attorney and as deputy assistant to the president and deputy staff secretary for President William J. Clinton.

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Price Information

Our common stock is traded on the NASDAQ Global Select Market under the symbol "FISV." At December 31, 2022, our common stock was held by 1,591 shareholders of record and by a significantly greater number of shareholders who hold shares in nominee or street name accounts with brokers. We have never paid dividends on our common stock and we do not anticipate paying dividends in the foreseeable future. For additional information regarding our expected use of capital, refer to the discussion in this report under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources."

Issuer Purchases of Equity Securities

The table below sets forth information with respect to purchases made by or on behalf of us or any "affiliated purchaser" (as defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934) of shares of our common stock during the three months ended December 31, 2022:

Period	Total Number of Shares Purchased	rage Price per Share	Shares Purchased as Part of Publicly Announced Plans or Programs (1)	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs (1)
October 1-31, 2022	2,582,723	\$ 96.80	2,582,723	21,910,039
November 1-30, 2022	3,030,000	99.94	3,030,000	18,880,039
December 1-31, 2022	1,949,510	101.14	1,949,510	16,930,529
Total	7,562,233		7,562,233	

On November 19, 2020 and February 22, 2023, our board of directors authorized the purchase of up to 60.0 million and 75.0 million shares of our common stock, respectively. These authorizations do not expire.

In connection with the vesting of restricted stock awards, shares of common stock are delivered to the Company by employees to satisfy tax withholding obligations. The following table summarizes such purchases of common stock during the three months ended December 31, 2022:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Shares Purchased as Part of Publicly Announced Plans or Programs	of Shares that May Yet Be Purchased Under the Plans or Programs
October 1-31, 2022		\$	_	_
November 1-30, 2022	67 (1)	100.99	_	_
December 1-31, 2022	7 (1)	102.08	_	_
Total	74			

Shares surrendered to us to satisfy tax withholding obligations in connection with the vesting of restricted stock awards issued to employees.

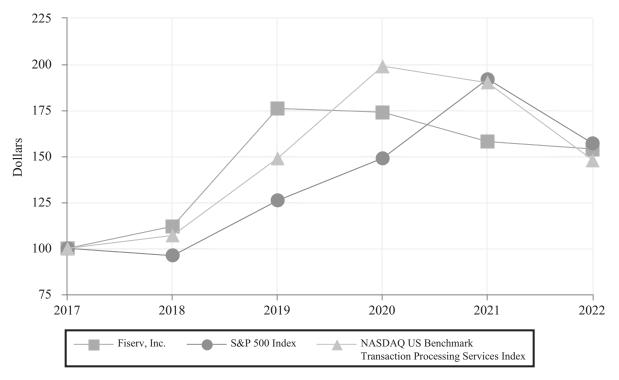
Stock Performance Graph

The stock performance graph and related information presented below is not deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission or subject to Regulation 14A or 14C under the Securities Exchange Act of 1934 or to the liabilities of Section 18 of the Securities Exchange Act of 1934 and will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent we specifically incorporate it by reference into such a filing.

The following graph compares the cumulative total shareholder return on our common stock for the five years ended December 31, 2022 with the S&P 500 Index and the NASDAQ US Benchmark Transaction Processing Services Index (the "Index"). Prior to September 21, 2020, the Index was known as the NASDAQ US Benchmark Financial Administration Index. The Index, as renamed, is identical to the NASDAQ US Benchmark Financial Administration Index prior to its name change on

September 21, 2020. The graph assumes that \$100 was invested on December 31, 2017 in our common stock and each index and that all dividends were reinvested. No cash dividends have been declared on our common stock. The comparisons in the graph are required by the Securities and Exchange Commission and are not intended to forecast or be indicative of possible future performance of our common stock.

COMPARISON OF FIVE YEAR CUMULATIVE TOTAL RETURN AMONG FISERV, INC., S&P 500 INDEX, AND NASDAQ US BENCHMARK TRANSACTION PROCESSING SERVICES INDEX (ASSUMES INITIAL INVESTMENT OF \$100 AND REINVESTMENT OF DIVIDENDS)



	December 31,											
	2017		2018		2019 2020		2021		2022			
Fiserv, Inc.	\$	100	\$	112	\$	176	\$	174	\$	158	\$	154
S&P 500 Index		100		96		126		149		192		157
NASDAQ US Benchmark Transaction Processing Services Index		100		107		149		199		190		148

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's discussion and analysis of financial condition and results of operations is provided as a supplement to our consolidated financial statements and accompanying notes to help provide an understanding of our financial condition, the changes in our financial condition and our results of operations. This section generally discusses information and results pertaining to the years ended December 31, 2022 and 2021. Information and discussion of results pertaining to the year ended December 31, 2020 not included herein can be found in Part II, "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for fiscal year 2021, filed with the Securities and Exchange Commission on February 24, 2022. Our discussion is organized as follows:

Overview. This section contains background information on our company and the products and services that we
provide, acquisitions and dispositions, our enterprise priorities, and the trends affecting our industry in order to
provide context for management's discussion and analysis of our financial condition and results of operations.

- Critical accounting policies and estimates. This section contains a discussion of the accounting policies that we believe are important to our financial condition and results of operations and that require judgment and estimates on the part of management in their application. In addition, all of our significant accounting policies, including critical accounting policies, are summarized in Note 1 to the accompanying consolidated financial statements.
- Results of operations. This section contains an analysis of our results of operations presented in the accompanying consolidated statements of income by comparing the results for the year ended December 31, 2022 to the results for the year ended December 31, 2021.
- *Liquidity and capital resources*. This section provides an analysis of our cash flows and a discussion of our outstanding debt and commitments at December 31, 2022.

Overview

Company Background

We are a leading global provider of payments and financial services technology solutions. We serve clients around the globe, including merchants, banks, credit unions, other financial institutions and corporate clients. We provide account processing and digital banking solutions; card issuer processing and network services; payments; e-commerce; merchant acquiring and processing; and the Clover® cloud-based point-of-sale ("POS") and business management platform. Our operations are comprised of the Merchant Acceptance ("Acceptance") segment, the Financial Technology ("Fintech") segment and the Payments and Network ("Payments") segment.

The businesses in our Acceptance segment provide a wide range of commerce-enabling solutions and serve merchants of all sizes around the world. These solutions include POS merchant acquiring and digital commerce services; mobile payment services; security and fraud protection products; Clover, our cloud-based POS and integrated commerce operating system for small and mid-sized businesses ("SMBs") and independent software vendors ("ISVs"); and CaratSM, our integrated operating system for large businesses. We distribute the products and services in the Acceptance segment businesses through a variety of channels, including direct sales teams, strategic partnerships with agent sales forces, ISVs, financial institutions, and other strategic partners in the form of joint venture alliances, revenue sharing alliances, and referral agreements. Merchants, financial institutions and distribution partners in the Acceptance segment are frequently clients of our other segments.

The businesses in our Fintech segment provide financial institutions around the world with technology solutions they need to run their operations, including products and services that enable financial institutions to process customer deposit and loan accounts and manage an institution's general ledger and central information files. As a complement to the core account processing functionality, the Fintech segment businesses also provide digital banking, financial and risk management, professional services and consulting, item processing and source capture, and other products and services that support numerous types of financial transactions. Certain of the businesses in the Fintech segment provide products or services to corporate clients to facilitate the management of financial processes and transactions. Many of the products and services offered in the Fintech segment are integrated with products and services provided by our other segments.

The businesses in the Payments segment provide financial institutions, corporate clients and the public sector with the products and services required to process digital payment transactions. This includes card transactions such as debit, credit and prepaid card processing and services; a range of network services, security and fraud protection products; and card production and print services. In addition, the Payments segment businesses offer non-card digital payment software and services, including bill payment, account-to-account transfers, person-to-person payments, electronic billing, and security and fraud protection products. Clients of the Payments segment businesses reflect a wide range of industries around the world, including merchants, distribution partners and financial institution customers in our other segments.

The majority of our revenue is generated from recurring account- and transaction-based fees under multi-year contracts that generally have high renewal rates. Most of the services we provide within our segments are necessary for our clients to operate their businesses and are, therefore, non-discretionary in nature.

Corporate and Other supports the reportable segments described above, and consists of amortization of acquisition-related intangible assets, unallocated corporate expenses and other activities that are not considered when we evaluate segment performance, such as gains or losses on sales of businesses, certain assets or investments; costs associated with acquisition and divestiture activity; certain services revenue associated with various dispositions; and our Output Solutions postage reimbursements.

Acquisitions and Dispositions

We frequently review our portfolio to ensure we have the necessary business assets to execute our strategy. We expect to acquire businesses when we identify: a compelling strategic need, such as a product, service or technology that helps meet client demand; an opportunity to change industry dynamics; a way to achieve business scale that enables competition and operational efficiency; or similar considerations. We expect to divest businesses that are not in line with our market, product or financial strategies. The results of operations for the following acquired and divested businesses are included in our consolidated results from the respective dates of acquisition and through the respective dates of disposition.

Acquisitions

On December 29, 2022, we acquired OrangeData S.A. ("Yacaré"), an Argentina-based payment service provider that enables customers to transact at merchant locations using QR codes. Yacaré is included within the Acceptance segment and enhances our instant payment transaction capabilities. On December 20, 2022, we acquired Merchant One, Inc. ("Merchant One"), an independent sales organization ("ISO") focused on acquiring merchants in the restaurant, retail and e-commerce industries using an innovative mix of direct and digital marketing strategies. Merchant One is included within the Acceptance segment and enhances our merchant distribution and sales force channels. On September 1, 2022, we acquired NexTable, Inc. ("NexTable"), a provider of cloud-based reservation and table management solutions for restaurants. NexTable is included within the Acceptance segment and expands our end-to-end restaurant solutions. On June 1, 2022, we acquired The LR2 Group, LLC ("City POS"), an ISO that promotes payment processing services and facilitates the sale of POS equipment for merchants. City POS is included within the Acceptance segment and expands the reach of our merchant services business. On April 1, 2022, we acquired a remaining ownership interest in Finxact, Inc. ("Finxact"), a developer of cloud-native banking solutions powering digital transformation throughout the financial services sector. Finxact is included within the Fintech segment and advances our digital banking strategy, expanding our account processing, digital and payments solutions. We acquired these businesses in 2022 for an aggregate purchase price of approximately \$994 million, net of \$28 million of acquired cash, and including earn-out provisions estimated at a fair value of \$6 million.

On November 22, 2021, we acquired BentoBox CMS, Inc. ("BentoBox"), a digital marketing and commerce platform that helps restaurants connect with their guests. BentoBox is included within the Acceptance segment and expands our Clover dining solutions and commerce and business management capabilities. On November 15, 2021, we acquired a remaining ownership interest in NetPay Solutions Group ("NetPay"), a multi-channel payment service provider offering a range of onboarding, customer lifecycle, risk management and settlement capabilities to businesses of all sizes. NetPay is included within the Acceptance segment and expands our merchant services business. On October 1, 2021, we acquired Integrity Payments, LLC ("AIP"), an ISO that promotes payment processing services for merchants and is included within the Acceptance segment. On June 14, 2021, we acquired Spend Labs Inc. ("SpendLabs"), a mobile-native, cloud-based software provider of commercial card payment solutions. SpendLabs is included within the Payments segment and expands our digital capabilities across mobile and desktop devices for small and mid-sized businesses. On May 4, 2021, we acquired Pineapple Payments Holdings, LLC ("Pineapple Payments"), an ISO that provides payment processing, proprietary technology and payment acceptance solutions for merchants. Pineapple Payments is included within the Acceptance segment and expands the reach of our payment solutions through its technology- and relationship-led distribution channels. On March 1, 2021, we acquired Radius8, Inc. ("Radius8"), a technology provider that uses consumer location and other information to drive incremental merchant transactions. Radius8 is included within the Acceptance segment and enhances our ability to help merchants increase sales, expand mobile application registration and improve one-to-one target marketing. On January 22, 2021, we acquired a remaining ownership interest in Ondot Systems, Inc. ("Ondot"), a provider of card management and digital experience technology. Ondot is included within the Payments segment and expands our digital capabilities, enhancing our suite of integrated payments, banking and merchant solutions. We acquired these businesses in 2021 for an aggregate purchase price of \$882 million, net of \$43 million of acquired cash, and including earn-out provisions at an aggregate fair value of \$34 million.

Dispositions

On October 17, 2022, we sold Fiserv Costa Rica, S.A. and our Systems Integration Services ("SIS") operations, which provides information technology engineering services in the United States ("U.S.") and India, to a single buyer. Fiserv Costa Rica, S.A. and SIS were reported primarily within our Fintech segment. On September 30, 2022, we sold our Korea operations, which were reported within our Acceptance segment. We sold these operations for total consideration of \$99 million and recognized an aggregate net pre-tax loss on the sales of \$83 million. These divestitures were the result of a strategic review of our business portfolio.

We mutually agreed with a minority partner to terminate one of our merchant alliance joint ventures effective March 2022. In conjunction with such termination, the joint venture minority partner elected to exercise its option to purchase certain merchant contracts of the joint venture for \$175 million, resulting in the recognition of a pre-tax gain of \$137 million.

Enterprise Priorities

We aspire to move money and information in a way that moves the world. Our purpose is to deliver superior value for our clients through leading technology, targeted innovation and excellence in everything we do. We are focused on driving growth and creating value by assembling a high-performing and diverse team, integrating our solutions, delivering operational excellence, allocating capital in a disciplined manner, including share repurchase and merger and acquisition activity, and delivering breakthrough innovation. Our long-term priorities are to continue to build high-quality revenue while meeting our financial commitments; deepen client relationships with an emphasis on digital channels and payment solutions; deliver innovation and integration enabling differentiated value for our clients; and generate integration value, including cost and revenue synergies from acquisitions.

Industry Trends

The global payments landscape continues to evolve, with rapidly advancing technologies and a steady expansion of digital payments, e-commerce and real-time payments infrastructure. Because of this growth, competition also continues to intensify. Business and consumer expectations continue to rise, with a focus on speed, convenience, choice and security. To meet these expectations, payments companies are focused on modernizing their technology, expanding the use of data and enhancing the customer experience.

Merchants

The rapid growth in and globalization of mobile and e-commerce, driven by consumers' desire for simpler, more efficient shopping experiences, has created an opportunity for merchants to reach consumers nearly anywhere, through any device, which often requires a merchant acquiring provider to enable and optimize the acceptance of payments. Merchants are demanding simpler, integrated and flexible systems to accept payments and help manage their everyday business operations. When combined with the ever-increasing ways a consumer can pay for goods and services, merchants have sought modern systems to streamline the complexity. Furthermore, merchants can now search, discover, compare, purchase and even install a new system through direct, digital-only experiences. This direct, digital-only channel is a source of new merchant acquisition opportunities, especially with respect to smaller merchants.

Additionally, there are numerous software-as-a-service ("SaaS") solution providers in the industry, many of which have chosen to integrate merchant acquiring into their software as a way to further monetize their client relationships. Such providers are typically referred to as ISVs, and we believe there are thousands of these potential distribution partnership opportunities available to us.

We believe that our merchant acquiring products and solutions create compelling value propositions for merchant clients of all sizes, from small and mid-sized businesses to medium-sized regional businesses to global enterprise merchants, and across all verticals. Furthermore, we believe that our sizable and diverse client base, combined with valued partnerships with merchant acquiring businesses of financial and non-financial institutions of all sizes, gives us a solid foundation for growth.

Financial Institutions and Other Financial Technology Providers

Financial services providers regularly introduce and implement new payment, deposit, risk management, lending and investment products, and the distinctions among the products and services traditionally offered by different types of financial institutions and other financial technology providers continue to narrow as they seek to serve the same customers. At the same time, the evolving global regulatory and cybersecurity landscape has continued to create a challenging operating environment for financial institutions. These conditions are driving heightened interest in solutions that help financial institutions win and retain customers, generate incremental revenue, comply with regulations and enhance operating efficiency. In addition, the focus on the customer experience, including through mobile and online engagement, by both financial institutions and their customers, as well as the growing volume and types of payment transactions in the marketplace, continues to elevate the data and transaction processing needs of financial institutions.

We expect that financial institutions and other financial technology providers will continue to invest significant capital and human resources to process transactions, manage information, maintain regulatory compliance and offer innovative new services to their customers in this rapidly evolving and competitive environment. We anticipate that we will benefit over the long term from the trend of financial institutions moving from in-house technology to outsourced solutions as they seek to remain current on technology changes in an evolving marketplace. We believe that economies of scale in developing and maintaining the infrastructure, technology, products, services and networks necessary to be competitive in such an environment are essential to justify these investments, and we anticipate that demand for products that facilitate customer interaction with financial institutions, including a unified, seamless customer experience across mobile and online channels, will continue to increase, which we expect to create revenue opportunities for us.

The number of financial institutions in the United States has declined at a relatively steady rate, primarily as a result of voluntary mergers and acquisitions. Rather than reducing the overall market, these consolidations transfer accounts among financial institutions. If a client loss occurs due to merger or acquisition, we typically receive a contract termination fee based on the size of the client and how early in the contract term the contract is terminated. These fees can vary from period to period with the variance depending on the quantum of financial institution merger activity in a given period and whether or not our clients are involved in the activity. Our focus on long-term client relationships and recurring, transaction-oriented products and services has also reduced the impact that consolidation in the financial services industry has had on us. We believe that the integration of our products and services creates a compelling value proposition for our clients by providing, among other things, new sources of revenue and opportunities to reduce their costs. Furthermore, we believe that our sizable and diverse client base, combined with our position as a leading provider of non-discretionary, recurring revenue-based products and services, gives us a solid foundation for growth.

Recent Market Conditions

Global macroeconomic conditions, including fluctuations in foreign currency exchange rates, inflation, disruptions in the global supply chain, the effects of the ongoing conflict between Russia and Ukraine, the continuing impact of the coronavirus ("COVID-19") pandemic, and regulations restricting trade or that impact our ability to offer products or services, could have a material adverse effect on our business, results of operations and financial condition. In addition, since 2021, we have observed increased shortages and delays in the global supply chain for components and inputs necessary to our businesses, such as semiconductors, paper and plastic, and may experience difficulty procuring those components and inputs in the future on a timely basis or at historical prices. For discussion of risks related to potential impacts of supply chain, geopolitical and macroeconomic challenges on our business, results of operations and financial condition, see "Item 1A. Risk Factors."

Critical Accounting Policies and Estimates

Our consolidated financial statements and accompanying notes have been prepared in accordance with accounting principles generally accepted in the U.S., which require management to make estimates, judgments and assumptions that affect the reported amount of assets, liabilities, revenue and expenses. We continually evaluate the accounting policies and estimates that we use to prepare our consolidated financial statements, including for recently adopted accounting pronouncements, and base our estimates on historical experience and assumptions that we believe are reasonable in light of current circumstances. Actual amounts and results could differ materially from these estimates.

Acquisitions

From time to time, we make strategic acquisitions that may have a material impact on our consolidated results of operations or financial position. We allocate the purchase price of acquired businesses to the assets acquired and liabilities assumed in the transaction at their estimated fair values. The estimates used to determine the fair value of long-lived assets, such as intangible assets, can be complex and require significant judgments. We use information available to us to make fair value determinations and engage independent valuation specialists, when necessary, to assist in the fair value determination of significant acquired long-lived assets. The determination of fair value requires estimates about discount rates, growth and retention rates, royalty rates, expected future cash flows and other future events that are judgmental in nature. While we use our best estimates and assumptions as a part of the purchase price allocation process, our estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to our consolidated statements of income. We are also required to estimate the useful lives of intangible assets to determine the amount of acquisition-related intangible asset amortization expense to record in future periods. We periodically review the estimated useful lives assigned to our intangible assets to determine whether such estimated useful lives continue to be appropriate. Additional information regarding our acquisitions is included in Note 4 to the consolidated financial statements.

Goodwill and Intangible Assets

We review the carrying value of goodwill for impairment annually, or more frequently if events or circumstances indicate the carrying value may not be recoverable. Goodwill is tested for impairment at a reporting unit level, which is one level below our reportable segments. When reviewing goodwill for impairment, we consider the prior test's amount of excess fair value over the carrying value of each reporting unit, the period of time since a reporting unit's last quantitative test, the extent a reorganization or disposition changes the composition of one or more of our reporting units, and other factors to determine whether or not to first perform a qualitative test. When performing a qualitative test, we assess numerous factors to determine whether it is more likely than not that the fair value of our reporting units are less than their respective carrying values. Examples of qualitative factors that we assess include our share price, our financial performance, market and competitive factors in our industry and

other events specific to our reporting units. If we conclude that it is more likely than not that the fair value of a reporting unit is less than its carrying value, we perform a quantitative impairment test.

The quantitative impairment test compares the estimated fair value of the reporting unit to its carrying value, and recognizes an impairment loss for the amount by which a reporting unit's carrying amount exceeds its fair value, without exceeding the total amount of goodwill allocated to that reporting unit. We determine the fair value of a reporting unit using both a discounted cash flow analysis and a market approach. Determining the fair value of a reporting unit involves judgment and the use of significant estimates and assumptions, which include assumptions regarding the revenue growth rates and operating margins used to calculate estimated future cash flows, risk-adjusted discount rates and future economic and market conditions.

Our most recent annual impairment assessment of our reporting units in the fourth quarter of 2022 determined that our goodwill of \$36.8 billion was not impaired as the estimated fair values of the respective reporting units exceeded the carrying values. However, for four of our reporting units, with aggregate goodwill of \$10.9 billion, the excess of the respective reporting unit's fair value over carrying value ranged from 7 to 18 percent. If future operating performance is below our expectations or there are material changes to forecasted revenue growth rates or operating margins, risk-adjusted discount rates, foreign currency exchange rates, effective income tax rates, or some combination thereof, a decline in the fair value of the reporting units could result in, and we may be required to record, a goodwill impairment charge. Additionally, a significant change in a merchant alliance business relationship or operating performance could result in a material goodwill impairment charge. It is also reasonably possible that future developments related to the interest rate environment, a shift in strategic initiatives, or significant changes in the composition of certain of our reporting units could have a future material impact on one or more of the estimates and assumptions used to evaluate goodwill impairment. We have no accumulated goodwill impairment through December 31, 2022. Additional information regarding our goodwill is included in Note 7 to the consolidated financial statements.

We review intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. We review capitalized software development costs for impairment at each reporting date. Recoverability of intangible assets is assessed by comparing the carrying amount of the asset to either the undiscounted future cash flows expected to be generated by the asset or the net realizable value of the asset, depending on the type of asset. Determining future cash flows and net realizable values involves judgment and the use of significant estimates and assumptions regarding future economic and market conditions. Measurement of any impairment loss is based on estimated fair value. Additional information regarding our intangible assets is included in Note 6 to the consolidated financial statements. Given the significance of our goodwill and intangible asset balances, an adverse change in fair value could result in an impairment charge, which could be material to our consolidated financial statements.

Revenue Recognition

Revenue is measured based on consideration specified in a contract with a customer, and excludes any amounts collected on behalf of third parties. As a practical expedient, we do not adjust the transaction price for the effects of a significant financing component if, at contract inception, the period between customer payment and the transfer of goods or services is expected to be one year or less. Contracts with customers are evaluated on a contract-by-contract basis as contracts may include multiple types of goods and services as described below.

Processing and Services

Processing and services revenue is generated from account- and transaction-based fees for data processing, merchant transaction processing and acquiring, electronic billing and payment services, electronic funds transfer and debit/credit processing services; consulting and professional services; and software maintenance for ongoing client support.

We recognize processing and services revenue in the period in which the specific service is performed unless they are not deemed distinct from other goods or services, which revenue would then be recognized as control is transferred of the combined goods and services. Our arrangements for processing and services typically consist of an obligation to provide specific services to our customers on a when- and if-needed basis (a stand-ready obligation) and revenue is recognized from the satisfaction of the performance obligations in the amount billable to the customer. These services are typically provided under a fixed or declining (tier-based) price per unit based on volume of service; however, pricing for services may also be based on minimum monthly usage fees. Fees for our processing and services arrangements are typically billed and paid on a monthly basis.

Product

Product revenue is generated from print and card production sales, as well as software license and hardware (primarily POS devices) sales. For software license agreements that are distinct, we recognize software license revenue upon delivery, assuming a contract is deemed to exist. Revenue for arrangements with customers that include significant customization, modification or production of software such that the software is not distinct is typically recognized over time based upon efforts expended, such as labor hours, to measure progress towards completion. For arrangements involving hosted licensed software for the customer, a software element is considered present to the extent the customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty and it is feasible for the customer to either operate the software on their own hardware or contract with another vendor to host the software. We sell or lease hardware (POS devices) and other peripherals as part of our contracts with customers. Hardware typically consists of terminals or Clover devices. We do not manufacture hardware, rather we purchase hardware from third-party vendors and hold such hardware in inventory until purchased by a customer. We account for the sale of hardware as a separate performance obligation and recognize the revenue at the standalone selling price when the customer obtains control of the hardware.

Significant Judgments

We use the following methods, inputs and assumptions in determining amounts of revenue to recognize. For multi-element arrangements, we account for individual goods or services as a separate performance obligation if they are distinct, if the good or service is separately identifiable from other items in the arrangement, and if a customer can benefit from the good or service on its own or with other resources that are readily available to the customer. If these criteria are not met, the promised goods or services are accounted for as a combined performance obligation. Determining whether goods or services are distinct performance obligations that should be accounted for separately may require significant judgment.

Technology or service components from third parties are frequently embedded in or combined with our applications or service offerings. Whether we recognize revenue based on the gross amount billed to a customer or the net amount retained involves judgment that depends on the relevant facts and circumstances, including the level of contractual responsibilities and obligations for delivering solutions to end customers, to determine whether we obtain control of goods and services prior to their transfer to a customer.

The transaction price is determined based on the consideration to which we will be entitled in exchange for transferring products or services to the customer. We include any fixed charges within our contracts as part of the total transaction price. To the extent that variable consideration is not constrained, we include an estimate of the variable amount, as appropriate, within the total transaction price and update our assumptions over the duration of the contract. We may constrain the estimated transaction price in the event of a high degree of uncertainty as to the final consideration amount owed because of an extended length of time over which the fees may be adjusted. The transaction price (including any discounts or rebates) is allocated between distinct goods and services in a multi-element arrangement based on their relative standalone selling prices. For items that are not sold separately, we estimate the standalone selling prices using available information such as market conditions and internally approved pricing guidelines. Judgment may be required to determine standalone selling prices for each performance obligation and whether it depicts the amount we expect to receive in exchange for the related good or service.

Contract modifications occur when we and our customers agree to modify existing customer contracts to change the scope or price (or both) of the contract, or when a customer terminates some, or all, of the existing services provided by us. When a contract modification occurs, it requires us to exercise judgment to determine if the modification should be accounted for as (i) a separate contract, (ii) the termination of the original contract and creation of a new contract, or (iii) a cumulative catch up adjustment to the original contract. Further, contract modifications require the identification and evaluation of the performance obligations of the modified contract, including the allocation of revenue to the remaining performance obligations and the period of recognition for each identified performance obligation. Additional information regarding our revenue recognition policies is included in Note 3 to the consolidated financial statements.

Income Taxes

The determination of our provision for income taxes requires management's judgment in the use of estimates and the interpretation and application of complex tax laws, sometimes made more complex by our global footprint. Judgment is also required in assessing the timing and amounts of deductible and taxable items. We establish a liability for known tax exposures relating to deductions, transactions and other matters involving some uncertainty as to the proper tax treatment of the item. In establishing a liability for known tax exposures, assumptions are made in determining whether, and the extent to which, a tax position will be sustained. A tax benefit with respect to a tax position is recognized only when it is more likely than not to be sustained upon examination by the relevant taxing authority, based on its technical merits, considering the facts and circumstances available as of the reporting date. The amount of tax benefit recognized reflects the largest benefit that we

believe is more likely than not to be realized on settlement with the relevant taxing authority. As additional information becomes available, we evaluate our tax positions and adjust our liability for known tax exposures as appropriate.

We maintain net operating loss carryforwards in various taxing jurisdictions, resulting in the establishment of deferred tax assets. We establish a valuation allowance against our deferred tax assets when, based upon the weight of all available evidence, we believe it is more likely than not that some portion or all of the deferred tax assets will not be realized. In making this determination, we have considered the relative impact of all of the available positive and negative evidence regarding future sources of taxable income and available tax planning strategies. However, there could be a material impact to our effective income tax rate if there is a significant change in our judgment. To the extent our judgment changes, the valuation allowances are then adjusted, generally through the provision for income taxes, in the period in which the change in facts and circumstances occurs. Additional information regarding our income taxes is included in Note 17 to the consolidated financial statements.

Results of Operations

Components of Revenue and Expenses

The following summary describes the components of revenue and expenses as presented in our consolidated statements of income.

Processing and Services

Processing and services revenue, which represented 82% of our total revenue in 2022, is primarily generated from account- and transaction-based fees under multi-year contracts. Processing and services revenue is most reflective of our business performance as a significant amount of our total operating profit is generated by these services. Cost of processing and services consists of costs directly associated with providing services to clients and includes the following: personnel; equipment and data communication; infrastructure costs, including costs to maintain software applications; client support; certain depreciation and amortization; and other operating expenses.

Product

Product revenue, which represented 18% of our total revenue in 2022, is derived from print and card production sales, as well as software license and hardware (primarily POS devices) sales. Cost of product consists of costs directly associated with the products sold and includes the following: costs of materials and postage; software development; hardware costs (primarily POS devices); personnel; infrastructure costs; certain depreciation and amortization; and other costs directly associated with product revenue.

Selling, General and Administrative Expenses

Selling, general and administrative expenses primarily consist of: salaries, wages, commissions and related expenses paid to sales personnel, administrative employees and management; third-party commissions; advertising and promotional costs; certain depreciation and amortization; and other selling and administrative expenses.

Financial Results

The following table presents certain amounts included in our consolidated statements of income, the relative percentage that those amounts represent to revenue and the change in those amounts from year to year. This information should be read together with the consolidated financial statements and accompanying notes. The financial results presented below have been affected by acquisitions, dispositions, and foreign currency fluctuations.

(In millions)				Percentage of	Revenue (1)	_	Increase (De	crease)
Year Ended December 31,	2022		2021	2022	2021		2022 vs. 2	021
Revenue:								
Processing and services	\$ 14,460) 5	\$ 13,307	81.5 %	82.0 %	\$	1,153	9 %
Product	3,27		2,919	18.5 %	18.0 %		358	12 %
Total revenue	17,73	7	16,226	100.0 %	100.0 %		1,511	9 %
Expenses:								
Cost of processing and services	5,77		6,084	39.9 %	45.7 %		(313)	(5)%
Cost of product	2,22		2,044	67.8 %	70.0 %		177	9 %
Sub-total	7,992	-	8,128	45.1 %	50.1 %		(136)	(2)%
Selling, general and administrative	6,059)	5,810	34.2 %	35.8 %		249	4 %
Net gain on sale of businesses and other assets	(54	<u> </u>		(0.3)%	— %		54	n/m
Total expenses	13,99′	7 -	13,938	78.9 %	85.9 %		59	— %
Operating income	3,740) _	2,288	21.1 %	14.1 %		1,452	63 %
Interest expense, net	(733	3)	(693)	(4.1)%	(4.3)%		40	6 %
Other (expense) income	(94	<u> </u>	71	(0.5)%	0.4 %		(165)	n/m
Income before income taxes and income from investments in unconsolidated affiliates	2,913	}	1,666	16.4 %	10.3 %		1,247	75 %
Income tax provision	(55))	(363)	(3.1)%	(2.2)%		188	52 %
Income from investments in unconsolidated affiliates	220)	100	1.2 %	0.6 %		120	120 %
Net income	2,582	-	1,403	14.6 %	8.6 %		1,179	84 %
Less: net income attributable to noncontrolling interests and redeemable noncontrolling interests	52	!	69	0.3 %	0.4 %		(17)	(25)%
Net income attributable to Fiserv, Inc.	\$ 2,530) 5	\$ 1,334	14.3 %	8.2 %	\$	1,196	90 %

Percentage of revenue is calculated as the relevant revenue, expense, or income amount divided by total revenue, except for cost of processing and services and cost of product amounts, which are divided by the related component of revenue.

(In millions)

Year Ended December 31,		Acceptance		Acceptance		Acceptance		Acceptance		Acceptance		Acceptance		eptance Fintech		Payments		Corporate and Other	Total
Total revenue:																			
2022	\$	7,292	\$	3,170	\$	6,262	\$	1,013	\$ 17,737										
2021		6,479		3,022		5,833		892	16,226										
Revenue growth	\$	813	\$	148	\$	429	\$	121	\$ 1,511										
Revenue growth percentage		13 %		5 %		7 %			9 %										
Operating income (loss):																			
2022	\$	2,321	\$	1,157	\$	2,823	\$	(2,561)	\$ 3,740										
2021		1,996		1,081		2,557		(3,346)	2,288										
Operating income growth	\$	325	\$	76	\$	266	\$	785	\$ 1,452										
Operating income growth percentage		16 %		7 %		10 %			63 %										
Operating margin:																			
2022		31.8 %		36.5 %		45.1 %			21.1 %										
2021		30.8 %		35.8 %		43.8 %			14.1 %										
Operating margin growth (1)		100 bps		70 bps		130 bps			700 bps										

⁽¹⁾ Represents the basis point growth in operating margin.

Operating margin percentages are calculated using actual, unrounded amounts.

Total Revenue

Total revenue increased \$1,511 million, or 9%, in 2022 compared to 2021. The revenue increase was driven by higher processing revenue and product sales across all of our business segments, partially offset by a 2% decrease due to foreign currency exchange rate fluctuations.

Revenue in our Acceptance segment increased \$813 million, or 13%, in 2022 compared to 2021. The revenue increase was driven by higher global merchant acquiring payment and transaction volumes, an increase in the number of active merchants on our Clover operating system and the expansion of our merchant relationships through value-added services. The revenue growth of our Clover and Carat operating systems were above pre-COVID-19 pandemic levels and contributed 5% and 1%, respectively, to Acceptance segment growth. The remaining revenue growth in our Acceptance segment was attributable to higher merchant acquiring payment and transaction volumes across our other merchant acquiring platforms.

Revenue in our Fintech segment increased \$148 million, or 5%, in 2022 compared to 2021. The revenue increase was driven by both higher processing revenue and license and termination fee revenue across our Fintech businesses, with each contributing approximately 2% to Fintech revenue growth.

Revenue in our Payments segment increased \$429 million, or 7%, in 2022 compared to 2021. The revenue increase was driven by our debit processing business, which contributed 3% to Payments segment revenue growth through new client wins on our network routing services; our Output Solutions business, which contributed 2%, primarily driven by new client growth; and our credit processing business, which contributed 1%, primarily driven by an increase in active accounts.

Revenue at Corporate and Other increased \$121 million, or 14%, in 2022 compared to 2021, primarily due to increased postage revenue.

Total Expenses

Total expenses in 2022 were relatively consistent compared to 2021. Total expenses as a percentage of total revenue decreased 700 basis points to 78.9% in 2022 compared to 2021. Total expenses as a percentage of total revenue were favorably impacted in 2022 by a reduction of approximately 390 basis points in acquisition and integration related expense and approximately 90 basis points in amortization of acquisition-related intangible assets. Total expenses as a percentage of total revenue for 2022 were also favorably impacted by operating leverage, along with a pre-tax gain on the sale of businesses and other assets of \$54 million.

Cost of processing and services as a percentage of processing and services revenue decreased to 39.9% in 2022 compared to 45.7% in 2021. Cost of processing and services as a percentage of processing and services revenue was favorably impacted in 2022 by approximately 330 basis points from a reduction in acquisition and integration related expenses, as well as strong operating leverage across our businesses, and partially offset by an increase in severance costs of approximately 50 basis points in 2022.

Cost of product as a percentage of product revenue decreased to 67.8% in 2022 compared to 70.0% in 2021. The cost of product as a percentage of product revenue improved in 2022 as a result of higher margin revenue growth.

Selling, general and administrative expenses as a percentage of total revenue decreased to 34.2% in 2022 compared to 35.8% in 2021. The decrease in selling, general and administrative expenses as a percentage of total revenue in 2022 was primarily due to a reduction in amortization of acquisition-related intangible assets of approximately 100 basis points.

The net gain on sale of businesses and other assets in 2022 included a \$137 million pre-tax gain from the sale of certain merchant contracts in conjunction with the mutual termination of one of our merchant alliance joint ventures and a \$44 million pre-tax gain from the sale of Fiserv Costa Rica, S.A. and our SIS operations. These gains were partially offset by a \$127 million pre-tax loss from the sale of our Korea operations.

Operating Income and Operating Margin

Total operating income increased \$1,452 million, or 63%, in 2022 compared to 2021. Total operating margin increased 700 basis points to 21.1% in 2022 compared to 2021. Total operating income and total operating margin benefited from revenue growth in 2022, along with a reduction in acquisition and integration related expenses. Total operating income and total operating margin were also favorably impacted by a \$54 million net pre-tax gain on the sale of businesses and other assets in 2022, partially offset by an increase in severance costs of approximately \$130 million.

Operating income in our Acceptance segment increased \$325 million, or 16%, in 2022 compared to 2021. Operating margin increased 100 basis points to 31.8% in 2022 compared to 2021. Operating margin growth in 2022 was primarily due to operating leverage and the divestiture of a lower-margin business within the Acceptance segment.

Operating income in our Fintech segment increased \$76 million, or 7%, in 2022 compared to 2021. Operating margin increased 70 basis points to 36.5% in 2022 compared to 2021. Fintech segment operating income and margin growth in 2022 was due to an increase in license and termination fee revenue.

Operating income in our Payments segment increased \$266 million, or 10%, in 2022 compared to 2021. Operating margin increased 130 basis points to 45.1% in 2022 compared to 2021. Payments segment operating income and margin growth in 2022 was primarily due to scalable revenue growth from our debit and credit processing businesses.

The operating loss in Corporate and Other decreased \$785 million in 2022 compared to 2021. Corporate and Other was favorably impacted by a reduction of approximately \$850 million in acquisition and integration related costs and amortization of acquisition related intangible assets. The operating loss in 2022 also included a \$54 million pre-tax gain on the sale of businesses and other assets and approximately \$130 million of increased severance costs.

Interest Expense, Net

Interest expense, net increased \$40 million, or 6%, in 2022 compared to 2021 primarily due to higher interest rates on outstanding borrowings.

Other (Expense) Income

Other expense increased \$165 million in 2022 compared to 2021. Other (expense) income includes net foreign currency transaction gains and losses, gains or losses from a change in fair value of investments in certain equity securities, and amounts related to debt guarantee arrangements of certain joint ventures. Net foreign currency transaction (losses) gains were \$(62) million and \$12 million in 2022 and 2021, respectively. Other expense in 2022 also includes net pre-tax expense of \$48 million associated with joint venture debt guarantees. Other income in 2021 included \$12 million related to a pre-tax gain on the remeasurement of a previously held investment in Ondot to fair value upon acquiring the remaining ownership interest in the entity.

Income Tax Provision

Income tax provision as a percentage of income before income taxes and income from investments in unconsolidated affiliates was 18.9% and 21.8% in 2022 and 2021, respectively. The decrease in the effective income tax rate in 2022 compared to 2021 was primarily the result of \$134 million of income tax expense in 2021 attributed to the revaluation of certain net deferred tax liabilities, primarily related to intangible assets and investments in joint ventures recognized at fair value in connection with the acquisition of First Data Corporation, reflecting the effect of enacted corporate income tax rate changes in the United Kingdom (tax rate increase from 19% to 25% starting in 2023) and Argentina (tax rate increase from 25% to 35%).

Income from Investments in Unconsolidated Affiliates

Our share of net income from affiliates accounted for using the equity method is reported as income from investments in unconsolidated affiliates, and the related tax expense is reported within the income tax provision in the consolidated statements of income. Income from investments in unconsolidated affiliates, including acquired intangible asset amortization from valuations in purchase accounting, was \$220 million and \$100 million in 2022 and 2021, respectively. Income from investments in unconsolidated affiliates in 2022 includes pre-tax gains totaling \$209 million, primarily related to the acquisition-date fair value remeasurement of our previously held equity interest in Finxact of \$110 million, as well as \$80 million resulting from the dilution of our ownership interest in conjunction with the Sagent M&C, LLC transaction with a third party. Income from investments in unconsolidated affiliates in 2021 included a \$33 million pre-tax gain resulting from the sale of our remaining ownership interest in InvestCloud Holdings, LLC ("InvestCloud"), as well as a \$28 million pre-tax gain resulting from the dilution of our ownership interest in connection with the Tegra118 merger with a third party.

Net Income Attributable to Noncontrolling Interests

Net income attributable to noncontrolling interests and redeemable noncontrolling interests relates to the minority partners' share of the net income in our consolidated subsidiaries. Net income attributable to noncontrolling interests, including acquired intangible asset amortization from valuations in purchase accounting, was \$52 million and \$69 million in 2022 and 2021, respectively.

Net income attributable to Fiserv, Inc. per share-diluted was \$3.91 and \$1.99 in 2022 and 2021, respectively. Net income attributable to Fiserv, Inc. per share-diluted in 2021 included \$134 million of certain discrete tax expenses discussed above, as well as higher acquisition and integration related expenses.

Liquidity and Capital Resources

General

Our primary liquidity needs in the ordinary course of business are to: (i) fund normal operating expenses; (ii) meet the interest and principal requirements of our outstanding indebtedness, including finance leases; and (iii) fund capital expenditures and operating lease payments. We believe these needs will be satisfied in both the short and long term using cash flow generated by our operations, along with our cash and cash equivalents of \$902 million, proceeds from the issuance of U.S. dollar and Euro commercial paper, and available capacity under our revolving credit facility of \$870 million (net of outstanding borrowings and \$5.1 billion of capacity designated for outstanding borrowings under our commercial paper programs, senior notes due in 2023 and letters of credit) at December 31, 2022.

The following table summarizes our net cash provided by operating activities, or operating cash flow and capital expenditure amounts for the years ended December 31, 2022 and 2021, respectively:

	Year Decem			Increase (Decrease)			
(In millions)	2022	2021	\$		%		
Net income	\$ 2,582	\$ 1,403	\$	1,179	_		
Depreciation and amortization	3,212	3,248		(36)			
Share-based compensation	323	239		84			
Deferred income taxes	(558)	(262)		(296)			
Net gain on sale of businesses and other assets	(54)			(54)			
Income from investments in unconsolidated affiliates	(220)	(100)		(120)			
Distributions from unconsolidated affiliates	73	34		39			
Non-cash impairment charges	14	15		(1)			
Net changes in working capital and other	(754)	(543)		(211)			
Net cash provided by operating activities	\$ 4,618	\$ 4,034	\$	584	14 %		
Capital expenditures, including capitalized software and other intangibles	\$ 1,479	\$ 1,160	\$	319	28 %		

Our operating cash flow was \$4.6 billion in 2022, an increase of 14% compared with \$4.0 billion in 2021. This increase was primarily attributable to improved operating results, partially offset by higher working capital use compared to the prior year, including increased accounts receivable corresponding to revenue growth and slower customer payments, as well as an increase in future credit card receivables purchased under our Clover Capital program.

We maintain investments in various affiliates that are accounted for as equity method investments. Total distributions from unconsolidated affiliates, including those classified as cash flows from investing activities, were \$211 million and \$149 million during the years ended December 31, 2022 and 2021, respectively.

Our current policy is to use our operating cash flow primarily to fund capital expenditures, share repurchases, acquisitions and to repay debt rather than to pay dividends. Our capital expenditures were approximately 8% and 7% of our total revenue in 2022 and 2021, respectively.

Cash Requirements

The following table details our future cash requirements under certain contractual obligations at December 31, 2022:

(In millions)	Total	Less than 1 year	 1-3 years	3-5 years	More than 5 years
Long-term debt including interest (1)(2)	\$ 26,206	\$ 950	\$ 5,155	\$ 9,705	\$ 10,396
Minimum finance lease payments (1)	576	183	272	120	1
Minimum operating lease payments (1)(2)	868	141	220	175	332
Purchase obligations (1)	1,727	683	715	209	120
Income tax obligations	96	10	36	41	9
Total	\$ 29,473	\$ 1,967	\$ 6,398	\$ 10,250	\$ 10,858

⁽¹⁾ Interest, finance lease, operating lease and purchase obligations are reported on a pre-tax basis.

Share Repurchases

We repurchased \$2.5 billion and \$2.6 billion (including the repurchase described below) of our common stock in 2022 and 2021, respectively. As of December 31, 2022, we had approximately 16.9 million shares remaining under our then existing repurchase authorization. On February 22, 2023, our board of directors approved a repurchase authorization for an additional 75.0 million shares. Shares repurchased are generally held for issuance in connection with our equity plans.

In 2021, New Omaha Holdings L.P. ("New Omaha"), a shareholder of ours, completed an underwritten secondary public offering of 23.0 million shares of our common stock (the "offering"). We repurchased from the underwriters 5.0 million shares of our common stock that were subject to the offering. The share repurchase totaled \$588 million and was funded with cash on hand. The repurchased shares were cancelled and no longer outstanding following the completion of the share repurchase.

Acquisitions and Dispositions

Acquisitions

We acquired Yacaré and Merchant One in December 2022, NexTable in September 2022 and City POS in June 2022. Additionally, we acquired a remaining ownership interest in Finxact in April 2022, in which we previously held a noncontrolling interest. We acquired these businesses for an aggregate purchase price of approximately \$994 million, net of \$28 million of acquired cash, and including earn-out provisions estimated at a fair value of \$6 million. We funded these acquisitions in 2022 by utilizing a combination of available cash and proceeds from the issuance of commercial paper.

We acquired BentoBox in November 2021, AIP in October 2021, SpendLabs in June 2021, Pineapple Payments in May 2021, and Radius8 in March 2021. Additionally, we acquired a remaining ownership interest in NetPay in November 2021 and a remaining ownership interest in Ondot in January 2021, in which we previously held noncontrolling equity interests. We acquired these businesses for an aggregate purchase price of \$882 million, net of \$43 million of acquired cash, and including earn-out provisions at an aggregate fair value of \$34 million. We funded these acquisitions in 2021 by utilizing a combination of available cash, proceeds from the issuance of commercial paper and existing availability under our revolving credit facility.

The results of operations for these acquired businesses are included in our consolidated results from the respective dates of acquisition.

Dispositions

We sold Fiserv Costa Rica, S.A. and our SIS operations in October 2022 and our Korea operations in September 2022 for aggregate net cash proceeds of \$77 million, along with a minority noncontrolling equity interest in the buyer of the Korea operations. Effective March 2022, we mutually agreed to terminate a merchant alliance joint venture with a minority partner. In conjunction with such termination, the joint venture minority partner elected to exercise its option to purchase certain additional merchant contracts of the joint venture for cash proceeds of \$175 million. The net proceeds from these dispositions were primarily used to pay down indebtedness and repurchase shares of our common stock.

The calculations assume that only mandatory debt repayments are made, no additional refinancing or lending occurs, except for our 0.375% Euro-denominated senior notes due in July 2023, 3.800% senior notes due in October 2023, and U.S. dollar and Euro commercial paper notes programs as we have the intent to refinance this debt on a long-term basis through the issuance of new commercial paper notes upon maturity, and we have the ability to do so under our revolving credit facility maturing in June 2027. The variable rate on the revolving credit facility and term loans are priced at the rate in effect at December 31, 2022.

We previously maintained a noncontrolling interest in Tegra118, LLC ("Tegra118") which was accounted for under the equity method. In February 2021, Tegra118 completed a merger with a third party, resulting in a dilution of our ownership interest in the combined new entity, Wealthtech Holdings, LLC, which was subsequently renamed as InvestCloud. In connection with the transaction, we made an additional capital contribution, funded under our revolving credit facility, of \$200 million into the combined entity and, in June 2021, we sold our entire ownership interest in InvestCloud for \$466 million. The net proceeds from the sale were primarily used to pay down outstanding borrowings on our term loan facility.

Indebtedness

Our debt consisted of the following at December 31:

(In millions)	2022			2021		
Short-term and current maturities of long-term debt:						
Foreign lines of credit	\$	198	\$	240		
Finance lease and other financing obligations		270		268		
Total short-term and current maturities of long-term debt	\$	468	\$	508		
Long-term debt:						
3.500% senior notes due October 2022	\$	_	\$	700		
0.375% senior notes due July 2023 (Euro-denominated)		531		566		
3.800% senior notes due October 2023		1,000		1,000		
2.750% senior notes due July 2024		2,000		2,000		
3.850% senior notes due June 2025		900		900		
2.250% senior notes due July 2025 (British Pound-denominated)		632		705		
3.200% senior notes due July 2026		2,000		2,000		
2.250% senior notes due June 2027		1,000		1,000		
1.125% senior notes due July 2027 (Euro-denominated)		531		566		
4.200% senior notes due October 2028		1,000		1,000		
3.500% senior notes due July 2029		3,000		3,000		
2.650% senior notes due June 2030		1,000		1,000		
1.625% senior notes due July 2030 (Euro-denominated)		531		566		
3.000% senior notes due July 2031 (British Pound-denominated)		632		705		
4.400% senior notes due July 2049		2,000		2,000		
U.S. dollar commercial paper notes		2,329		916		
Euro commercial paper notes		1,210		905		
Revolving credit facility		35		97		
Receivable securitized loan		_		500		
Term loan facility		200		200		
Unamortized discount and deferred financing costs		(120)		(125)		
Finance lease and other financing obligations		539		528		
Total long-term debt	\$	20,950	\$	20,729		

At December 31, 2022, our debt consisted primarily of \$16.8 billion of fixed-rate senior notes and \$3.5 billion of outstanding borrowings under our commercial paper programs. Interest on our U.S. dollar-denominated senior notes is paid semi-annually, while interest on our Euro and British Pound-denominated senior notes is paid annually. Interest on our revolving credit facility and commercial paper notes is generally paid weekly, or more frequently on occasion, and interest on our term loan is paid monthly. Outstanding borrowings under our 0.375% Euro-denominated senior notes due in July 2023, 3.800% senior notes due in October 2023, and U.S dollar and Euro commercial paper programs are classified in the consolidated balance sheet as long-term, as we have the intent to refinance these borrowings on a long-term basis through the continued issuance of new commercial paper notes upon maturity, and we also have the ability to refinance such borrowings under our revolving credit facility, as further discussed below.

In July 2022, we redeemed \$700 million in aggregate principal amount of our outstanding 3.500% senior notes due in October 2022 at a redemption price equal to 100% of the aggregate principal amount of the notes being redeemed, plus accrued and unpaid interest. We financed the redemption of these notes using proceeds from the issuance of U.S. dollar commercial paper. We also repaid \$485 million, representing all amounts outstanding on our receivable securitized loan, in July 2022, using proceeds from the issuance of U.S. dollar commercial paper and terminated the underlying receivables financing agreement.

In June 2022, we entered into a new senior unsecured multicurrency revolving credit facility with substantially the same syndicate of banks that were lenders under our prior amended and restated revolving credit facility, which we voluntarily terminated and replaced. The new credit agreement matures in June 2027 and provides for a maximum aggregate principal amount of availability of \$6.0 billion.

Variable Rate Debt

Our variable rate debt consisted of the following at December 31, 2022:

(In millions)	Maturity	Weighted-Average Interest Rate	 Outstanding Borrowings
Foreign lines of credit	n/a	30.58%	\$ 198
U.S. dollar commercial paper notes	various	4.82%	2,329
Euro commercial paper notes	various	1.92%	1,210
Revolving credit facility	June 2027	5.44%	35
Term loan facility	July 2024	5.64%	200
Total variable rate debt		5.27%	\$ 3,972

We maintain certain short-term lines of credit with foreign banks and alliance partners primarily to fund settlement activity associated with international operations in Latin America. We maintain U.S. dollar and Euro unsecured commercial paper programs with various maturities generally ranging from one day to four months. Outstanding borrowings under our commercial paper programs bear interest based on the prevailing rates at the time of issuance. In August 2022, we increased our U.S. commercial paper program borrowing capacity to \$6.0 billion to align with the maximum amount of availability under our revolving credit facility.

As discussed above, we maintain a revolving credit facility with aggregate commitments available for \$6.0 billion of total capacity. Borrowings under the credit facility bear interest at a variable rate based on a Secured Overnight Financing Rate ("SOFR") or a base rate in the case of U.S. dollar borrowings, in each case plus a specified margin based on our long-term debt rating in effect from time to time. We are required to pay a facility fee based on the aggregate commitments in effect under the credit agreement from time to time.

We maintain a term loan credit agreement with a syndicate of financial institutions. Outstanding borrowings under the term loan bear interest at a variable rate based on one-month LIBOR or a base rate, in each case plus a specified margin based on our long-term debt rating in effect from time to time.

Debt Covenants and Compliance

The indentures governing our senior notes contain covenants that, among other matters, limit (i) our ability to consolidate or merge with or into, or convey, transfer or lease all or substantially all of our properties and assets to, another person, (ii) our and certain of our subsidiaries' ability to create or assume liens, and (iii) our and certain of our subsidiaries' ability to engage in sale and leaseback transactions. We may, at our option, redeem the senior notes, in whole or in part, at any time prior to the applicable maturity date.

The new revolving credit facility contains various restrictions and covenants that require us to, among other things, limit our consolidated indebtedness as of the end of each fiscal quarter to no more than 3.75 times our consolidated net income before interest, taxes, depreciation, amortization, non-cash charges and expenses and certain other adjustments ("EBITDA") during the period of four fiscal quarters then ended, subject to certain exceptions.

The term loan facility contains various restrictions and covenants that require us to, among other things, (i) limit our consolidated indebtedness as of the end of each fiscal quarter to no more than 3.5 times our EBITDA during the period of four fiscal quarters then ended, subject to certain exceptions, and (ii) maintain EBITDA of at least 3.0 times our consolidated interest expense as of the end of each fiscal quarter for the period of four fiscal quarters then ended.

During the year ended December 31, 2022, we were in compliance with all financial debt covenants. Our ability to meet future debt covenant requirements will depend on our continued ability to generate earnings and cash flows. We expect to remain in compliance with all terms and conditions associated with our outstanding debt, including financial debt covenants.

Debt Guarantees

We maintain noncontrolling ownership interests in Sagent M&C, LLC and defi SOLUTIONS Group, LLC (collectively, the "Lending Joint Ventures"). The Lending Joint Ventures maintain, as amended in April 2022, variable-rate term loan facilities with aggregate outstanding borrowings of \$437 million in senior unsecured debt at December 31, 2022 and variable-rate revolving credit facilities with an aggregate borrowing capacity of \$83 million with a syndicate of banks, which mature in April 2027. There were no outstanding borrowings on the revolving credit facilities at December 31, 2022. We have guaranteed the debt of the Lending Joint Ventures and do not anticipate that the Lending Joint Ventures will fail to fulfill their debt obligations. We maintained a liability of \$40 million at December 31, 2022 for the estimated fair value of our non-contingent obligations to stand ready to perform over the term of the guarantee arrangements. Such guarantees will be amortized in future periods over the contractual term of the debt. In addition, we maintained a contingent liability of \$21 million at December 31, 2022, representing the current expected credit losses to which we are exposed. This contingent liability is estimated based on certain financial metrics of the Lending Joint Ventures and historical industry data, which is used to develop assumptions of the likelihood the guaranteed parties will default and the level of credit losses in the event a default occurs. We have not made any payments under the guarantees, nor have we been called upon to do so.

Other

Access to capital markets impacts our cost of capital and our ability to refinance maturing debt and fund future acquisitions. Our ability to access capital on favorable terms depends on a number of factors, including general market conditions, interest rates, credit ratings on our debt securities, perception of our potential future earnings and the market price of our common stock. As of December 31, 2022, we had a corporate credit rating of Baa2 with a stable outlook from Moody's Investors Service, Inc. ("Moody's") and BBB with a stable outlook from Standard & Poor's Ratings Services ("S&P") on our senior unsecured debt securities. As of December 31, 2022, we had a commercial paper credit rating of P-2 from Moody's and A-2 from S&P.

The interest rates payable on certain of our senior notes, term loan and commercial paper notes programs are subject to adjustment from time to time if Moody's or S&P changes the debt rating applicable to the notes. If the ratings from Moody's or S&P decrease below investment grade, the per annum interest rates on certain senior notes are subject to increase by up to two percent. In no event will the total increase in the per annum interest rates exceed two percent above the original interest rates, nor will the per annum interest rate be reduced below the original interest rate applicable to the senior notes.

Cash and Cash Equivalents

Investments, exclusive of settlement assets, with original maturities of three months or less that are readily convertible to cash are considered to be cash equivalents as reflected within our consolidated balance sheets. At December 31, 2022 and 2021, we held \$902 million and \$835 million in cash and cash equivalents, respectively.

The table below details the cash and cash equivalents at December 31:

		2022						2021						
(In millions)	Do	mestic	International Total		Do	mestic	Inter	national		Total				
Available	\$	135	\$	153	\$	288	\$	180	\$	221	\$	401		
Unavailable (1)		178		436		614		138		296		434		
Total	\$	313	\$	589	\$	902	\$	318	\$	517	\$	835		

Represents cash held by our joint ventures that is not available to fund operations outside of those entities unless the board of directors of the relevant entity declares a dividend, as well as cash held by other entities that are subject to foreign exchange controls in certain countries or regulatory capital requirements.

Employee Termination Costs

We recorded \$187 million and \$95 million of employee termination costs related to cash severance and other separation costs for terminated employees during the years ended December 31, 2022 and 2021, respectively. Employee termination costs include those charges incurred in connection with the acquisition of First Data Corporation during the year ended December 31, 2021. The employee severance and other separation costs accrued balance of \$23 million at December 31, 2022 is expected to be paid within the next twelve months.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Market risk refers to the risk that a change in the level of one or more market prices, interest rates, currency exchange rates, indices, correlations or other market factors, such as liquidity, will result in losses for a certain financial instrument or group of financial instruments. Our senior management actively monitors certain market risks to which we are exposed, primarily from fluctuations in interest rates and foreign currency exchange rates. In order to limit our exposure to these risks, we may enter into derivative instruments with creditworthy institutions to hedge against changing interest rates and foreign currency rate fluctuations. We currently utilize forward exchange contracts, fixed-to-fixed cross-currency rate swap contracts and other non-derivative hedging instruments to manage risk.

Interest Rate Risk

In addition to existing cash and cash equivalents balances and cash provided by operating activities, we use a combination of fixed- and variable-rate debt instruments to finance our operations. We are exposed to interest rate risk on certain of these debt obligations. We had fixed- and variable-rate debt, excluding finance leases and other financing obligations, with varying maturities for an aggregate carrying amount of \$16.8 billion and \$4.0 billion, respectively, at December 31, 2022. Our fixed-rate debt at December 31, 2022 primarily consisted of fixed-rate senior notes with a fair value of \$15.2 billion, based on matrix pricing which considers readily observable inputs of comparable securities. The potential change in fair value of our fixed-rate senior notes from a hypothetical 1% change in market interest rates would not alone impact any decisions to repurchase our outstanding fixed-rate debt instruments before their maturity. Our variable-rate debt at December 31, 2022 primarily consisted of outstanding U.S. dollar and Euro commercial paper and borrowings on our variable rate term loan and foreign lines of credit. Based on our outstanding debt balances and interest rates at December 31, 2022, a hypothetical 1% increase in market interest rates related to our variable-rate debt would increase annual interest expense by approximately \$40 million. This sensitivity analysis assumes the outstanding debt balances at December 31, 2022 and the change in market interest rates is applicable for an entire year.

In connection with processing electronic payments transactions, funds received from subscribers are invested into short-term, highly liquid investments from the time we collect the funds until payments are made to the applicable recipients. Fluctuations in market interest rates affect the interest-related income that we earn on these investments. During the year ended December 31, 2022, the amount of such interest-related income was not material and, therefore, a hypothetical 1% decrease in market interest rates would not have a significant impact on such income. This sensitivity analysis assumes the subscriber fund balances at December 31, 2022 and the change in market interest rates is applicable for an entire year.

Foreign Currency Risk

We conduct business globally and are exposed to foreign currency risk from changes in the value of underlying assets and liabilities of our non-U.S. dollar-denominated foreign investments and foreign currency transactions. We manage the exposure to these risks through the use of foreign currency forward exchange contracts, fixed-to-fixed cross-currency rate swap contracts and non-derivative net investment hedges. Translation gains and losses from non-U.S. subsidiaries are generally reflected as a component of accumulated other comprehensive loss within shareholders' equity on the consolidated balance sheets. For subsidiaries located in highly inflationary economies, the financial statements are remeasured into U.S. dollars, and the foreign currency gains and losses from the remeasurement of monetary assets and liabilities are reflected in the consolidated statements of income, rather than in shareholders' equity. The remeasurement of monetary assets and liabilities resulted in foreign currency exchange losses of \$52 million and \$5 million during the years ended December 31, 2022 and 2021, respectively, primarily related to Argentina.

Our exposure to foreign currency exchange risks generally arise from our non-U.S. operations to the extent they are conducted in local currency. Approximately 14% of our total revenue was generated outside the U.S in each of 2022 and 2021. The major currencies to which our revenues are exposed are the Argentine Peso, Brazilian Real, British Pound, Canadian Dollar, Euro and Indian Rupee. A strengthening or weakening of the U.S. dollar relative to the currencies in which our revenue and profits are denominated by 10% would have resulted in a decrease or increase, respectively, in our reported pre-tax income as follows at December 31:

(In millions)	202	2	2021
Argentine Peso	\$	5	\$ 4
Brazilian Real		5	6
British Pound		1	5
Canadian Dollar		5	4
Euro		7	16
Indian Rupee		5	3
Other			1
Total increase or decrease	\$	28	\$ 39

We maintain foreign currency forward exchange contracts, designated as cash flow hedges, to hedge foreign currency exposure to the Indian Rupee. At December 31, 2022, the notional amount of these derivatives was \$346 million, with a fair value of \$(8) million. In addition, we maintain fixed-to-fixed cross-currency rate swap contracts to hedge a portion of our net investment in certain subsidiaries whose functional currencies are the Euro. At December 31, 2022, aggregate notional cross-currency rate swaps of 400 million Euro were designated as net investment hedges. We also designated our Euro- and British Pound-denominated senior notes and Euro commercial paper notes as net investment hedges to hedge a portion of our net investment in certain subsidiaries whose functional currencies are the Euro and British Pound.

Item 8. Financial Statements and Supplementary Data

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Fiserv, Inc.
Consolidated Statements of Income

(In millions, except per share data)

Year Ended December 31,	 2022	 2021	2020
Revenue:			
Processing and services (1)	\$ 14,460	\$ 13,307	\$ 12,215
Product	3,277	2,919	2,637
Total revenue	17,737	16,226	14,852
Expenses:			
Cost of processing and services	5,771	6,084	5,841
Cost of product	2,221	2,044	1,971
Selling, general and administrative	6,059	5,810	5,652
Net gain on sale of businesses and other assets	(54)		(464)
Total expenses	13,997	13,938	13,000
Operating income	3,740	2,288	1,852
Interest expense, net	(733)	(693)	(709)
Other (expense) income	(94)	71	28
Income before income taxes and income from investments in unconsolidated affiliates	2,913	1,666	1,171
Income tax provision	(551)	(363)	(196)
Income from investments in unconsolidated affiliates	220	100	
Net income	2,582	1,403	975
Less: net income attributable to noncontrolling interests and redeemable noncontrolling interests	52	69	17
Net income attributable to Fiserv, Inc.	\$ 2,530	\$ 1,334	\$ 958
Net income attributable to Fiserv, Inc. per share – basic	\$ 3.94	\$ 2.01	\$ 1.42
Net income attributable to Fiserv, Inc. per share – diluted	\$ 3.91	\$ 1.99	\$ 1.40
Shares used in computing net income attributable to Fisery, Inc. per share:			
Basic	642.3	662.6	672.1
Diluted	647.9	671.6	683.4

Includes processing and other fees charged to related party investments accounted for under the equity method of \$201 million, \$203 million and \$236 million for the years ended December 31, 2022, 2021 and 2020, respectively (see Note 19).

Fiserv, Inc. Consolidated Statements of Comprehensive Income

(In millions)

Year Ended December 31,	 2022	 2021	 2020
Net income	\$ 2,582	\$ 1,403	\$ 975
Other comprehensive income (loss):			
Fair market value adjustment on cash flow hedges	(15)	8	7
Reclassification adjustment for net realized losses (gains) on cash flow hedges included in cost of processing and services	2	(10)	(1)
Reclassification adjustment for net realized losses on cash flow hedges included in net interest expense	19	21	21
Tax impacts of cash flow hedges, net	(2)	(5)	(7)
Unrealized (losses) gains on defined benefit pension plans	(78)	67	(8)
Tax impacts of defined benefit pension plans, net	18	(17)	2
Foreign currency translation	(421)	(497)	(186)
Reclassification adjustment for accumulated foreign currency translation impacts from the sale of a foreign entity included in loss on sale of business	56	_	_
Tax impacts of foreign currency translation, net (see Note 13)	(73)	36	
Total other comprehensive loss	(494)	(397)	(172)
Comprehensive income	\$ 2,088	\$ 1,006	\$ 803
Less: net income attributable to noncontrolling interests and redeemable noncontrolling interests	52	69	17
Less: other comprehensive (loss) income attributable to noncontrolling interests	(50)	(39)	35
Comprehensive income attributable to Fiserv, Inc.	\$ 2,086	\$ 976	\$ 751

Fisery, Inc. Consolidated Balance Sheets

(In millions)

December 31,	 2022	 2021
Assets		
Cash and cash equivalents	\$ 902	\$ 835
Trade accounts receivable, less allowance for doubtful accounts	3,585	2,860
Prepaid expenses and other current assets	1,575	1,523
Settlement assets	21,482	13,652
Total current assets	27,544	18,870
Property and equipment, net	1,958	1,742
Customer relationships, net	8,424	9,991
Other intangible assets, net	3,991	4,018
Goodwill	36,811	36,433
Contract costs, net	905	811
Investments in unconsolidated affiliates	2,403	2,561
Other long-term assets	1,833	1,823
Total assets	\$ 83,869	\$ 76,249
Liabilities and Equity		
Accounts payable and accrued expenses	\$ 3,883	\$ 3,550
Short-term and current maturities of long-term debt	468	508
Contract liabilities	625	585
Settlement obligations	21,482	13,652
Total current liabilities	26,458	18,295
Long-term debt	20,950	20,729
Deferred income taxes	3,602	4,172
Long-term contract liabilities	235	225
Other long-term liabilities	936	878
Total liabilities	52,181	44,299
Commitments and Contingencies (see Note 18)		
Redeemable Noncontrolling Interests	161	278
Fiserv, Inc. Shareholders' Equity:		
Preferred stock, no par value: 25 million shares authorized; none issued	_	_
Common stock, \$0.01 par value: 1,800 million shares authorized; 784 million shares issued	8	8
Additional paid-in capital	23,011	22,983
Accumulated other comprehensive loss	(1,189)	(745)
Retained earnings	17,376	14,846
Treasury stock, at cost, 154 million and 134 million shares	 (8,378)	 (6,140)
Total Fisery, Inc. shareholders' equity	 30,828	30,952
Noncontrolling interests	 699	720
Total equity	 31,527	31,672
Total liabilities and equity	\$ 83,869	\$ 76,249

Fiserv, Inc. Consolidated Statements of Equity

Fisery, Inc. Shareholders' Equity

	Number	of Shares			1	Amount			
					Accumulated				
(In millions)	Common Shares	Treasury Shares	Common Stock	Additional Paid-In Capital	Other Comprehensive Loss	Retained Earnings	Treasury Stock	Noncontrolling Interests	Total Equity
Balance at January 1, 2020	791	112	\$ 8	\$ 23,741	\$ (180)	\$ 12,528	\$ (3,118)	\$ 1,616	\$ 34,595
Net income (loss) (1)						958		(22)	936
Measurement period adjustments related to First Data acquisition								(126)	(126)
Distributions paid to noncontrolling interests (2)								(37)	(37)
Net adjustment to noncontrolling interests from dissolution (see Note 4)				(36)				(726)	(762)
Other comprehensive (loss) income					(207)			35	(172)
Share-based compensation				369					369
Shares issued under stock plans		(5)		(231)	ı		178		(53)
Purchases of treasury stock		16					(1,635)		(1,635)
Retirement of treasury stock (see Note 19)	(2)	(2)		(200)	1		200		_
Cumulative-effect adjustment of ASU 2016-13 adoption						(45)			(45)
Balance at December 31, 2020	789	121	8	23,643	(387)	13,441	(4,375)	740	33,070
Net income (1)						1,334		25	1,359
Distributions paid to noncontrolling interests (2)								(6)	(6)
Change in redemption value of redeemable noncontrolling interest (see Note 12)				(18)					(18)
Other comprehensive loss					(287)			(39)	(326)
Prior period adjustment (see Note 13)					(71)	71			_
Share-based compensation				239					239
Shares issued under stock plans		(5)		(293)	1		212		(81)
Purchases of treasury stock		23					(2,565)		(2,565)
Retirement of treasury stock (see Note 19)	(5)	(5)		(588)			588		_
Balance at December 31, 2021	784	134	8	22,983	(745)	14,846	(6,140)	720	31,672
Net income (1)						2,530		24	2,554
Distributions paid to noncontrolling interests (2)								(8)	(8)
Other comprehensive loss					(444)			(50)	(494)
Share-based compensation				323					323
Shares issued under stock plans		(5)		(295)	ı		262		(33)
Purchases of treasury stock		25					(2,500)		(2,500)
Capital contribution from noncontrolling interest								12	12
								13	13

⁽¹⁾ The total net income presented in the consolidated statements of equity for the years ended December 31, 2022, 2021 and 2020 is different than the amount presented in the consolidated statements of income due to the net income attributable to redeemable noncontrolling interests of \$28 million, \$44 million and \$39 million, respectively, not included in equity.

The total distributions presented in the consolidated statements of equity for the years ended December 31, 2022, 2021 and 2020 exclude \$34 million, \$43 million and \$42 million, respectively, in distributions paid to redeemable noncontrolling interests, and for the years ended December 31, 2021 and 2020 exclude \$13 million and \$25 million, respectively, in distributions related to the dissolution of the Banc of America Merchant Services joint venture (see Note 4), not included in equity.

Fisery, Inc. Consolidated Statements of Cash Flows

(In millions)

Year Ended December 31,	 2022	2021	2020
Cash flows from operating activities:			
Net income	\$ 2,582	\$ 1,403	\$ 975
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and other amortization	1,320	1,158	1,077
Amortization of acquisition-related intangible assets	1,849	2,038	2,133
Amortization of financing costs and debt discounts	43	52	47
Share-based compensation	323	239	369
Deferred income taxes	(558)	(262)	71
Net gain on sale of businesses and other assets	(54)	_	(464)
Income from investments in unconsolidated affiliates	(220)	(100)	
Distributions from unconsolidated affiliates	73	34	42
Non-cash impairment charges	14	15	124
Other operating activities	(10)	(48)	(16)
Changes in assets and liabilities, net of effects from acquisitions and dispositions:			
Trade accounts receivable	(770)	(358)	320
Prepaid expenses and other assets	(253)	(248)	(167)
Contract costs	(290)	(269)	(289)
Accounts payable and other liabilities	511	303	(146)
Contract liabilities	58	77	71
Net cash provided by operating activities	4,618	4,034	4,147
Cash flows from investing activities:			
Capital expenditures, including capitalized software and other intangibles	(1,479)	(1,160)	(900)
Net proceeds from sale of businesses and other assets	246	_	579
Payments for acquisitions of businesses, net of cash acquired	(988)	(848)	(139)
Distributions from unconsolidated affiliates	138	115	109
Purchases of investments	(52)	(256)	(1)
Proceeds from sale of investments	23	519	11
Net cash used in investing activities	(2,112)	(1,630)	(341)
Cash flows from financing activities:			
Debt proceeds	1,624	6,435	8,897
Debt repayments, including debt financing costs	(3,325)	(7,881)	(10,934)
Net proceeds from (repayments of) commercial paper and short-term borrowings	1,837	1,741	(6)
Proceeds from issuance of treasury stock	149	140	133
Purchases of treasury stock, including employee shares withheld for tax obligations	(2,677)	(2,786)	(1,826)
Settlement activity, net	(78)	711	405
Distributions paid to noncontrolling interests and redeemable noncontrolling interests	(42)	(62)	(104)
Payments of acquisition-related contingent consideration	(2)	(37)	(18)
Other financing activities	36	(2)	22
Net cash used in financing activities	(2,478)	(1,741)	(3,431)
Effect of exchange rate changes on cash and cash equivalents	(41)	(27)	16
Net change in cash and cash equivalents	(13)	636	391
Cash and cash equivalents, beginning balance	3,205	2,569	2,178
Cash and cash equivalents, ending balance	\$ 3,192	\$ 3,205	\$ 2,569

Fisery, Inc. Notes to Consolidated Financial Statements

1. Summary of Significant Accounting Policies

Description of the Business

Fisery, Inc. and its subsidiaries (collectively, the "Company") provide payments and financial services technology solutions to clients worldwide. The Company provides account processing and digital banking solutions; card issuer processing and network services; payments; e-commerce; merchant acquiring and processing; and the Clover® cloud-based point-of-sale ("POS") and business management platform. The Company serves clients around the globe, including merchants, banks, credit unions, other financial institutions and corporate clients. The Company's reportable segments are Merchant Acceptance ("Acceptance"), Financial Technology ("Fintech") and Payments and Network ("Payments").

Principles of Consolidation

The consolidated financial statements include the accounts of Fisery, Inc. and its subsidiaries in which the Company holds a majority controlling financial interest. All intercompany transactions and balances between the Company and its subsidiaries have been eliminated in consolidation. Control is typically established when ownership and voting interests in an entity are greater than 50%. Investments in which the Company has significant influence but not control are accounted for using the equity method of accounting, for which the Company's share of net income or loss is reported within income from investments in unconsolidated affiliates, and the related tax expense or benefit is reported within the income tax provision in the consolidated statements of income. Significant influence over an affiliate's operations generally coincides with an ownership interest of between 20% and 50%; however, for partnerships and limited liability companies, an ownership interest of between 3% and 50% or board of director representation may also constitute significant influence.

The Company maintains a majority controlling financial interest in certain entities, mostly related to consolidated merchant alliances (see Note 19). Noncontrolling interests represent the minority shareholders' share of the net income or loss and equity in consolidated subsidiaries. The Company's noncontrolling interests presented in the consolidated statements of income include net income attributable to noncontrolling interests and redeemable noncontrolling interests. Noncontrolling interests are presented as a component of equity in the consolidated balance sheets. Noncontrolling interests that are redeemable upon the occurrence of an event that is not solely within the Company's control are presented outside of equity and are carried at their estimated redemption value if it exceeds the initial carrying value of the redeemable interest (see Note 12).

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("U.S.") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ materially from those estimates.

Since the onset of the coronavirus ("COVID-19") pandemic in early 2020, global economic and market conditions have been negatively impacted, including levels of consumer and business spending. The Company's operating performance, primarily within its merchant acquiring and payment-related businesses, which earn transaction-based fees, was adversely affected by the economic impact of the COVID-19 pandemic. The Company has determined, however, that there have been no material changes to the estimates and assumptions within its consolidated financial statements to date as a result of the COVID-19 pandemic. The Company will continue to monitor any future developments.

Revenue Recognition

The Company generates revenue from the delivery of processing, service and product solutions. Revenue is measured based on consideration specified in a contract with a customer, and excludes any amounts collected on behalf of third parties. The Company recognizes revenue when it satisfies a performance obligation by transferring control over a product or service to a customer which may be at a point in time or over time. Additional information regarding the Company's revenue recognition policies is included in Note 3 to the consolidated financial statements.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and investments with original maturities of 90 days or less and are stated at cost in the consolidated balance sheets, which approximates market value. Cash and cash equivalents that were restricted from use due to regulatory or other requirements are included in other long-term assets in the consolidated balance sheets. Cash and cash

equivalents held on behalf of merchants and other payees are included in settlement assets in the consolidated balance sheets. The changes in settlement cash and cash equivalents are included in settlement activity, net within cash flows from financing activities in the consolidated statements of cash flows.

The following table provides a reconciliation between cash and cash equivalents on the consolidated balance sheets and the consolidated statements of cash flows at December 31:

(In millions)		2022	2021	2020		
Cash and cash equivalents on the consolidated balance sheets	\$	902	\$ 835	\$	906	
Cash and cash equivalents included in settlement assets (see Note 5)		2,283	2,361		1,650	
Other restricted cash		7	9		13	
Total cash and cash equivalents on the consolidated statements of cash flows	\$	3,192	\$ 3,205	\$	2,569	

Allowance for Doubtful Accounts

The Company analyzes the collectability of trade accounts receivable by considering historical bad debts, client creditworthiness, current economic trends, changes in client payment terms and collection trends when evaluating the adequacy of the allowance for doubtful accounts. Any change in the assumptions used in analyzing a specific account receivable may result in an additional allowance for doubtful accounts being recognized in the period in which the change occurs. The allowance for doubtful accounts was \$52 million and \$55 million at December 31, 2022 and 2021, respectively.

Leases

The Company maintains certain leasing receivables associated with its POS terminal leasing businesses. Leasing receivables are included in prepaid expenses and other current assets and other long-term assets in the consolidated balance sheets. Interest income on the Company's leasing receivables is recognized using the effective interest method, and is included within product revenue in the consolidated statements of income. Initial direct costs incurred to obtain operating leases and other sales-type leases, in which the fair value of the underlying asset is equal to its carrying amount at the lease commencement date, are deferred and recognized over the lease term. Initial direct costs to obtain a sales-type lease are expensed as incurred if the fair value of the underlying asset is different from its carrying amount at the lease commencement date. Additional information regarding the Company's lease policies is included in Note 10 to the consolidated financial statements.

Prepaid Expenses and Other Current Assets

Prepaid expenses represent advance payments for goods and services to be consumed in the future, such as maintenance, postage and insurance, and totaled \$431 million and \$410 million at December 31, 2022 and 2021, respectively.

The Company offers merchants advance access to capital through its Clover Capital cash advance program. Under this program, merchants sell fixed amounts of their future credit card receivables to the Company in exchange for an up-front purchase price payment. Future credit card receivables purchased by the Company under the Clover Capital program were \$164 million and \$77 million at December 31, 2022 and 2021, respectively. The Company maintained a reserve of \$7 million at both December 31, 2022 and 2021, based on an estimate of uncollectible amounts.

Settlement Assets and Obligations

Settlement assets and obligations result from timing differences between collection and fulfillment of payment transactions and collateral amounts held to manage merchant credit risk, primarily associated with the Company's merchant acquiring services. Settlement assets represent cash received or amounts receivable from agents, payment networks, bank partners, merchants or direct consumers. Settlement obligations represent amounts payable to merchants and payees. Certain merchant settlement assets (included within settlement receivables) that relate to settlement obligations are held by partner banks to which the Company does not have legal ownership, but which the Company has the right to use, to satisfy the related settlement obligations. The Company records settlement obligations for amounts payable to merchants and for outstanding payment instruments issued to payees that have not yet been presented for settlement. Additional information regarding the Company's settlement assets and obligations is included in Note 5 to the consolidated financial statements.

Allowance for Merchant Credit Losses

With respect to the Company's merchant acquiring business, the Company's merchant customers have the legal obligation to refund any charges properly reversed by the cardholder. However, in the event the Company is not able to collect the refunded

amounts from the merchants, the Company may be liable for the reversed charges. The Company's risk in this area primarily relates to situations where a cardholder has purchased goods or services to be delivered in the future. The Company requires cash deposits, guarantees, letters of credit or other types of collateral from certain merchants to mitigate this risk. Collateral held by the Company, or held by partner banks for the Company's benefit, is classified within settlement assets and the obligation to repay the collateral is classified within settlement obligations in the consolidated balance sheets. The Company also utilizes a number of systems and procedures to manage merchant credit risk. Despite these efforts, the Company experiences losses due to merchant defaults.

The aggregate merchant credit loss expense, recognized by the Company within cost of processing and services in the consolidated statements of income, was \$62 million, \$41 million and \$113 million for the years ended December 31, 2022, 2021 and 2020, respectively. The amount of collateral available to the Company was \$1.5 billion and \$2.2 billion at December 31, 2022 and 2021, respectively. The Company maintains an allowance for merchant credit losses that are expected to exceed the amount of merchant collateral. The allowance includes estimated losses from anticipated chargebacks and fraud events that have been incurred on merchants' payment transactions that have been processed but not yet reported to the Company, which is recorded within accounts payable and accrued expenses in the consolidated balance sheets, as well as estimated losses on refunded amounts to cardholders that have not yet been collected from the merchants, which is recorded within prepaid expenses and other current assets in the consolidated balance sheets. The allowance is based primarily on the Company's historical experience of credit losses and other factors such as changes in economic conditions or increases in merchant fraud. The aggregate merchant credit loss allowance was \$29 million and \$42 million at December 31, 2022 and 2021, respectively.

Property and Equipment

Property and equipment is reported at cost. Depreciation of property and equipment is computed primarily using the straight-line method over the shorter of the estimated useful life of the asset or the leasehold period, if applicable. Property and equipment consisted of the following at December 31:

(In millions)	Estimated Useful Lives	2022	2021
Land		\$ 47	\$ 48
Data processing equipment	3 to 5 years	3,025	2,302
Buildings and leasehold improvements	5 to 40 years	724	512
Furniture and equipment	5 to 8 years	370	372
		4,166	3,234
Less: Accumulated depreciation		(2,208)	(1,492)
Total		\$ 1,958	\$ 1,742

Depreciation expense for all property and equipment totaled \$555 million, \$498 million and \$523 million for the years ended December 31, 2022, 2021 and 2020, respectively (see Note 16 for a description of accelerated depreciation under certain finance lease agreements).

Intangible Assets

Customer related intangible assets represent customer contracts and relationships obtained as part of acquired businesses and are amortized using an accelerated amortization method which corresponds with the customer attrition rates used in the initial valuation of the intangibles over their estimated useful lives, generally ten to twenty years. Acquired software and technology represents software and technology intangible assets obtained as part of acquired businesses and is amortized using the straight-line method over their estimated useful lives, generally four to ten years. Trade names are amortized using the straight-line method over their estimated useful lives, generally eight to twenty years. Non-compete agreements are amortized using the straight-line method over their estimated useful lives, generally four to five years.

Purchased software represents software licenses purchased from third parties and is amortized using the straight-line method over their estimated useful lives, generally five years.

The Company continually develops, maintains and enhances its products and systems. Product development expenditures represented approximately 7%, 7% and 6% of the Company's total revenue for the years ended December 31, 2022, 2021 and 2020, respectively. Research and development costs incurred prior to the establishment of technological feasibility are expensed as incurred. Routine maintenance of software products, design costs and other development costs incurred prior to the

establishment of a product's technological feasibility are also expensed as incurred. Costs are capitalized commencing when the technological feasibility of the software has been established.

Capitalized software development costs represent the capitalization of certain costs incurred to develop new software or to enhance existing software which is marketed externally or utilized by the Company to process client transactions. Capitalized software development costs are amortized using the straight-line method over their estimated useful lives, generally five years.

The Company may, at its discretion, negotiate to pay an independent sales organization ("ISO") an agreed-upon up-front amount in exchange for the ISO's surrender of its right to receive commission payments from the Company related to future transactions of merchants referred by the ISO ("residual buyout"). The amount that the Company pays for these residual buyouts is capitalized and subsequently amortized using the straight-line method over the expected life of the merchant portfolios, generally five to nine years. The Company may also obtain residual buyouts as part of acquired businesses. Additional information regarding the Company's identifiable intangible assets is included in Note 6 to the consolidated financial statements.

Goodwill

Goodwill represents the excess of purchase price over the fair value of identifiable assets acquired and liabilities assumed in a business combination. The Company evaluates goodwill for impairment on an annual basis, or more frequently if circumstances indicate possible impairment. Goodwill is tested for impairment at a reporting unit level, which is one level below the Company's reportable segments. When assessing goodwill for impairment, the Company considers (i) the prior year's amount of excess fair value over the carrying value of each reporting unit, (ii) the period of time since a reporting unit's last quantitative test, (iii) the extent a reorganization or disposition changes the composition of one or more of the reporting units and (iv) other factors to determine whether or not to first perform a qualitative test. When performing a qualitative test, the Company assesses numerous factors to determine whether it is more likely than not that the fair value of its reporting units is less than their respective carrying values. Examples of qualitative factors that the Company assesses include its share price, its financial performance, market and competitive factors in its industry and other events specific to its reporting units. If the Company concludes that it is more likely than not that the fair value of a reporting unit is less than its carrying value, the Company performs a quantitative impairment test by comparing reporting unit carrying values to estimated fair values.

The Company elected to perform a quantitative test for certain reporting units, including those that changed in composition or where the prior year's amount of excess fair value over carrying value was of a lower magnitude, and tested the remainder of its reporting units using a qualitative approach. The Company's most recent annual impairment assessment of its reporting units in the fourth quarter of 2022 determined that its goodwill was not impaired as the estimated fair values exceeded the carrying values. However, it is reasonably possible that future developments related to the interest or currency exchange rate environments; a shift in strategic initiatives; a deterioration in financial performance or in the success of merchant alliances and relationships within a particular reporting unit; or significant changes in the composition of, or assumptions used in, the quantitative test on certain of the Company's reporting units (such as an increase in risk-adjusted discount rates) could have a future material impact on one or more of the estimates and assumptions used to evaluate goodwill impairment. There is no accumulated goodwill impairment for the Company through December 31, 2022. Additional information regarding the Company's goodwill is included in Note 7 to the consolidated financial statements.

Asset Impairment

The Company reviews property and equipment, lease right-of-use ("ROU") assets, intangible assets and its investments in unconsolidated affiliates for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. The Company reviews capitalized software development costs for impairment at each reporting date. Recoverability of property and equipment, lease ROU assets, capitalized software development costs and other intangible assets is assessed by comparing the carrying amount of the asset to either the undiscounted future cash flows expected to be generated by the asset or the net realizable value of the asset, depending on the type of asset. The Company assesses lease ROU assets that are exited in advance of the non-cancellable lease terms by comparing the carrying values of the lease ROU assets to the discounted cash flows from estimated sublease payments. The Company's investments in unconsolidated affiliates are assessed by comparing the carrying amount of the investments to their estimated fair values and are impaired if any decline in fair value is determined to be other than temporary. Measurement of any impairment loss is based on estimated fair value.

Fair Value Measurements

The Company applies fair value accounting for all assets and liabilities that are recognized or disclosed at fair value in its consolidated financial statements on a recurring basis. Fair value represents the amount that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities, the Company uses the hierarchy prescribed in Accounting

Standards Codification ("ASC") 820, *Fair Value Measurements* ("ASC Topic 820"), and considers the principal or most advantageous market and the market-based risk measurements or assumptions that market participants would use in pricing the asset or liability. The three levels in the hierarchy are as follows:

- Level 1 Quoted prices (unadjusted) for identical assets or liabilities in active markets that are accessible as of the measurement date.
- Level 2 Inputs other than quoted prices within Level 1 that are observable either directly or indirectly, including but not limited to quoted prices in markets that are not active, quoted prices in active markets for similar assets or liabilities and observable inputs other than quoted prices such as interest rates or yield curves.
- Level 3 Unobservable inputs reflecting management's judgments about the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk.

Additional information regarding the Company's fair value measurements is included in Note 9 to the consolidated financial statements.

Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consisted of the following at December 31:

(In millions)	202	2	2021
Trade accounts payable	\$	652	\$ 593
Client deposits		871	783
Accrued compensation and benefits		279	392
Accrued taxes		432	154
Accrued interest		216	216
Other accrued expenses		1,433	1,412
Total	\$	3,883	\$ 3,550

Foreign Currency

The U.S. dollar is the functional currency of the Company's U.S.-based businesses and certain foreign-based businesses. Where the functional currency differs from the U.S. dollar, assets and liabilities are translated into U.S. dollars at the exchange rates in effect at the balance sheet date. Revenue and expenses are translated at the average exchange rates during the reporting period. Gains and losses from foreign currency translation are recorded as a separate component of accumulated other comprehensive loss. Gains and losses from foreign currency transactions are included in determining net income for the reporting period.

Financial statements of subsidiaries located in highly inflationary economies outside of the U.S. are remeasured into U.S. dollars, and the foreign currency gains and losses from the remeasurement of monetary assets and liabilities are reflected in the consolidated statements of income, rather than in shareholders' equity. The remeasurement of monetary assets and liabilities resulted in foreign currency exchange losses of \$52 million and \$5 million during the years ended December 31, 2022 and 2021, respectively, primarily related to Argentina. Foreign currency exchange losses resulting from the remeasurement of monetary assets and liabilities were nominal during the year ended December 31, 2020.

To reduce exposure to changes in the value of the Company's net investments in certain of its foreign currency-denominated subsidiaries due to changes in foreign currency exchange rates, the Company uses fixed-to-fixed cross-currency rate swap contracts and foreign currency-denominated debt as economic hedges of its net investments in such foreign currency-denominated subsidiaries (see Note 13). Accordingly, foreign currency transaction gains or losses on the qualifying net investment hedge instruments are recorded as foreign currency translation, net of tax, within other comprehensive income (loss) in the consolidated statements of comprehensive income and will remain in accumulated other comprehensive loss within the consolidated balance sheets until the sale or complete liquidation of the underlying foreign subsidiaries.

Derivatives

Derivatives are entered into for periods consistent with related underlying exposures and are recorded in the consolidated balance sheets as either an asset or liability measured at fair value. If the derivative is designated as a cash flow hedge, changes in the fair value of the derivative are recorded as a component of accumulated other comprehensive loss and recognized in the consolidated statements of income when the hedged item affects earnings. If the derivative is designated as a net investment hedge, changes in the fair value of the derivative, net of tax, are recorded in the foreign currency translation component of other comprehensive income (loss) until the sale or complete liquidation of the underlying net investment. If the derivative is

designated as a fair value hedge, changes in the fair value of the derivative are recorded in the same line item as the changes in the fair value of the hedged item and recognized in the consolidated statements of income. To the extent a derivative is not designated as a hedge, changes in fair value are recognized in the consolidated statements of income. The Company's policy is to enter into derivatives with creditworthy institutions and not to enter into such derivatives for speculative purposes.

Employee Benefit Plans

The Company maintains frozen defined benefit pension plans covering certain employees in Europe and the U.S. The Company records actuarial gains/losses and prior service cost in the consolidated balance sheets and recognizes changes in these amounts during the year in which changes occur through other comprehensive income (loss). The Company uses various assumptions when computing amounts relating to its defined benefit pension plan obligations and their associated expenses (including the discount rate and the expected rate of return on plan assets). Additional information regarding the Company's employee benefit plans is included in Note 14 to the consolidated financial statements.

Cost of Processing, Services and Product

Cost of processing and services consists of costs directly associated with providing services to clients and includes the following: personnel; equipment and data communication; infrastructure costs, including costs to maintain software applications; client support; certain depreciation and amortization; and other operating expenses.

Cost of product consists of costs directly associated with the products sold and includes the following: costs of materials and postage; software development; hardware costs (primarily POS devices); personnel; infrastructure costs; certain depreciation and amortization; and other costs directly associated with product revenue.

Selling, General and Administrative Expenses

Selling, general and administrative expenses primarily consist of: salaries, wages, commissions and related expenses paid to sales personnel, administrative employees and management; third-party commissions; advertising and promotional costs; certain depreciation and amortization; and other selling and administrative expenses.

Interest Expense, Net

Interest expense, net consists of interest expense primarily associated with the Company's outstanding borrowings and finance lease obligations, as well as interest income primarily associated with the Company's investment securities. Interest expense, net consisted of the following for the years ended December 31:

(In millions)	2022	2021	2020	
Interest expense	\$	(746)	\$ (696)	\$ (716)
Interest income		13	3	7
Interest expense, net	\$	(733)	\$ (693)	\$ (709)

Income Taxes

Deferred tax assets and liabilities are recognized for the expected future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax basis, and net operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. A valuation allowance is recorded against deferred tax assets if it is more likely than not that some portion or all of the deferred tax assets will not be realized.

Liabilities are established for unrecognized tax benefits, attributable to differences between a tax position taken or expected to be taken in a tax return and the benefit recognized in the financial statements. In establishing a liability for an unrecognized tax benefit, assumptions are made in determining whether, and the extent to which, a tax position will be sustained. A tax position is recognized only when it is more likely than not to be sustained upon examination by the relevant taxing authority, based on its technical merits. The amount of tax benefit recognized reflects the largest benefit the Company believes is more likely than not to be realized upon ultimate settlement. As additional information becomes available, the liability for unrecognized tax benefits is reevaluated and adjusted, as appropriate. Tax benefits ultimately realized can differ from amounts previously recognized due to uncertainties, with any such differences generally impacting the provision for income tax.

Net Income Per Share

Net income per share attributable to Fisery, Inc. in each year is calculated using actual, unrounded amounts. Basic net income per share is computed by dividing net income attributable to Fisery, Inc. by the weighted-average number of common shares outstanding during the year. Diluted net income per share is computed by dividing net income attributable to Fisery, Inc. by the weighted-average number of common shares and common stock equivalents outstanding during the year. Common stock equivalents consist of outstanding stock options, unvested restricted stock units and unvested restricted stock awards, and are computed using the treasury stock method. The Company excluded 1.7 million, 1.5 million and 1.3 million weighted-average shares from the calculations of common stock equivalents for anti-dilutive stock options in 2022, 2021 and 2020, respectively. The computation of shares used in calculating basic and diluted net income per share is as follows at December 31:

(In millions)	2022	2021	2020
Weighted-average common shares outstanding used for the calculation of net income attributable to Fisery, Inc. per share –			
basic	642.3	662.6	672.1
Common stock equivalents	5.6	9.0	11.3
Weighted-average common shares outstanding used for the calculation of net income attributable to Fiserv, Inc. per share – diluted	647.9	671.6	683.4

Supplemental Cash Flow Information

(In millions)

(in millions)				
Year Ended December 31,	2	022	2021	2020
Interest paid	\$	703	\$ 648	\$ 673
Income taxes paid		709	666	156
Treasury stock purchases settled after the balance sheet date		6	_	_
Distribution of nonmonetary assets (see Note 4)		_	_	726

104

143

308

2. Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

Software obtained under financing arrangements

In 2021, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2021-10, *Government Assistance (Topic 832)* ("ASU 2021-10"), which requires that an entity provide certain disclosures in its annual financial statements about transactions with a government that are accounted for by applying a grant or contribution accounting model by analogy. ASU 2021-10 is effective for all business entities for annual periods beginning after December 15, 2021 and may be applied either prospectively or retrospectively to the transactions reflected in the financial statements at the date of initial application. The Company adopted ASU 2021-10, with prospective application of the additional disclosures to the transactions reflected in its consolidated financial statements, for the year ending December 31, 2022. The adoption was not material and therefore did not have an impact on the Company's financial statement disclosures.

In 2021, the FASB issued ASU No. 2021-08, *Accounting for Contract Assets and Contract Liabilities from Contracts with Customers* ("ASU 2021-08"), which requires that an entity recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with ASC Topic 606, *Revenue from Contracts with Customers* ("ASC 606"). Generally, this should result in recognition and measurement of contract assets and contract liabilities at carryover value consistent with how they were recognized and measured in the acquired company's financial statements, providing consistent recognition and enhanced comparability with revenue contracts with customers not acquired in a business combination. Prior to adoption of ASU 2021-08, an acquirer generally recognized contract assets and contract liabilities acquired in a business combination at fair value on the acquisition date. For public entities, ASU 2021-08 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. Entities are required to apply a prospective transition approach upon adoption, unless early adoption occurs in an interim period. The Company adopted ASU 2021-08 effective January 1, 2022, with prospective application to business combinations occurring after adoption, and the adoption did not have a material impact on the Company's consolidated financial statements.

In 2021, the FASB issued ASU No. 2021-05, *Leases (Topic 842): Lessors – Certain Leases with Variable Lease Payments* ("ASU 2021-05"), which amends the lease classification requirements for lessors with certain leases containing variable payments. A lessor is to classify and account for a lease with variable lease payments that do not depend on an index or a rate as an operating lease if the lease would have been classified as a sales-type lease or a direct financing lease and the lessor would have otherwise recognized a day-one loss. For public entities, ASU 2021-05 is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years, with early adoption permitted. Entities that have adopted ASC Topic 842, *Leases* ("ASC Topic 842"), prior to the issuance of ASU 2021-05 may apply this update either retrospectively to leases that commenced or were modified on or after the adoption of ASC Topic 842 or prospectively to leases that commence or are modified on or after the date the entity first applies ASU 2021-05. The Company adopted ASU 2021-05 effective January 1, 2022, with prospective application to leases commencing or modified thereafter, and the adoption did not have a material impact on its consolidated financial statements.

Recently Issued Accounting Pronouncements

In 2022, the FASB issued ASU No. 2022-03, Fair Value Measurement (Topic 820): Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions ("ASU 2022-03"), which clarifies the guidance in ASC Topic 820, Fair Value Measurement, when measuring the fair value of an equity security subject to contractual restrictions that prohibit the sale of an equity security and introduces new disclosure requirements for equity securities subject to contractual sale restrictions that are measured at fair value in accordance with ASC Topic 820. For public entities, ASU 2022-03 is effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. The provisions within ASU 2022-03 are to be applied prospectively with any adjustments from the adoption recognized in earnings and disclosed on the date of adoption. The Company is currently assessing the impact the adoption of ASU 2022-03 will have on its consolidated financial statements and disclosures.

In 2022, the FASB issued ASU No. 2022-02, *Financial Instruments – Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures* ("ASU 2022-02"), which requires that entities disclose current period gross write-offs by year of origination for financing receivables and net investments in leases. For public entities, the provisions within ASU 2022-02 are to be applied prospectively and are effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. The Company will adopt ASU 2022-02 and will include the additional disclosures, as applicable, for any write-offs reflected in its consolidated financial statements effective for the year ending December 31, 2023.

3. Revenue Recognition

Significant Accounting Policy

ASC 606 outlines a single comprehensive model to use in accounting for revenue arising from contracts with customers. The core principle, involving a five-step process, of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

Revenue is measured based on consideration specified in a contract with a customer, and excludes any amounts collected on behalf of third parties. Taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction, that are collected by the Company from a customer, are excluded from revenue. Shipping and handling activities associated with outbound freight after control over a product has transferred to a customer are accounted for as a fulfillment activity and recognized as revenue at the point in time at which control of the goods transfers to the customer. As a practical expedient, the Company does not adjust the transaction price for the effects of a significant financing component if, at contract inception, the period between customer payment and the transfer of goods or services is expected to be one year or less.

Nature of Goods and Services

The Company's operations are comprised of the Acceptance segment, the Fintech segment and the Payments segment (see Note 20). The following is a description of principal activities from which the Company generates its revenue. Contracts with customers are evaluated on a contract-by-contract basis as contracts may include multiple types of goods and services as described below.

Processing and Services

Processing and services revenue is generated from account- and transaction-based fees for merchant transaction processing and acquiring, electronic billing and payment services, electronic funds transfer and debit/credit processing services; consulting and professional services; and software maintenance for ongoing client support.

The Company recognizes processing and services revenue in the period in which the specific service is performed unless they are not deemed distinct from other goods or services in which revenue would then be recognized as control is transferred of the combined goods and services. The Company's arrangements for processing and services typically consist of an obligation to provide specific services to its customers on a when and if needed basis (a stand-ready obligation) and revenue is recognized from the satisfaction of the performance obligations in the amount billable to the customer. These services are typically provided under a fixed or declining (tier-based) price per unit based on volume of service; however, pricing for services may also be based on minimum monthly usage fees. Fees for the Company's processing and services arrangements are typically billed and paid on a monthly basis.

Product

Product revenue is generated from print and card production, software license, and hardware (primarily POS device) sales.

For software license agreements that are distinct, the Company recognizes software license revenue upon delivery, assuming a contract is deemed to exist. Revenue for arrangements with customers that include significant customization, modification or production of software such that the software is not distinct is typically recognized over time based upon efforts expended, such as labor hours, to measure progress towards completion. For arrangements involving hosted licensed software for the customer, a software element is considered present to the extent the customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty and it is feasible for the customer to either operate the software on their own hardware or contract with another vendor to host the software. In certain instances, the Company may offer extended payment terms beyond one year. To the extent a significant financing component exists, it is calculated as the difference between the promised consideration and the present value of the software license fees utilizing a discount rate reflective of a separate financing transaction, and is recognized as interest income over the extended payment period. The cash selling price of the software license fee is recognized as revenue at the point in time when the software is transferred to the customer.

The Company sells or leases hardware (POS devices) and other peripherals as part of its contracts with customers. Hardware typically consists of POS terminals or Clover[®] devices. The Company does not manufacture hardware; rather, it purchases hardware from third-party vendors and holds such hardware in inventory until purchased by a customer. The Company accounts for sales of hardware as a separate performance obligation and recognizes the revenue at its standalone selling price when the customer obtains control of the hardware.

Significant Judgments in Application of the Guidance

The Company uses the following methods, inputs and assumptions in determining amounts of revenue to recognize:

Identification of Performance Obligations

To identify its performance obligations, the Company considers all of the goods or services promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices. For multi-element arrangements, the Company accounts for individual goods or services as a separate performance obligation if they are distinct, the good or service is separately identifiable from other items in the arrangement and if a customer can benefit from it on its own or with other resources that are readily available to the customer. If these criteria are not met, the promised goods or services are accounted for as a combined performance obligation. Determining whether goods or services are distinct performance obligations that should be accounted for separately may require significant judgment.

Technology or service components from third parties are frequently embedded in or combined with the Company's applications or service offerings. Whether the Company recognizes revenue based on the gross amount billed to a customer or the net amount retained involves judgment that depends on the relevant facts and circumstances, including the level of contractual responsibilities and obligations for delivering solutions to end customers, to determine whether control of goods and services is obtained prior to their transfer to a customer.

Determination of Transaction Price

The transaction price is determined based on the consideration to which the Company will be entitled in exchange for transferring products or services to the customer. The Company includes any fixed charges within its contracts as part of the total transaction price. To the extent that variable consideration is not constrained, the Company includes an estimate of the variable amount, as appropriate, within the total transaction price and updates its assumptions over the duration of the contract.

Assessment of Estimates of Variable Consideration

Many of the Company's contracts with customers contain some component of variable consideration; however, the constraint will generally not result in a reduction in the estimated transaction price for most forms of variable consideration. The Company may constrain the estimated transaction price in the event of a high degree of uncertainty as to the final consideration amount owed because of an extended length of time over which fees may be adjusted.

Allocation of Transaction Price

The transaction price (including any discounts or rebates) is allocated between distinct goods and services in a multi-element arrangement based on their relative standalone selling prices. The standalone selling prices are determined based on the prices at which the Company separately sells each good or service. For items that are not sold separately, the Company estimates the standalone selling prices using available information such as market conditions and internally approved pricing guidelines. Judgment may be required to determine standalone selling prices for each performance obligation and whether it depicts the amount the Company expects to receive in exchange for the related good or service.

Contract Modifications

Contract modifications occur when the Company and its customers agree to modify existing customer contracts to change the scope or price (or both) of the contract or when a customer terminates some, or all, of the existing services provided by the Company. When a contract modification occurs, it requires the Company to exercise judgment to determine if the modification should be accounted for as (i) a separate contract, (ii) the termination of the original contract and creation of a new contract, or (iii) a cumulative catch up adjustment to the original contract. Further, contract modifications require the identification and evaluation of the performance obligations of the modified contract, including the allocation of consideration to the remaining performance obligations and the period of revenue recognition for each identified performance obligation.

Disaggregation of Revenue

The tables below present the Company's revenue disaggregated by type of revenue, including a reconciliation with its reportable segments. The majority of the Company's revenue is earned domestically, with revenue generated outside the U.S. comprising approximately 14%, 14% and 13% of total revenue for the years ended December 31, 2022, 2021 and 2020, respectively.

(In millions)		Reportable Segments							
Year Ended December 31, 2022	Acceptance Fintech Payments		Payments		Corporate and Other		Total		
Type of Revenue									
Processing	\$	6,226	\$	1,608	\$	4,709	\$	22	\$ 12,565
Hardware, print and card production		918		42		1,036		_	1,996
Professional services		21		484		278		_	783
Software maintenance		_		553		24		_	577
License and termination fees		69		252		114		_	435
Output Solutions postage		_		_		_		989	989
Other		58		231		101		2	392
Total Revenue	\$	7,292	\$	3,170	\$	6,262	\$	1,013	\$ 17,737
		•							,

(In millions)	Reportable Segments										
Year Ended December 31, 2021	Acceptance			Fintech		Payments		Corporate and Other		Total	
Type of Revenue											
Processing	\$	5,511	\$	1,544	\$	4,497	\$	32	\$	11,584	
Hardware, print and card production		830		44		913		_		1,787	
Professional services		43		471		265		_		779	
Software maintenance				557		11				568	
License and termination fees		47		186		65				298	
Output Solutions postage				_				860		860	
Other		48		220		82				350	
Total Revenue	\$	6,479	\$	3,022	\$	5,833	\$	892	\$	16,226	

Donortoble Segments

(In millions)	Reportable Segments								
Year Ended December 31, 2020	Acceptance		Fintech		Payments	Corporate and Other		Total	
Type of Revenue									
Processing	\$	4,696	\$	1,426	\$ 4,348	\$	58	\$	10,528
Hardware, print and card production		714		51	771		_		1,536
Professional services		29		465	233		1		728
Software maintenance				563	3		2		568
License and termination fees		28		189	68		_		285
Output Solutions postage				_			864		864
Other		55		207	81		_		343
Total Revenue	\$	5,522	\$	2,901	\$ 5,504	\$	925	\$	14,852

Contract Balances

(In millions)

The following table provides information about contract assets and contract liabilities from contracts with customers at December 31:

(In millions)	2022		2021		2020		
Contract assets	\$	551	\$	541	\$	433	
Contract liabilities		860		810		733	

Contract assets, reported within other long-term assets in the consolidated balance sheets, primarily result from revenue being recognized where payment is contingent upon the transfer of services to a customer over the contractual period. Contract liabilities primarily relate to advance consideration received from customers (deferred revenue) for which transfer of control occurs, and therefore revenue is recognized, as services are provided. Contract balances are reported in a net contract asset or liability position on a contract-by-contract basis at the end of each reporting period.

During the years ended December 31, 2022 and December 31, 2021, contract assets and contract liabilities increased primarily due to customer discounts and deferred conversion revenue associated with long-term contracts obtained during the respective year. The Company recognized \$585 million and \$546 million of revenue during the years ended December 31, 2022 and December 31, 2021, respectively, that was included in the contract liabilities balance at the beginning of the year.

Transaction Price Allocated to Remaining Performance Obligations

The following table includes estimated processing, services and product revenue expected to be recognized in the future related to performance obligations that were unsatisfied (or partially unsatisfied) at December 31, 2022:

(In millions)

Year Ending December 31,	
2023	\$ 2,276
2024	1,828
2025	1,393
2026	835
Thereafter	1,074

The Company applies the optional exemption under ASC 606 and does not disclose information about remaining performance obligations for account- and transaction-based processing fees that qualify for recognition under the as-invoiced practical expedient. These multi-year contracts contain variable consideration for stand-ready performance obligations for which the exact quantity and mix of transactions to be processed are contingent upon the customer's request. The Company also applies the optional exemptions under ASC 606 and does not disclose information for variable consideration that is a sales-based or usage-based royalty promised in exchange for a license of intellectual property or that is allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct good or service in a series. The amounts disclosed above as remaining performance obligations consist primarily of fixed or monthly minimum processing fees and maintenance fees under contracts with an original expected duration of greater than one year.

Contract Costs

The Company incurs incremental costs to obtain a contract as well as costs to fulfill contracts with customers that are expected to be recovered. These costs consist of sales commissions incurred only if a contract is obtained, and customer conversion or implementation related costs. Capitalized sales commissions and conversion or implementation costs were as follows at December 31:

(In millions)	20	22	2021		
Capitalized sales commissions	\$	485 \$	437		
Capitalized conversion or implementation costs		420	374		

Capitalized contract costs are amortized based on the transfer of goods or services to which the asset relates. The amortization period also considers expected customer lives and whether the asset relates to goods or services transferred under a specific anticipated contract. The amortization of capitalized sales commissions is included in selling, general and administrative expenses and amortization of capitalized conversion or implementation costs within cost of processing and services. These costs totaled \$173 million, \$148 million and \$124 million during the years ended December 31, 2022, 2021 and 2020, respectively. Impairment losses recognized during the years ended December 31, 2022, 2021 and 2020 related to capitalized contract costs were not significant.

4. Acquisitions and Dispositions

Acquisitions

Acquisitions were accounted for as business combinations using the acquisition method of accounting in accordance with ASC 805, *Business Combinations*. Purchase price was allocated to the respective assets acquired and liabilities assumed based on the estimated fair values at the date of acquisitions. The results of operations for the following acquired and divested businesses are included in the consolidated results of the Company from the respective dates of acquisition and through the respective dates of disposition. Pro forma information for these acquired businesses is not provided because they did not have a material effect, individually or in aggregate, on the Company's consolidated results of operations.

Acquisition of Merchant One

On December 20, 2022, the Company acquired Merchant One, Inc. ("Merchant One"), an independent sales organization focused on acquiring merchants in the restaurant, retail and e-commerce industries using an innovative mix of direct and digital marketing strategies, for approximately \$302 million, net of \$1 million of acquired cash. Merchant One is included within the Acceptance segment, and enhances the Company's merchant distribution and sales force channels. The preliminary allocation of purchase price resulted in the recognition of identifiable intangible assets consisting of approximately \$178 million of customer relationships with an estimated useful life of 10 years, \$118 million of goodwill and \$6 million of other net assets. The allocation of the purchase price is preliminary and is subject to further adjustment, pending additional refinement and final completion of valuations. Goodwill, which is deductible for tax purposes, is primarily attributed to the anticipated value created by expanding the reach of the Clover® cloud-based POS and business management platform, and select value-added services that enable the Company to deliver new and innovative capabilities to Merchant One's clients.

Acquisition of Finxact

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On April 1, 2022, the Company acquired a remaining ownership interest in Finxact, Inc. ("Finxact"), a developer of cloud-native banking solutions powering digital transformation throughout the financial services sector, for \$645 million, net of \$27 million of acquired cash. The Company previously held a noncontrolling equity interest in Finxact, which was accounted for under the equity method. The remeasurement of the Company's previously held equity interest to its acquisition-date fair value resulted in the recognition of a pre-tax gain of \$110 million, included within income from investments in unconsolidated affiliates in the consolidated statement of income during the year ended December 31, 2022. Finxact is included within the Fintech segment and advances the Company's digital banking strategy, expanding its account processing, digital, and payments solutions.

The allocation of purchase price recorded for Finxact was finalized in the fourth quarter of 2022 as follows:

(In millions)	
Cash	\$ 27
Other net assets	1
Intangible assets	105
Goodwill	 670
Total consideration	\$ 803
Less: Fair value of previously held equity interest	 (131)
Total purchase price	\$ 672

Goodwill, which is not deductible for tax purposes, is primarily attributed to the anticipated value created by the combined scale, core platform modernization, and accelerated delivery of enhanced digital banking solutions offered to financial institutions of all sizes. The amounts allocated to identifiable intangible assets were as follows:

(In millions)	Gross Carrying Amount				Weighted-Average Useful Life
Acquired software and technology	\$	90	6 years		
Trade name		9	5 years		
Customer relationships		6	8 years		
Total	\$	105	6 years		

Acquisition of BentoBox

On November 22, 2021, the Company acquired BentoBox CMS, Inc ("BentoBox"), a digital marketing and commerce platform that helps restaurants connect with their guests, for \$317 million, net of \$24 million of acquired cash. BentoBox is included within the Acceptance segment and expands the Company's Clover® dining solutions and commerce and business management capabilities.

During the year ended December 31, 2022, the Company identified and recorded measurement period adjustments to the preliminary BentoBox purchase price allocation, including refinements to valuations of acquired intangible assets, which were the result of additional analysis performed and information identified based on facts and circumstances that existed as of the acquisition date. These measurement period adjustments resulted in an increase to goodwill of \$62 million, with offsetting amounts to the change in goodwill attributable to a decrease in identifiable intangible assets, including acquired software and technology, of \$84 million and deferred tax adjustments of \$22 million. Such measurement period adjustments did not have a material impact on the Company's consolidated statements of income. The allocation of purchase price was finalized in the second quarter of 2022 and resulted in the recognition of identifiable intangible assets of \$52 million, goodwill of \$266 million and other net assets of \$23 million. Goodwill, which is not deductible for tax purposes, is primarily attributed to the anticipated value created by the enhanced strength of the Company's omnichannel platform to drive increased operational efficiencies for restaurants, enabling operators to deliver seamless and distinct hospitality experiences for their diners.

The amounts allocated to identifiable intangible assets were as follows:

(In millions)	Gross Carrying Amount		Weighted-Average Useful Life
Acquired software and technology	\$	25	6 years
Customer relationships and other		27	4 years
Total	\$	52	5 years

Acquisition of Pineapple Payments

On May 4, 2021, the Company acquired Pineapple Payments Holdings, LLC ("Pineapple Payments"), an independent sales organization that provides payment processing, proprietary technology, and payment acceptance solutions for merchants, for \$207 million, net of \$6 million of acquired cash, and including earn-out provisions estimated at a fair value of \$30 million (see Note 9). Pineapple Payments is included within the Acceptance segment and expands the reach of the Company's payment solutions through its technology- and relationship-led distribution channels.

The allocation of purchase price was finalized in the fourth quarter of 2021 and resulted in the recognition of identifiable intangible assets of \$127 million, goodwill of \$79 million and other net assets of \$7 million. Goodwill, of which \$59 million is deductible for tax purposes, is primarily attributed to the anticipated value created by the accelerated delivery of new and innovative capabilities to merchant clients.

The amounts allocated to identifiable intangible assets were as follows:

(In millions)	Gross Carrying Amount		• 0		Weighted-Average Useful Life
Customer relationships	\$	90	17 years		
Residual buyouts		20	8 years		
Acquired software and technology		6	7 years		
Non-compete agreements and other		11	5 years		
Total	\$	127	14 years		

Acquisition of Ondot

On January 22, 2021, the Company acquired a remaining ownership interest in Ondot Systems, Inc. ("Ondot"), a digital experience platform provider for financial institutions, for \$271 million, net of \$13 million of acquired cash and cash equivalents. The Company previously held a noncontrolling equity interest in Ondot, which was accounted for at cost. The remeasurement of the Company's previously held equity interest to its acquisition-date fair value resulted in the recognition of a pre-tax gain of \$12 million, included within other (expense) income in the consolidated statements of income during the year ended December 31, 2021. Ondot is included within the Payments segment and expands the Company's digital capabilities, enhancing its suite of integrated payments, banking and merchant solutions.

The allocation of purchase price recorded for Ondot was finalized in the third quarter of 2021 as follows:

(In millions)	
Cash and cash equivalents	\$ 13
Receivables and other assets	9
Intangible assets	142
Goodwill	173
Payables and other liabilities	 (31)
Total consideration	\$ 306
Less: Fair value of previously held equity interest	 (22)
Total purchase price	\$ 284

Goodwill, which is not deductible for tax purposes, is primarily attributed to the anticipated value created by the combined scale of integrated digital solutions to consumers, merchants, acquirers, networks and card issuers. The amounts allocated to identifiable intangible assets were as follows:

(In millions)	Gross Carrying Amount				Weighted-Average Useful Life
Acquired software and technology	\$	90	6 years		
Customer relationships		35	6 years		
Non-compete agreements and other		17	4 years		
Total	\$	142	6 years		

Other Acquisitions

On December 29, 2022, the Company acquired OrangeData S.A. ("Yacaré"), an Argentina-based payment service provider that enables customers to transact at merchant locations using QR codes. Yacaré is included within the Acceptance segment and enhances the Company's instant payment transaction capabilities. On September 1, 2022, the Company acquired NexTable, Inc. ("NexTable"), a provider of cloud-based reservation and table management solutions for restaurants. NexTable is included within the Acceptance segment and expands the Company's end-to-end restaurant solutions. On June 1, 2022, the Company acquired The LR2 Group, LLC ("City POS"), an independent sales organization that promotes payment processing services and facilitates the sale of POS equipment for merchants. City POS is included within the Acceptance segment and expands the Company's merchant services business. The Company acquired these businesses for an aggregate purchase price of \$44 million, including earn-out provisions estimated at a fair value of \$6 million (see Note 9). The allocation of purchase price for these acquisitions resulted in the recognition of identifiable intangible assets of \$23 million, goodwill of \$22 million and other net assumed liabilities of \$1 million. The purchase price allocations for the CityPOS and NexTable acquisitions were finalized in the third and fourth quarters of 2022, respectively. The allocation of the purchase price for Yacaré is preliminary and is subject to further adjustment. Goodwill for these acquisitions, of which \$17 million is deductible for tax purposes, is primarily attributed to the value created by expanding the reach of the Company's payment solutions and enhancing omnichannel capabilities.

The amounts allocated to identifiable intangible assets for other acquisitions acquired in 2022 were as follows:

(In millions)	Carrying lount	Weighted-Average Useful Life
Acquired software and technology	\$ 12	7 years
Customer relationships	 11	10 years
Total	\$ 23	9 years

On November 15, 2021, the Company acquired a remaining ownership interest in NetPay Solutions Group ("NetPay"), a multichannel payment service provider offering a range of onboarding, customer lifecycle, risk management and settlement capabilities to businesses of all sizes. The Company previously held a noncontrolling equity interest in NetPay, which was accounted for under the equity method and approximated acquisition-date fair value. NetPay is included within the Acceptance segment and expands the Company's merchant services business. On October 1, 2021, the Company acquired Integrity Payments, LLC ("AIP"), an independent sales organization that promotes payment processing services for merchants, which is included within the Acceptance segment. On June 14, 2021, the Company acquired Spend Labs Inc. ("SpendLabs"), a mobilenative, cloud-based software provider of commercial card payment solutions. SpendLabs is included within the Payments segment and expands the Company's digital capabilities across mobile and desktop devices for small and mid-sized businesses. On March 1, 2021, the Company acquired Radius8, Inc. ("Radius8"), a provider of a platform that uses consumer location and other information to drive incremental merchant transactions. Radius8 is included within the Acceptance segment and enhances the Company's ability to help merchants increase sales, expand mobile application registration and improve one-to-one target marketing. The Company acquired these businesses for an aggregate purchase price of \$87 million, net of the fair value of the Company's previously held noncontrolling equity interest in NetPay of \$14 million and including earn-out provisions estimated at a fair value of \$4 million (see Note 9). The allocation of purchase price for these acquisitions resulted in the recognition of identifiable intangible assets of \$47 million, goodwill of \$61 million and net assumed liabilities of \$7 million. The purchase price allocation for the Radius8 acquisition was finalized in the third quarter of 2021 and for SpendLabs in the fourth quarter of 2021. The purchase price allocations for the NetPay and AIP acquisitions were finalized in the first quarter of 2022. Measurement period adjustments did not have a material impact on the consolidated statements of income. Goodwill for these acquisitions, of which \$14 million is deductible for tax purposes, is primarily attributed to synergies, the anticipated value created by advancing digital capabilities to the Company's clients, and selling the Company's products and services to the acquired businesses' existing client base.

The amounts allocated to identifiable intangible assets for other acquisitions acquired in 2021 were as follows:

(In millions)	Gross Carrying Lions) Amount		Weighted-Average Useful Life
Acquired software and technology	\$	31	6 years
Customer relationships		9	10 years
Residual buyouts		7	5 years
Total	\$	47	7 years

On March 2, 2020, the Company acquired MerchantPro Express LLC ("MerchantPro"), an independent sales organization that provides processing services, POS equipment and merchant cash advances to businesses across the U.S. MerchantPro is included within the Acceptance segment and expands the Company's merchant services business. On March 18, 2020, the Company acquired Bypass Mobile, LLC ("Bypass"), an independent software vendor and innovator in enterprise POS systems for sports and entertainment venues, food service management providers and national restaurant chains. Bypass is included within the Acceptance segment and enhances the Company's ability to help businesses deliver seamless physical and digital customer experiences. On May 11, 2020, the Company acquired Inlet, LLC ("Inlet"), a provider of secure digital delivery solutions for enterprise and middle-market biller invoices and statements. Inlet is included within the Payments segment and enhances the Company's digital bill payment strategy. The Company acquired these businesses for an aggregate purchase price of \$167 million, net of \$2 million of acquired cash, and including earn-out provisions estimated at a fair value of \$45 million. The allocation of purchase price for these acquisitions resulted in the recognition of identifiable intangible assets of \$81 million, goodwill of \$90 million and net assumed liabilities of \$4 million. The purchase price allocation for the MerchantPro acquisition was finalized in the third quarter of 2020, and for the Bypass and Inlet acquisitions in the fourth quarter of 2020. Goodwill for these acquisitions, of which \$36 million is deductible for tax purposes, is primarily attributed to synergies and the anticipated value created by selling the Company's products and services to existing clients of the acquired businesses.

The amounts allocated to identifiable intangible assets for other acquisitions acquired in 2020 were as follows:

(In millions)	Gross Carrying Amount				Weighted-Average Useful Life
Customer relationships	\$	32	14 years		
Residual buyouts		35	9 years		
Acquired software and technology		14	8 years		
Total	\$	81	11 years		

Dispositions

Disposition of Korea Operations

On September 30, 2022, the Company sold its Korea operations, which were reported within the Acceptance segment, for total consideration of \$50 million, consisting of \$43 million in net cash and an equity interest in the buyer of \$7 million. The Company recognized a pre-tax loss of \$127 million on the sale, recorded within net gain on sale of businesses and other assets in the consolidated statement of income for the year ended December 31, 2022. The loss was comprised of the difference between the consideration received and the net carrying amount of the business, including \$40 million of allocated goodwill, \$48 million of customer relationship net intangible assets and \$56 million of accumulated foreign currency translation losses, which were reclassified from accumulated other comprehensive loss.

Disposition of Fiserv Costa Rica and Systems Integration Services

On October 17, 2022, the Company sold Fiserv Costa Rica, S.A. and its Systems Integration Services ("SIS") operations, which provides information technology engineering services in the U.S. and India, to a single buyer, for an aggregate sales price of \$49 million. The Company recognized a pre-tax gain of \$44 million on the sales, recorded within net gain on sale of businesses and other assets, with a related tax expense of \$8 million recorded within the income tax provision, in the consolidated statement of income for the year ended December 31, 2022. Fiserv Costa Rica, S.A. and SIS were reported primarily within the Fintech segment.

Dissolution of Banc of America Merchant Services Joint Venture

Effective July 1, 2020, the Company and Bank of America ("BANA") dissolved the Banc of America Merchant Services joint venture ("BAMS" or the "joint venture"), of which the Company maintained a 51% controlling ownership interest. Upon dissolution of the joint venture's operations, the joint venture transferred a proportionate share of value, primarily the client contracts, to each party via an agreed upon contractual separation. The remaining activities of the joint venture consisted primarily of an orderly wind down of remaining BAMS assets and liabilities. Pursuant to the separation agreement, the joint venture retains the responsibility for certain contingencies that may arise from pre-dissolution activities, including certain legal claims and contingencies. The Company may be obligated to fund a proportionate share of any such losses as incurred.

The transfer of value to BANA was accounted for at fair value as a non pro rata distribution of nonmonetary assets, resulting in the recognition of a pre-tax gain of \$36 million, with a related tax expense of \$13 million. The pre-tax gain included the revaluation of client contracts allocated to BANA to a fair value of \$700 million, as well as an estimated \$24 million for certain additional consideration due from the Company to BANA in connection with the dissolution. The pre-tax net gain was recorded within net gain on sale of businesses and other assets and the tax expense was recorded within the income tax provision in the consolidated statement of income for the year ended December 31, 2020. Noncontrolling interests of the Company were reduced by \$726 million and the Company's additional paid-in capital was reduced by \$36 million to account for the wind down of the joint venture and the transfer of a proportionate share of the joint venture's fair value to BANA. The transfer of value to the Company was accounted for at carryover basis as the Company maintains control of such assets. The business transferred to the Company continues to be operated and managed within the Company's Acceptance segment.

The fair value of the client contracts upon dissolution of the joint venture was determined using the multi-period excess earnings method, a form of the income approach. The determination of the fair values required estimates about discount rates, growth and attrition rates, future expected cash flows and other future events that were judgmental in nature. The fair value measurements were primarily based on significant inputs that were not observable in the market and thus represented a Level 3 measurement of the fair value hierarchy as defined in ASC 820, *Fair Value Measurements*. The significant assumptions used included the estimated annual net cash flows (including appropriate revenue and profit attributable to the asset, retention rate, applicable tax rate, and contributory asset charges, among other factors), the discount rate, reflecting the risks inherent in the future cash flow stream, an assessment of the asset's life cycle, and the tax amortization benefit, among other factors.

On February 18, 2020, the Company sold a 60% controlling interest of its Investment Services business, subsequently renamed Tegra118, LLC ("Tegra118"). The Company received proceeds of \$578 million, net of related expenses, resulting in a pre-tax gain on the sale of \$428 million, with the related tax expense of \$112 million recorded through the income tax provision, in the consolidated statement of income for the year ended December 31, 2020. The pre-tax gain included \$176 million related to the remeasurement of the Company's 40% retained interest based upon the enterprise value of the business. The revenues, expenses and cash flows of the Investment Services business were consolidated into the Company's financial results through the date of the sale transaction, and are reported within Corporate and Other (see Note 20). In conjunction with the sale transaction, the Company also entered into transition services agreements to provide, at fair value, various administration, business process outsourcing, technical and data center related services for defined periods to Tegra118.

On February 2, 2021, Tegra118 completed a merger with a third party, resulting in a dilution of the Company's ownership interest in the combined new entity, Wealthtech Holdings, LLC, which was subsequently renamed as InvestCloud Holdings, LLC ("InvestCloud"). In connection with the transaction, the Company made an additional capital contribution of \$200 million into the combined entity and recognized a pre-tax gain of \$28 million within income from investments in unconsolidated affiliates in the consolidated statement of income, with related tax expense of \$6 million recorded through the income tax provision, during the year ended December 31, 2021. On June 30, 2021, the Company sold its entire ownership interest in InvestCloud for \$466 million, resulting in a pre-tax gain of \$33 million, recorded within income from investments in unconsolidated affiliates in the consolidated statement of income, with related tax expense of \$8 million recorded through the income tax provision, during the year ended December 31, 2021. The Company continues to provide various technical and data center related services under the terms of a service agreement with InvestCloud.

5. Settlement Assets and Obligations

Settlement assets and obligations represent intermediary balances arising from the settlement process which involves the transferring of funds between card issuers, payment networks, merchants and consumers, and collateral amounts held to manage merchant credit risk. The Company records settlement assets and obligations upon processing a payment transaction. Settlement assets represent amounts receivable from agents, payment networks, bank partners, merchants or direct consumers for submitted merchant transactions, and funds received by the Company in advance of paying to merchants or payees. Settlement obligations represent the unpaid amounts that are due to merchants and payees for their payment transactions and collateral deposits.

The principal components of the Company's settlement assets and obligations were as follows at December 31:

(In millions)	2022		2021	
Settlement assets				_
Cash and cash equivalents	\$	2,283	\$	2,361
Receivables		19,199		11,291
Total settlement assets	\$	21,482	\$	13,652
Settlement obligations				
Payment instruments outstanding	\$	650	\$	460
Card settlements and collateral deposits due to merchants		20,832		13,192
Total settlement obligations	\$	21,482	\$	13,652

6. Intangible Assets

Identifiable intangible assets consisted of the following at December 31:

(In millions) 2022	 Gross Carrying Amount	Accumulated Amortization			Net Book Value
Customer relationships	\$ 14,795	\$	6,371	\$	8,424
Acquired software and technology	2,510		1,234		1,276
Trade names	633		295		338
Purchased software	1,146		595		551
Capitalized software and other intangibles	 2,601		775		1,826
Total	\$ 21,685	\$	9,270	\$	12,415

(In millions) 2021	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Customer relationships	\$ 15,103	\$ 5,112	\$ 9,991
Acquired software and technology	2,522	901	1,621
Trade names	612	228	384
Purchased software	1,133	479	654
Capitalized software and other intangibles	1,879	520	1,359
Total	\$ 21,249	\$ 7,240	\$ 14,009

Gross software development costs capitalized for new products and enhancements to existing products totaled \$807 million, \$613 million and \$462 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Amortization expense associated with the above identifiable intangible assets was as follows for the years ended December 31:

(In millions)	2022 2021		2020		
Amortization expense	\$	2,441	\$	2,548	\$ 2,563

Amortization expense during the year ended December 31, 2020 includes \$56 million of accelerated amortization associated with the termination of certain vendor contracts (see Note 16).

The Company estimates that annual amortization expense with respect to intangible assets recorded at December 31, 2022 will be as follows:

Year Ending December 31,	
2023	\$ 2,362
2024	2,068
2025	1,811
2026	1,491
2027	1,134
Thereafter	 3,549
Total	\$ 12,415

7. Goodwill

The following table presents changes in goodwill during the years ended December 31, 2022 and 2021.

	Kepor table Segments						
(In millions)	A	cceptance		Fintech		Payments	Total
Goodwill - December 31, 2020	\$	21,408	\$	2,108	\$	12,806	\$ 36,322
Acquisitions and valuation adjustments		321				197	518
Transfers (1)				(67)		67	
Foreign currency translation		(347)		(2)		(58)	(407)
Goodwill - December 31, 2021		21,382		2,039		13,012	36,433
Acquisitions and valuation adjustments		202		670			872
Dispositions		(40)		(5)			(45)
Foreign currency translation		(344)		(2)		(103)	(449)
Goodwill - December 31, 2022	\$	21,200	\$	2,702	\$	12,909	\$ 36,811

Donortoble Segments

8. Investments in Unconsolidated Affiliates

The Company maintains investments in various affiliates that are accounted for as equity method investments, the most significant of which are related to the Company's merchant alliances. The Company's share of net income or loss from these investments is reported within income from investments in unconsolidated affiliates and the related tax expense or benefit is reported within the income tax provision in the consolidated statements of income.

Merchant Alliances

The Company maintains ownership interests in various merchant alliances. A merchant alliance is an agreement between the Company and a financial institution that combines the processing capabilities and management expertise of the Company with the visibility and distribution channel of the financial institution. A merchant alliance acquires credit and debit card transactions from merchants. The Company provides processing and other services to the alliance and charges fees to the alliance based on contractual pricing (see Note 19). The Company's investment in its merchant alliances was \$2.1 billion and \$2.3 billion at December 31, 2022 and 2021, respectively, and is reported within investments in unconsolidated affiliates in the consolidated balance sheets.

Other Equity Method Investments

The Company maintains noncontrolling ownership interests in Sagent M&C, LLC ("Sagent") and defi SOLUTIONS Group, LLC (collectively, the "Lending Joint Ventures"), which are accounted for under the equity method. In 2022, Sagent completed a transaction with a third party for the contribution from and the sale by such third party to Sagent of certain intangible and tangible personal property rights, resulting in a dilution of the Company's ownership interest in Sagent. As a result of the transaction, the Company recognized a pre-tax gain of \$80 million within income from investments in unconsolidated affiliates, with related tax expense of \$19 million recorded through the income tax provision, in the consolidated statement of income for the year ended December 31, 2022. The Company's remaining noncontrolling ownership interest in Sagent continues to be accounted for as an equity method investment. The Company's net investment in the Lending Joint Ventures was \$72 million and \$25 million at December 31, 2022 and 2021, respectively, and is reported within investments in unconsolidated affiliates in the consolidated balance sheets. In addition, the Company maintains other strategic investments accounted for under the equity method. The Company's aggregate investment in such entities was \$257 million and \$266 million at December 31, 2022 and 2021, respectively, and is reported within investments in unconsolidated balance sheets.

The Lending Joint Ventures maintain, as amended in 2022, variable-rate term loan facilities with aggregate outstanding borrowings of \$437 million in senior unsecured debt at December 31, 2022 and variable-rate revolving credit facilities with an aggregate borrowing capacity of \$83 million with a syndicate of banks, which mature in April 2027. There were no outstanding borrowings on the revolving credit facilities at December 31, 2022. The Company has guaranteed the debt of the Lending Joint Ventures and does not anticipate that the Lending Joint Ventures will fail to fulfill their debt obligations. See Note 9 for additional information.

⁽¹⁾ Relates to the migration of a line of business from the Fintech segment to the Payments segment. This migration did not have a material impact on the results of operations of the affected reportable segments.

The Company classifies distributions from its investments accounted for using the equity method in the consolidated statements of cash flows using the cumulative earnings approach. Under this approach, distributions received from unconsolidated affiliates are classified as cash flows from operating activities to the extent that the cumulative distributions do not exceed the cumulative earnings on the investment. To the extent the current period distribution exceeds the cumulative earnings on the investment, the distribution is considered a return of investment and is classified as cash flows from investing activities. The Company received cash distributions from unconsolidated affiliates of \$211 million, \$149 million and \$151 million, of which \$138 million, \$115 million and \$109 million were recorded as cash flows from investing activities in the Company's consolidated statements of cash flows for the years ended December 31, 2022, 2021 and 2020, respectively.

Other Equity Investments

The Company also maintains investments, of which it does not have significant influence, in various equity securities without a readily determinable fair value. Such investments totaled \$135 million and \$113 million at December 31, 2022 and 2021, respectively, and are included within other long-term assets in the consolidated balance sheets. The Company reviews these investments each reporting period to determine whether an impairment or observable price change for the investment has occurred. To the extent such events or changes occur, the Company evaluates the fair value compared to its cost basis in the investment. Gains or losses from a sale of these investments or a change in fair value are included within other (expense) income in the consolidated statements of income for the period. During the year ended December 31, 2021, the Company remeasured its equity interest in Ondot to fair value upon the acquisition of the remaining ownership interest, resulting in the recognition of a pre-tax gain of \$12 million (see Note 4). Other adjustments made to the values recorded for certain equity securities and gains and losses from sales of equity securities during the years ended December 31, 2022, 2021 and 2020 were not significant.

9. Fair Value Measurements

The fair values of cash equivalents, trade accounts receivable, settlement assets and obligations, accounts payable, and client deposits approximate their respective carrying values due to the short period of time to maturity. The Company maintains forward exchange contracts, designated as cash flow hedges, to hedge foreign currency exposure. The Company also maintains cross-currency rate swap contracts, designated as net investment hedges, to hedge a portion of its net investment in certain subsidiaries whose functional currencies are the Euro. These derivative instruments are measured on a recurring basis based on foreign currency spot rates and forwards quoted by banks and foreign currency dealers and are marked to market each period (see Note 13). Contingent consideration related to certain of the Company's acquisitions (see Note 4) is estimated using the present value of a probability-weighted assessment approach based on the likelihood of achieving the earn-out criteria. The fair value of the Company's contingent liability for current expected credit losses associated with its debt guarantees, as further described below, is estimated based on assumptions of future risk of default and the corresponding level of credit losses at the time of default.

Assets and liabilities measured at fair value on a recurring basis consisted of the following at December 31:

			Fair '	Valı	ie
(In millions)	Classification	Fair Value Hierarchy	2022		2021
Assets					
Forward exchange contracts designated as cash flow hedges	Prepaid expenses and other current assets	Level 2	\$ _	\$	6
Liabilities					
Forward exchange contracts designated as cash flow hedges	Accounts payable and accrued expenses	Level 2	\$ 7	\$	_
Forward exchange contracts designated as cash flow hedges	Other long-term liabilities	Level 2	1		_
Cross-currency rate swap contracts designated as net investment hedges	Other long-term liabilities	Level 2	23		_
Contingent consideration	Accounts payable and accrued expenses	Level 3	6		2
Contingent consideration	Other long-term liabilities	Level 3	2		32
Contingent debt guarantee	Accounts payable and accrued expenses	Level 3	_		4
Contingent debt guarantee	Other long-term liabilities	Level 3	21		_

The Company's senior notes are recorded at amortized cost but measured at fair value for disclosure purposes. The estimated fair value of senior notes was based on matrix pricing which considers readily observable inputs of comparable securities (Level 2 of the fair value hierarchy). The carrying value of the Company's foreign lines of credit, term loan credit agreement, commercial paper notes and revolving credit facility borrowings approximates fair value as these instruments have variable interest rates and the Company has not experienced any change to its credit ratings (Level 2 of the fair value hierarchy). The estimated fair value of total debt, excluding finance leases and other financing obligations, was \$19.2 billion and \$21.8 billion at December 31, 2022 and 2021, respectively, and the carrying value was \$20.6 billion and \$20.4 billion at December 31, 2022 and 2021, respectively.

The Company maintains liabilities for its obligations to perform over the term of its debt guarantee arrangements with the Lending Joint Ventures (see Note 8), which are reported within accounts payable and accrued expenses, and other long-term liabilities in the consolidated balance sheets. In April 2022, the Lending Joint Ventures amended their respective term loans and revolving credit facilities, increasing aggregate borrowing capacity by \$75 million and extending the maturity to April 2027. The Company elected to guarantee this incremental indebtedness, resulting in aggregate guarantees of \$520 million and a pretax expense of \$48 million related to such debt guarantee obligations, recorded within other (expense) income in the consolidated statement of income and within other operating activities in the consolidated statement of cash flows, during the year ended December 31, 2022. The Company is entitled to receive a defined fee in exchange for its incremental guarantee of this indebtedness. The Company has not made any payments under the guarantees, nor has it been called upon to do so, and does not anticipate that the Lending Joint Ventures will fail to fulfill their debt obligations.

The non-contingent component of the Company's debt guarantee arrangements is recorded at amortized cost, but measured at fair value for disclosure purposes. The carrying value of the Company's non-contingent liability of \$40 million and \$10 million approximates the fair value at December 31, 2022 and 2021, respectively (Level 3 of the fair value hierarchy). Such guarantees will be amortized in future periods over the contractual term of the debt. The contingent component of the Company's debt guarantee arrangements represents the current expected credit losses to which the Company is exposed. The amount of the liability is estimated based on certain financial metrics of the Lending Joint Ventures and historical industry data, which is used to develop assumptions of the likelihood the guaranteed parties will default and the level of credit losses in the event a default occurs. The Company recognized \$12 million, \$12 million and \$13 million during the years ended December 31, 2022, 2021 and 2020, respectively, within other (expense) income in its consolidated statements of income related to its release from risk under the non-contingent guarantees as well as a change in the provision of estimated credit losses associated with the indebtedness of the Lending Joint Ventures.

Certain of the Company's non-financial assets are measured at fair value on a non-recurring basis, including property and equipment, lease ROU assets, equity securities without a readily determinable fair value, goodwill and other intangible assets, and are subject to fair value adjustment in certain circumstances. Additional information about fair value adjustments recorded on a non-recurring basis during the years ended December 31, 2022, 2021 and 2020 is included in Notes 8 and 16.

10. Leases

Company as Lessee

The Company primarily leases office space, data centers and equipment from third parties. The Company determines if a contract is a lease at inception. A contract contains a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The lease term begins on the commencement date, which is the date the Company takes possession of the asset, and may include options to extend or terminate the lease when it is reasonably certain that the option will be exercised. Many of the Company's leases contain renewal options for varying periods, which can be exercised at the Company's sole discretion. Leases are classified as operating or finance leases based on factors such as the lease term, lease payments, and the economic life, fair value and estimated residual value of the asset. Certain leases include options to purchase the leased asset at the end of the lease term, which is assessed as a part of the Company's lease classification determination. The Company's leases have remaining lease terms ranging from one month to 21 years.

The Company uses the right-of-use model to account for its leases. ROU assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the Company's obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized on the commencement date based on the present value of lease payments over the lease term. ROU assets are based on the lease liability and are increased by prepaid lease payments and decreased by lease incentives received. For leases where the Company is reasonably certain to exercise a renewal option, such option periods have been included in the determination of the Company's ROU assets and lease liabilities. Certain leases require the Company to pay taxes, insurance, maintenance and other operating expenses associated with the leased asset. Such amounts are not included in the measurement of the ROU assets and lease liabilities to the extent they are variable in nature. These variable lease costs are recognized as variable lease expenses when incurred. As a practical expedient, lease agreements

with lease and non-lease components are accounted for as a single lease component for all asset classes. The Company estimates contingent lease incentives when it is probable that the Company is entitled to the incentive at lease commencement. The Company elected the short-term lease recognition exemption for all leases that qualify. Therefore, leases with an initial term of 12 months or less are not recorded on the consolidated balance sheets; instead, lease payments are recognized as lease expense on a straight-line basis over the lease term. The depreciable life of the ROU assets and leasehold improvements are limited by the expected lease term unless the Company is reasonably certain of a transfer of title or purchase option. The Company uses its incremental borrowing rate to discount future lease payments in the calculation of the lease liability and ROU asset based on the information available on the commencement date for each lease. The Company's leases typically do not provide an implicit rate. The determination of the incremental borrowing rate requires judgment and is determined using the Company's current unsecured borrowing rate, adjusted for various factors such as collateralization, currency and term to align with the terms of the lease.

Lease Balances

(In millions)			
December 31,	2	2022	2021
Assets			
Operating lease assets (1)	\$	586 \$	575
Finance leage agests (2)		5.4.1	107

Liabilities

Liabilities			
Current:			
Operating lease liabilities (1)	\$	124	\$ 122
Finance lease liabilities (2)		156	130
Noncurrent:			
Operating lease liabilities (1)		628	615
Finance lease liabilities (2)		366	313
Total lease liabilities	\$	1,274	\$ 1,180
	' 		

Operating lease assets are included within other long-term assets, and operating lease liabilities are included within accounts payable and accrued expenses (current portion) and other long-term liabilities (noncurrent portion) in the consolidated balance sheets

Components of Lease Cost

Year Ended December 31,	,	2022	2021	2020
Operating lease cost (1)	\$	186	\$ 162	\$ 198
Finance lease cost: (2)				
Amortization of right-of-use assets		169	122	150
Interest on lease liabilities		17	 23	 21
Total lease cost	\$	372	\$ 307	\$ 369

Operating lease expense is included within cost of processing and services, cost of product and selling, general and administrative expense, dependent upon the nature and use of the ROU asset, in the consolidated statements of income. Operating lease expense includes approximately \$38 million, \$39 million and \$50 million of variable lease costs during the years ended December 31, 2022, 2021 and 2020, respectively.

Finance lease assets are included within property and equipment, net and finance lease liabilities are included within short-term and current maturities of long-term debt (current portion) and long-term debt (noncurrent portion) in the consolidated balance sheets.

Finance lease expense is recorded as depreciation and amortization expense within cost of processing and services, cost of product and selling, general and administrative expense, dependent upon the nature and use of the ROU asset, and interest expense, net in the consolidated statements of income. Finance lease expense includes \$62 million of accelerated amortization associated with the termination of certain vendor contracts during the year ended December 31, 2020 (see Note 16).

Supplemental Cash Flow Information

(In millions)

Year Ended December 31,	20	22	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	\$	131	\$ 153	\$ 155
Operating cash flows from finance leases		17	23	21
Financing cash flows from finance leases		183	161	187
Right-of-use assets obtained in exchange for lease liabilities:				
Operating leases	\$	109	\$ 197	\$ 46
Finance leases		234	231	399

Lease Term and Discount Rate

December 31,	2022	2021
Weighted-average remaining lease term:		
Operating leases	10 years	10 years
Finance leases	4 years	3 years
Weighted-average discount rate:		
Operating leases	2.7 %	2.7 %
Finance leases	3.8 %	2.7 %

Maturity of Lease Liabilities

Future minimum rental payments on leases with initial non-cancellable lease terms in excess of one year were due as follows at December 31, 2022:

Year Ending December 31,	Operating Leases (1)			Finance Leases (2)		
2023	\$	141	\$	183		
2024		119		158		
2025		101		114		
2026		92		84		
2027		83		36		
Thereafter		332		1		
Total lease payments		868		576		
Less: Interest		(116)		(54)		
Present value of lease liabilities	\$	752	\$	522		

Operating lease payments include \$26 million related to options to extend lease terms that are reasonably certain of being exercised and exclude \$53 million of legally binding minimum lease payments for leases signed but not yet commenced. Operating leases that have been signed but not yet commenced are for equipment and real estate and will commence in 2023 with lease terms of up to 16 years.

Finance lease payments exclude \$39 million of legally binding minimum lease payments for leases signed but not yet commenced. Finance leases that have been signed but not yet commenced are for equipment and will commence in 2023 with lease terms of up to 5 years.

Company as Lessor

The Company owns certain POS terminal equipment which it leases to merchants. Leases are classified as operating or salestype leases based on factors such as the lease term, lease payments, and the economic life, fair value and estimated residual value of the asset. The terms of the leases typically range from one month to five years. For operating leases, the minimum lease payments received are recognized as lease income on a straight-line basis over the lease term and the leased asset is included in property and equipment, net in the consolidated balance sheets and depreciated over its estimated useful life. For sales-type leases, selling profit is recognized at the commencement date of the lease to the extent the fair value of the underlying asset is different from its carrying amount. Selling profit is directly impacted by the Company's estimate of the amount to be derived from the residual value of the asset at the end of the lease term. The residual value of the asset is computed using various assumptions, including the expected value of the underlying asset at the end of the lease term. Unearned income is recognized as interest income over the lease term. For sales-type leases, the Company derecognizes the carrying amount of the underlying leased asset and recognizes a net investment in the leased asset in the consolidated balance sheets. The net investment in a leased asset is computed based on the present value of the minimum lease payments not yet received and the present value of the residual value of the asset.

Components of Lease Income

(In millions)

Year Ended December 31,	2022		2021	2020
Sales-type leases:				
Selling profit (1)	\$	55	\$ 61	\$ 48
Interest income (1)		99	85	76
Operating lease income (2)		279	297	257

- Selling profit includes \$147 million, \$141 million and \$106 million recorded within product revenue with a corresponding charge of \$92 million, \$80 million and \$58 million recorded within cost of product in the consolidated statements of income for the years ended December 31, 2022, 2021 and 2020, respectively. Interest income is included within product revenue in the consolidated statements of income.
- Operating lease income includes a nominal amount of variable lease income and is included within product revenue in the consolidated statements of income for each of the years ended December 31, 2022, 2021 and 2020.

Components of Net Investment in Sales-Type Leases

December 31,	2022		2021	
Minimum lease payments	\$	428	\$	395
Residual values		20		23
Less: Unearned interest income		(169)		(157)
Net investment in leases (1)	\$	279	\$	261

Net investments in leased assets are included within prepaid expenses and other current assets (current portion) and other long-term assets (noncurrent portion) in the consolidated balance sheets.

Maturities of Future Minimum Lease Payment Receivables

Future minimum lease payments receivable on sales-type leases were as follows at December 31, 2022:

(In millions)

Year Ending December 31,	Sales-Type Leases				
2023	\$	169			
2024		133			
2025		88			
2026		35			
2027		3			
Thereafter					
Total minimum lease payments	\$	428			

Lease Payment Receivables Portfolio

The Company accounts for lease payment receivables in connection with POS terminal equipment as a single portfolio. The Company recognizes an allowance for expected credit losses on lease payment receivables at the commencement date of the lease by considering the term, geography and internal credit risk ratings of such lease. The internal credit risk ratings are established based on lessee specific risk factors, such as FICO score, number of years the lessee has been in business and the nature of the lessee's industry, which are considered indicators of the likelihood a lessee may default in the future. The allowance for estimated credit losses on lease payment receivables was \$60 million and \$56 million at December 31, 2022 and 2021, respectively.

The Company determines delinquency status on lease payment receivables based on the number of calendar days past due. The Company considers lease payments that are 90 days or less past due as performing. Lease payments that are greater than 90 days past due are placed on non-accrual status in which interest income is no longer recognized. Lease payment receivables are fully written off in the period they become delinquent greater than 180 days past due. The amortized cost balance of net investment in leases at December 31, 2022 and 2021, was \$279 million and \$261 million, respectively. Lease payment receivables that were determined to be on non-accrual status were nominal at each of December 31, 2022 and 2021.

11. Debt

The Company's debt consisted of the following at December 31:

(In millions)	2022		2021		
Short-term and current maturities of long-term debt:					
Foreign lines of credit	\$	198	\$	240	
Finance lease and other financing obligations		270		268	
Total short-term and current maturities of long-term debt	\$	468	\$	508	
Long-term debt:					
3.500% senior notes due October 2022	\$	_	\$	700	
0.375% senior notes due July 2023 (Euro-denominated)		531		566	
3.800% senior notes due October 2023		1,000		1,000	
2.750% senior notes due July 2024		2,000		2,000	
3.850% senior notes due June 2025		900		900	
2.250% senior notes due July 2025 (British Pound-denominated)		632		705	
3.200% senior notes due July 2026		2,000		2,000	
2.250% senior notes due June 2027		1,000		1,000	
1.125% senior notes due July 2027 (Euro-denominated)		531		566	
4.200% senior notes due October 2028		1,000		1,000	
3.500% senior notes due July 2029		3,000		3,000	
2.650% senior notes due June 2030		1,000		1,000	
1.625% senior notes due July 2030 (Euro-denominated)		531		566	
3.000% senior notes due July 2031 (British Pound-denominated)		632		705	
4.400% senior notes due July 2049		2,000		2,000	
U.S. dollar commercial paper notes		2,329		916	
Euro commercial paper notes		1,210		905	
Revolving credit facility		35		97	
Receivable securitized loan		_		500	
Term loan facility		200		200	
Unamortized discount and deferred financing costs		(120)		(125)	
Finance lease and other financing obligations		539		528	
Total long-term debt	\$	20,950	\$	20,729	

Annual maturities of the Company's total debt were as follows at December 31, 2022:

Year Ending December 31,	
2023	\$ 468
2024	2,438
2025	1,688
2026	2,100
2027	6,680
Thereafter	 8,164
Total principal payments	 21,538
Unamortized discount and deferred financing costs	 (120)
Total debt	\$ 21,418

Senior Notes

The Company has outstanding \$16.8 billion of various fixed-rate senior notes, as described above. The indentures governing the Company's senior notes contain covenants that, among other matters, limit (i) the Company's ability to consolidate or merge with or into, or convey, transfer or lease all or substantially all of its properties and assets to, another person, (ii) the Company's and certain of its subsidiaries' ability to create or assume liens, and (iii) the Company's and certain of its subsidiaries' ability to engage in sale and leaseback transactions. The Company may, at its option, redeem the senior notes, in whole or, from time to time, in part, at any time prior to the applicable maturity date. Interest on the Company's U.S. dollar-denominated senior notes is paid semi-annually, while interest on its Euro- and British Pound-denominated senior notes is paid annually. The interest rate applicable to certain of the senior notes is subject to an increase of up to two percent in the event that the credit rating assigned to such notes is downgraded below investment grade.

In July 2022, the Company redeemed \$700 million in aggregate principal amount of its outstanding 3.500% senior notes due in October 2022 at a redemption price equal to 100% of the aggregate principal amount of the notes being redeemed, plus accrued and unpaid interest. The Company financed the redemption of these notes using proceeds from the issuance of U.S. dollar commercial paper. At December 31, 2021, the 3.500% senior notes due in October 2022 were classified in the consolidated balance sheet as long-term, as the Company had the intent to refinance this debt on a long-term basis and the ability to do so. At December 31, 2022, the 0.375% Euro-denominated senior notes due in July 2023 and 3.800% senior notes due in October 2023 were classified in the consolidated balance sheet as long-term, as the Company has the intent to refinance this debt on a long-term basis and the ability to do so under its revolving credit facility.

During the year ended December 31, 2021, the Company used a portion of the net proceeds from the 2021 issuance of commercial paper notes, as described below, to repay the outstanding principal balance of \$400 million under its 4.750% senior notes that matured in June 2021.

Commercial Paper

The Company maintains unsecured U.S. dollar and Euro commercial paper programs. From time to time, the Company may issue under these programs U.S. dollar commercial paper with maturities of up to 397 days from the date of issuance and Euro commercial paper with maturities of up to 183 days from the date of issuance. Outstanding borrowings under the U.S. dollar program were \$2.3 billion and \$916 million at December 31, 2022 and 2021, respectively, with a weighted average interest rate of 4.818% and 0.295%, respectively. Outstanding borrowings under the Euro program were \$1.2 billion and \$905 million at December 31, 2022 and 2021, respectively, with a weighted average interest rate of 1.918% and (0.420)%, respectively. The Company intends to maintain available capacity under its revolving credit facility, as described below, in an amount at least equal to the aggregate outstanding borrowings under its commercial paper programs. Outstanding borrowings under the commercial paper programs are classified in the consolidated balance sheets as long-term as the Company has the intent to refinance this commercial paper on a long-term basis through the continued issuance of new commercial paper upon maturity, and the Company also has the ability to refinance such commercial paper under its revolving credit facility.

During the years ended December 31, 2022 and 2021, the Company used the net proceeds from the issuance of commercial paper notes to repay outstanding borrowings under its revolving credit facility; to redeem its 3.500% senior notes due in October 2022; to repay its 4.750% senior notes that matured in June 2021; to pay down outstanding borrowings on its term loan facility; to repay amounts outstanding on its receivable securitized loan; and to fund acquisitions.

Revolving Credit Facility

In June 2022, the Company entered into a new senior unsecured multicurrency revolving credit facility with substantially the same syndicate of banks that were lenders under its prior amended and restated revolving credit facility, which the Company voluntarily terminated and replaced. The new credit agreement matures in June 2027 and provides for a maximum aggregate principal amount of availability of \$6.0 billion. Borrowings under the new credit facility bear interest at a variable rate based on a Secured Overnight Financing Rate ("SOFR"), or a base rate in the case of U.S. dollar borrowings, in each case, plus a specified margin based on the Company's long-term debt rating in effect from time to time (5.44% at December 31, 2022). The credit facility also requires the Company to pay a facility fee based on the aggregate commitments in effect under the agreement from time to time. The new credit facility contains various restrictions and covenants that require the Company to, among other things, limit its consolidated indebtedness as of the end of each fiscal quarter to no more than 3.75 times the Company's consolidated net income before interest, taxes, depreciation, amortization, non-cash charges and expenses and certain other adjustments ("EBITDA") during the period of four fiscal quarters then ended, subject to certain exceptions. The Company was in compliance with all financial debt covenants during the year ended December 31, 2022.

Foreign Lines of Credit and Other Arrangements

The Company maintains certain short-term lines of credit with foreign banks and alliance partners primarily to fund settlement activity associated with international operations in Latin America. The Company had amounts outstanding on these lines of credit totaling \$198 million and \$240 million at a weighted-average interest rate of 30.58% and 21.01% at December 31, 2022 and 2021, respectively.

Receivable Securitized Loan

The Company maintains a consolidated wholly-owned subsidiary, First Data Receivables, LLC ("FDR"). FDR was a party to certain receivables financing arrangements, including an agreement ("Receivables Financing Agreement") through July 2022, with certain financial institutions and other persons from time to time party thereto as lenders and group agents, pursuant to which certain wholly-owned subsidiaries of the Company had agreed to transfer and contribute receivables to FDR, and FDR in turn could obtain borrowings from the financial institutions and other lender parties to the Receivables Financing Agreement secured by liens on those receivables. FDR's assets were not available to satisfy the obligations of any other entities or affiliates of the Company, and FDR's creditors were entitled, upon its liquidation, to be satisfied out of FDR's assets prior to any assets or value in FDR becoming available to the Company. In July 2022, the Company repaid \$485 million, representing all amounts outstanding on its receivable securitized loan. The Company used proceeds from the issuance of U.S. dollar commercial paper to repay and terminate the Receivables Financing Agreement.

FDR held \$1.0 billion in receivables as part of the securitization program at December 31, 2021, which were recorded within trade accounts receivable, net in the Company's consolidated balance sheet. FDR utilized the receivables as collateral in borrowings of \$500 million as of December 31, 2021, at an average interest rate of 0.95%. Outstanding borrowings bore interest at a variable rate based on one-month LIBOR plus a specified margin. At December 31, 2021, outstanding borrowings under the receivable securitized loan facility were classified in the consolidated balance sheet as long-term, as the Company had the intent to refinance this debt on a long-term basis and the ability to do so.

Term Loan Facility

The Company maintains a term loan credit agreement with a syndicate of financial institutions, of which the aggregate principal amount outstanding under such agreement was \$200 million at both December 31, 2022 and 2021. Borrowings under the term loan facility bear interest at a variable rate based on one-month LIBOR or on a base rate, plus, in each case, a specified margin based on the Company's long-term debt rating in effect from time to time, and mature in July 2024. The variable interest rate on the term loan facility borrowings was 5.64% and 1.35% at December 31, 2022 and 2021, respectively. The term loan credit facility contains affirmative, negative and financial covenants, and events of default, that are substantially the same as those set forth in the Company's revolving credit facility, as described above.

Deferred Financing Costs

Deferred financing costs are amortized as a component of interest expense, net over the term of the underlying debt using the effective interest method. Deferred financing costs primarily related to the Company's senior notes totaled \$76 million and \$92 million at December 31, 2022 and 2021, respectively, and are reported as a direct reduction of the related debt instrument in the consolidated balance sheets. Deferred financing costs related to the Company's revolving credit facility are reported in other long-term assets in the consolidated balance sheets and totaled \$10 million and \$3 million at December 31, 2022 and 2021, respectively.

12. Redeemable Noncontrolling Interests

The minority partner in one of the Company's existing merchant alliance joint ventures maintains a redeemable noncontrolling interest which is presented outside of equity and carried at its estimated redemption value. The minority partner owns 1% of the equity in the joint venture; in addition, the minority partner is entitled to a contractually determined share of the entity's income. The agreement contains redemption features whereby the interest held by the minority partner is redeemable either (i) at the option of the holder or (ii) upon the occurrence of an event that is not solely within the Company's control. The joint venture may be terminated by either party for convenience any time after December 31, 2024. In the event of termination for cause, as a result of a change in control, or for convenience after the predetermined date, the Company may be required to purchase the minority partner membership interest at a price equal to the fair market value of the minority interest through a distribution in the form of cash, certain merchant contracts of the joint venture, or a combination thereof to the minority partner. In conjunction with the termination of the joint venture, the minority partner may also exercise an option to purchase certain additional merchant contracts at fair market value.

In 2021, the Company and a joint venture minority partner mutually agreed to terminate one of the Company's merchant alliance joint ventures effective March 2022. The redeemable noncontrolling interest was adjusted to reflect the estimated redemption value, with such adjustment recorded within additional paid-in capital in the consolidated statement of equity for the year ended December 31, 2021. In conjunction with the termination, the joint venture minority partner elected to exercise its option to purchase certain additional merchant contracts of the joint venture. The Company received proceeds of \$175 million from the sale of such merchant contracts of the joint venture, resulting in the recognition of a pre-tax gain of \$137 million within net gain on sale of businesses and other assets, with related tax expense of \$7 million recorded through the income tax provision, in the consolidated statement of income for the year ended December 31, 2022.

The following table presents a summary of the redeemable noncontrolling interests activity during the years ended December 31:

(In millions)	2	2022	2021
Balance at beginning of year	\$	278	\$ 259
Distributions paid to redeemable noncontrolling interests		(34)	(43)
Share of income		28	44
Adjustment to estimated redemption value		_	18
Derecognition of redeemable noncontrolling interest		(111)	_
Balance at end of year	\$	161	\$ 278

13. Accumulated Other Comprehensive Loss

Changes in accumulated other comprehensive loss by component, net of income taxes, consisted of the following:

	Year Ended December 31, 2022							
(In millions)		Cash Flow Hedges		Foreign Currency Translation	Pen	sion Plans		Total
Balance at December 31, 2021	\$	(107)	\$	(676)	\$	38	\$	(745)
Other comprehensive loss before reclassifications		(11)		(444)		(60)		(515)
Amounts reclassified from accumulated other comprehensive loss		15		56		_		71
Net current-period other comprehensive income (loss)		4		(388)		(60)		(444)
Balance at December 31, 2022	\$	(103)	\$	(1,064)	\$	(22)	\$	(1,189)

	Year Ended December 31, 2021									
(In millions)		Cash Flow Hedges		Foreign Currency Translation	Pe	ension Plans		Total		
Balance at December 31, 2020	\$	(121)	\$	(254)	\$	(12)	\$	(387)		
Other comprehensive income (loss) before reclassifications		6		(422)		50		(366)		
Amounts reclassified from accumulated other comprehensive loss		8		_		_		8		
Net current-period other comprehensive income (loss)		14		(422)		50		(358)		
Balance at December 31, 2021	\$	(107)	\$	(676)	\$	38	\$	(745)		

Cash Flow Hedges

The Company maintains forward exchange contracts, designated as cash flow hedges, to hedge foreign currency exposure (see Note 9) to the Indian Rupee. The notional amount of these derivatives was \$346 million and \$341 million at December 31, 2022 and 2021, respectively. Based on the amounts recorded in accumulated other comprehensive loss at December 31, 2022,

the Company estimates that it will recognize losses of approximately \$7 million in cost of processing and services during the next twelve months as foreign exchange forward contracts settle.

The Company previously entered into treasury lock agreements ("Treasury Locks"), designated as cash flow hedges to manage exposure to fluctuations in benchmark interest rates in anticipation of the issuance of fixed rate debt in connection with the acquisition and refinancing of certain indebtedness of First Data Corporation ("First Data") and its subsidiaries. In 2019, concurrent with the issuance of U.S dollar-denominated senior notes, the Treasury Locks were settled resulting in a loss, net of income taxes, and recorded in accumulated other comprehensive loss that is being amortized to earnings over the terms of the originally forecasted interest payments. The unamortized balance recorded in accumulated other comprehensive loss related to the Treasury Locks was \$130 million and \$145 million at December 31, 2022 and 2021, respectively. Based on the amounts recorded in accumulated other comprehensive loss at December 31, 2022, the Company estimates that it will recognize approximately \$15 million in net interest expense during the next twelve months related to settled interest rate hedge contracts.

Net Investment Hedges

To reduce exposure to changes in the value of the Company's net investments in certain of its foreign currency-denominated subsidiaries due to changes in foreign currency exchange rates, the Company uses its fixed-to-fixed cross-currency rate swap contracts and foreign currency-denominated debt as economic hedges of its net investments in such foreign currency-denominated subsidiaries. At December 31, 2022, aggregate notional cross-currency rate swaps of 400 million Euro were designated as net investment hedges to hedge a portion of the Company's net investment in certain subsidiaries whose functional currency is the Euro. The Company has designated its Euro- and British Pound-denominated senior notes and Euro commercial paper notes as net investment hedges to hedge a portion of its net investment in certain subsidiaries whose functional currencies are the Euro and the British Pound.

The following table outlines the terms of the Company's cross-currency rate swap contracts at December 31, 2022:

Effective Date of Contract	Maturity Date of Contract	Notional Amount (EUR)	Fixed Rate Paid (EUR)	Fixed Rate Received (USD)
September 1, 2022	June 1, 2025	80 million	2.096 %	3.85 %
September 15, 2022	July 1, 2026	80 million	1.635 %	3.20 %
October 6, 2022	June 1, 2025	80 million	1.922 %	3.85 %
October 27, 2022	July 1, 2026	80 million	1.458 %	3.20 %
November 10, 2022	June 1, 2025	80 million	1.816 %	3.85 %

Foreign currency transaction gains or losses on the qualifying net investment hedge instruments are recorded as foreign currency translation within other comprehensive income (loss) in the consolidated statements of comprehensive income and will remain in accumulated other comprehensive loss in the consolidated balance sheets until the sale or complete liquidation of the underlying foreign subsidiaries.

Foreign currency transaction gains (losses) related to net investment hedges that were recorded in other comprehensive loss in the consolidated statements of comprehensive income were as follows at December 31:

(In millions)	2	022	2021	2020
Cross-currency rate swap contracts	\$	(17) \$	_	\$ —
Foreign currency-denominated debt		236	110	(151)

The Company recorded income tax impacts of \$(73) million and \$36 million for the years ended December 31, 2022 and 2021, respectively, in other comprehensive income (loss) from the translation of foreign currency-denominated senior notes, commercial paper notes and cross-currency rate swap contracts. During the year ended December 31, 2021, the Company recorded a prior period adjustment which resulted in an increase to retained earnings of \$71 million to reclassify prior year deferred tax benefits on such foreign currency translation losses from accumulated other comprehensive loss that were not previously recorded in other comprehensive income (loss). Management believes this prior period adjustment was not material to the consolidated financial statements.

14. Employee Benefit Plans

Defined Contribution Plans

The Company and its subsidiaries maintain defined contribution savings plans covering the majority of their employees. Under the plans, eligible participants may elect to contribute a specified percentage of their salaries and the Company makes matching contributions, each subject to certain limitations. The plans provide tax-deferred amounts for each participant, consisting of employee elective contributions, company matching and discretionary company contributions. In response to the COVID-19 pandemic, the Company temporarily suspended company matching contributions during most of 2020 and re-established such contributions effective January 1, 2021, to equal 100% on the first 1% contributed and 25% on the next 4% contributed for eligible participants. Effective January 1, 2022, Company matching contributions were increased to 100% on the first 1% contributed and 50% on the next 4% contributed for eligible participants. Expenses for company contributions under these plans totaled \$79 million, \$58 million, and \$38 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Defined Benefit Plans

The Company maintains noncontributory defined benefit pension plans (collectively, the "Plans") covering certain of its employees in the United Kingdom ("U.K."), the U.S., Germany and Austria. All of these plans are frozen and provide benefits to eligible employees based on an employee's average final compensation and years of service.

The following table provides a reconciliation of benefit obligations, plan assets and the funded status of the Plans as of and for the years ended December 31:

	U.K. Plan					U.S. and Other Plans			
(<u>In millions</u>)		2022		2021		2022		2021	
Change in projected benefit obligations:									
Balance at beginning of year	\$	(736)	\$	(777)	\$	(221)	\$	(238)	
Interest cost		(12)		(11)		(5)		(5)	
Settlements		_		16		_			
Actuarial gain		230		15		41		9	
Benefits paid		28		21		14		12	
Foreign currency translation		72				2		1	
Balance at end of year	\$	(418)	\$	(736)	\$	(169)	\$	(221)	
Change in fair value of plan assets:									
Balance at beginning of year	\$	983	\$	974	\$	183	\$	181	
Actual return on plan assets		(290)		47		(39)		14	
Settlements		_		(16)		_			
Benefits paid		(28)		(21)		(14)		(12)	
Foreign currency translation		(95)		(1)					
Balance at end of year	\$	570	\$	983	\$	130	\$	183	
Funded status of the plans	\$	152	\$	247	\$	(39)	\$	(38)	

The funded status of the Plans is recognized as an asset or a liability within other long-term assets or within other long-term liabilities in the consolidated balance sheets.

Projected Benefit Obligations

The Company records amounts relating to Plan obligations and their associated expenses based on calculations which include actuarial assumptions, including the discount rate and the expected rate of return on plan assets. Changes in any of the assumptions and the amortization of differences between the assumptions and actual experience will affect the amount of pension expense in future periods. The Company reviews its actuarial assumptions at least annually and modifies the assumptions based on current rates and trends, as appropriate. The effects of modifications are recognized immediately within the consolidated balance sheets, and are generally amortized to operating income over future periods, with the deferred amount

recorded in accumulated other comprehensive loss within the consolidated balance sheets. The Company's funding policy is to contribute quarterly an amount as recommended by the Plans' independent actuaries. Company contributions under the Plans were nominal in both 2022 and 2021, with future contributions not expected to be significant. The Company employs a building block approach in determining the expected long-term rate of return for plan assets with proper consideration of diversification and re-balancing. Historical markets are studied and long-term historical relationships between equities and fixed-income securities are preserved consistent with the widely accepted capital market principle that assets with higher volatility generate a greater return over the long run. Current market factors such as inflation and interest rates are evaluated before long-term capital market assumptions are determined. Peer data and historical returns are reviewed to check for reasonableness and appropriateness.

The weighted-average rate assumptions used in the measurement of the Company's projected benefit obligations and net periodic benefit expense as of and for the years ended December 31 were as follows:

	Projected Benefit	Obligations	Net Periodic Benefit Expense			
	2022	2021	2022	2021		
Discount rate	5.01 %	1.97 %	1.97 %	1.56 %		
Expected long-term return on plan assets	n/a	n/a	2.19 %	2.25 %		

The estimated future benefit payments are expected to be as follows:

(In millions)

Year Ending December 31,	
2023	\$ 34
2024	34
2025	35
2026	36
2027	37
2028-2032	196

Plan Assets

The Company's investment strategy for the U.K. plan is to allocate the assets into two pools: (i) liability-hedging assets whereby the focus is risk management, protection and insurance relative to the liability target invested in, but not limited to, money market funds, debt, U.K. government bonds and U.K. government index-linked bonds; and (ii) return-seeking assets whereby the focus is on return generation and taking risk in a controlled manner. Such assets may include equities, government bonds, high-yield bonds, property, commodities or hedge funds. The Company's target allocation for the U.K. plan based on the investment policy at December 31, 2022 was 80% liability-hedging assets and 20% return-seeking assets. Investment risk is measured and monitored on an ongoing basis through quarterly investment portfolio reviews, annual liability measurements, and periodic asset and liability studies. The Company's investment strategy for the U.S. plan employs a total return investment approach whereby a diversified blend of equities and fixed-income investments are used to maximize the long-term return of plan assets for a prudent level of risk. The Company sets an allocation mix necessary to support the underlying plan liabilities as influenced significantly by the demographics of the participants and the frozen nature of the plan. The Company's target allocation for the U.S. plan based on the investment policy at December 31, 2022 was 61% liability-hedging assets and 39% return-seeking assets.

The following table sets forth assets carried and measured at fair value on a recurring basis for the Plans at December 31:

2022	Level 1		Level 2		 Level 3
Cash and cash equivalents (1)	\$	43	\$		\$
Equity securities (2)		1		40	_
Fixed income securities (3)		137		86	_
Other investments (4)		301		(26)	
Total investments at fair value	\$	482	\$	100	\$

(In millions)

2021	Level 1		Level 1 Level 2		Level 3	
Cash and cash equivalents (1)	\$	230	\$	_	\$	_
Equity securities (2)		10		93		
Fixed income securities (3)		202		105		
Other investments (4)		361		7		
Total investments at fair value	\$	803	\$	205	\$	

- (1) Cash and cash equivalents include highly liquid investments in money market funds.
- (2) Equity securities primarily consist of domestic, international and global equity pooled funds.
- (3) Fixed income securities primarily consist of debt securities issued by U.S. and foreign government agencies and debt obligations issued by a variety of private and public corporations.
- (4) Other investments primarily consist of index-linked government bonds, derivatives and other investments.

In addition to the investments presented within the fair value hierarchy table above, the Plans' assets include investments in various collective trusts that are measured at fair value using the net asset value per share (or its equivalent) practical expedient. Such investments totaled \$118 million and \$158 million at December 31, 2022 and 2021, respectively.

Net Periodic Benefit Cost

The components of net periodic benefit cost (income) were as follows for the years ended December 31:

(In millions)	2022		2021	2020
Interest cost	\$	17 \$	16	\$ 20
Expected return on plan assets	(18)	(23)	(24)
Net periodic benefit income	\$	(1) \$	(7)	\$ (4)

In the first quarter of 2023, the Company commenced actions necessary to terminate the plans in the U.S. and U.K. Termination is subject to certain considerations, including regulatory review, interest rates and annuity pricing. Upon termination, the Company expects to recognize a non-cash pension settlement charge, which includes the recognition of remaining actuarial gains (losses) recorded within accumulated other comprehensive loss, and derecognition of the net assets of such plans. The amount of accrued vested benefits to be received by participants will not be impacted.

15. Share-Based Compensation

The Company recognizes the fair value of share-based compensation awards granted to employees in cost of processing and services, cost of product, and selling, general and administrative expense in its consolidated statements of income.

The Company's share-based compensation awards are typically granted in the first quarter of the year; however, grants may also occur throughout the year in conjunction with acquisitions of businesses, and primarily consist of the following:

Restricted Stock Units and Awards – The Company grants restricted stock units and awards to employees and non-employee directors. Time-based restricted stock units and award grants generally vest over a three- or four-year period. Performance-based restricted stock units generally vest over a three- to five-year period based upon the achievement of defined performance goals including revenue growth, achievement of integration milestones, and completion of strategic initiatives. The Company recognizes compensation expense for restricted stock units and awards based on the market price of its common stock on the grant date over the period during which the units and awards vest.

Performance Share Units – The Company grants performance share units to employees. The number of shares issued at the end of the performance period is determined by the level of achievement of predefined performance goals, including earnings, revenue growth, synergy and integration attainment, and shareholder return. The Company recognizes compensation expense on performance share units ratably over the requisite performance period of the award, generally two to five years, to the extent management views the performance goals as probable of attainment. The Company recognizes compensation expense for the fair value of the shareholder return component over the requisite service period of the award.

Stock Options – The Company grants stock options to employees and non-employee directors at exercise prices equal to the fair market value of the Company's stock on the dates of grant. Stock option grants generally vest over a three-or four-year period. All stock options expire ten years from the date of the award. The Company recognizes compensation expense for the fair value of the stock options over the requisite service period of the stock option award.

Employee Stock Purchase Plan – The Company maintains an employee stock purchase plan that allows eligible employees to purchase a limited number of shares of common stock each quarter through payroll deductions at a discount of the closing price of the Company's common stock on the last business day of each calendar quarter. Effective April 9, 2020, the Company temporarily suspended the employee discount of 10% under the employee stock purchase plan to help manage discretionary costs in response to the COVID-19 pandemic. Effective January 1, 2021, the discount under the employee stock purchase plan was re-established at 5%, which is considered noncompensatory and therefore does not give rise to recognizable compensation cost.

The Company recognized \$323 million, \$239 million and \$369 million of share-based compensation expense during the years ended December 31, 2022, 2021 and 2020, respectively. At December 31, 2022, the total remaining unrecognized compensation cost for restricted stock units and awards, performance share units, and unvested stock options, net of estimated forfeitures, of \$495 million is expected to be recognized over a weighted-average period of 2.1 years. During the years ended December 31, 2022, 2021 and 2020, stock options to purchase 3.7 million, 4.4 million and 2.6 million shares, respectively, were exercised.

Share-Based Compensation Activity

No stock option awards were granted during the year ended December 31, 2022. The weighted-average estimated fair value of stock options granted during the years ended December 31, 2021 and 2020 was \$33.35 and \$35.02 per share, respectively. The fair values of stock options granted were estimated on the date of grant using a binomial option-pricing model with the following assumptions:

	2021	2020
Expected life (in years)	6.5	6.4
Average risk-free interest rate	0.6 %	1.8 %
Expected volatility	29.3 %	28.3 %
Expected dividend yield	0 %	0 %

The Company determined the expected life of stock options using historical data. The risk-free interest rate was based on the U.S. treasury yield curve in effect as of the grant date. Expected volatility was determined using weighted-average implied market volatility combined with historical volatility. The Company believes that a blend of historical volatility and implied volatility better reflects future market conditions and better indicates expected volatility than purely historical volatility.

A summary of stock option activity is as follows:

	Shares (In thousands)	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value n millions)
Stock options outstanding - December 31, 2021	10,229	\$ 56.36		
Granted	_	_		
Forfeited	(204)	111.39		
Exercised	(3,689)	42.06		
Stock options outstanding - December 31, 2022	6,336	\$ 62.91	3.92	\$ 256
Stock options exercisable - December 31, 2022	5,696	\$ 57.36	3.52	\$ 256

A summary of restricted stock unit, restricted stock award and performance share unit activity is as follows:

	Restricted Stock Units and Awards			Performance Share Units			
	Shares (In thousands)		Weighted- Average Grant Date Fair Value	Shares (In thousands)		Weighted- Average Grant Date Fair Value	
Units and awards - December 31, 2021	5,074	\$	101.09	1,392	\$	96.32	
Granted	3,473		93.54	3,050		100.78	
Forfeited	(759)		100.21	(122)		97.00	
Vested	(2,258)		99.70	(1,077)		103.13	
Units and awards - December 31, 2022	5,530	\$	96.88	3,243	\$	100.93	

In conjunction with certain acquisitions, the Company granted restricted stock units with performance vesting provisions to be measured over two and five years, which are presented as performance share units within the table above.

The table below presents additional information related to stock option and restricted stock unit activity:

(In millions)	2022	2021	2020
Total intrinsic value of stock options exercised	\$ 226	\$ 339	\$ 194
Fair value of restricted stock units vested	335	332	454
Income tax benefit from stock options exercised and restricted stock units vested	109	142	156
Cash received from stock options exercised	105	91	83

At December 31, 2022, 22.0 million share-based awards were available for grant under the Amended and Restated Fisery, Inc. 2007 Omnibus Incentive Plan. Under its employee stock purchase plan, the Company issued 0.5 million shares during each of the years ended December 31, 2022, 2021 and 2020. At December 31, 2022, there were 23.3 million shares available for issuance under the employee stock purchase plan.

16. Restructuring and Other Charges

In connection with the acquisition of First Data in 2019, the Company implemented integration plans focused on reducing the Company's overall cost structure, including reducing vendor spend and eliminating duplicate costs. The Company recorded restructuring charges related to certain of these integration activities of \$118 million and \$303 million, primarily reported in cost of processing and service and selling, general and administrative expenses within the consolidated statements of income, based upon committed actions during the years ended December 31, 2021 and 2020, respectively.

Employee Termination Costs

The Company recorded \$187 million, \$95 million and \$131 million of employee termination costs related to cash severance and other separation costs for terminated employees during the years ended December 31, 2022, 2021 and 2020, respectively. Employee termination costs include those charges incurred in connection with the acquisition of First Data during the years ended December 31, 2021 and 2020.

The following table summarizes the changes in the reserve related to the Company's employee severance and other separation costs during the years ended December 31:

(In millions)	2022	2021
Balance at beginning of year	\$ 36	\$ 27
Severance and other separation costs	187	95
Cash payments	(200)	(86)
Balance at end of year	\$ 23	\$ 36

The employee severance and other separation costs accrual balance of \$23 million at December 31, 2022 is expected to be paid within the next twelve months. In addition, the Company recorded \$22 million, \$8 million and \$48 million of share-based compensation costs during the years ended December 31, 2022, 2021 and 2020, respectively, related to the accelerated vesting of equity awards for terminated employees.

Facility Exit Costs

The Company permanently vacated certain leased facilities in advance of the non-cancellable lease terms as part of the Company's efforts to reduce facility costs in connection with the First Data acquisition during 2021 and 2020, and in connection with a strategic consolidation of facilities during 2022. In conjunction with the exit of these leased facilities, the Company assessed the respective operating lease ROU assets for impairment by comparing the carrying values of the ROU assets to the discounted cash flows from estimated sublease payments (Level 3 of the fair value hierarchy). In addition, the Company assessed certain property and equipment associated with owned and leased facilities for impairment. As a result, the Company recorded non-cash impairment charges of \$14 million, \$15 million and \$124 million reported in selling, general and administrative expense within the consolidated statements of income during the years ended December 31, 2022, 2021 and 2020, respectively, associated with the early exit of these facilities. The Company continues to evaluate its facility locations and therefore may incur additional exit costs in future periods.

Other Costs

During 2020, in connection with initiatives to reduce the Company's overall cost structure following the acquisition of First Data, the Company terminated certain of its existing lease agreements to upgrade and consolidate its computing infrastructure. The Company upgraded or replaced certain leased hardware under separate, new lease agreements, resulting in the early termination and disposal of existing hardware under the current lease agreements. As such, the Company adjusted the amortization period for these existing lease agreements to coincide with the modified remaining term. Finance lease expense during the year ended December 31, 2020 includes \$62 million of accelerated amortization associated with the termination of these vendor contracts. In addition, the Company executed similar terminations to certain of its existing software financing agreements. Amortization expense during the year ended December 31, 2020 includes \$56 million of accelerated amortization associated with the termination of these vendor contracts.

17. Income Taxes

Substantially all of the Company's pre-tax earnings are derived from domestic operations in all years presented. The income tax provision was as follows for the years ended December 31:

(In millions)	2022		2021		2020
Components of income tax provision (benefit):					
Current:					
Federal	\$	802	\$	378	\$ (25)
State		175		138	71
Foreign		132		109	79
		1,109		625	125
Deferred:			-! '		
Federal		(339)		(186)	189
State		(84)		(106)	(34)
Foreign		(135)		30	(84)
		(558)		(262)	71
Income tax provision	\$	551	\$	363	\$ 196

A reconciliation of the statutory federal income tax rate to the Company's effective income tax rate is as follows for the years ended December 31:

2022	2021	2020
21.0 %	21.0 %	21.0 %
2.5 %	1.6 %	2.0 %
— %	8.0 %	2.8 %
(0.9)%	(3.1)%	(3.2)%
(0.8)%	(2.2)%	(3.9)%
(2.2)%	(2.1)%	0.7 %
(0.5)%	(2.7)%	(1.0)%
0.4 %	0.7 %	2.0 %
(0.5)%	(1.3)%	(1.7)%
(0.1)%	1.9 %	(2.0)%
18.9 %	21.8 %	16.7 %
	21.0 % 2.5 % — % (0.9)% (0.8)% (2.2)% (0.5)% 0.4 % (0.5)% (0.1)%	21.0 % 21.0 % 2.5 % 1.6 % — % 8.0 % (0.9)% (3.1)% (0.8)% (2.2)% (2.2)% (2.1)% (0.5)% (2.7)% 0.4 % 0.7 % (0.5)% (1.3)% (0.1)% 1.9 %

Foreign tax law changes included \$134 million and \$32 million of income tax expense attributed to the revaluation of certain net deferred tax liabilities in connection with enacted corporate income tax rate changes in foreign countries during the years ended December 31, 2021 and 2020, respectively. In 2021, the enacted tax rate in the United Kingdom increased from 19% to 25% starting in 2023, and the tax rate in Argentina increased from 25% to 35%. In 2020, the tax rate in the United Kingdom increased from 17% to 19%.

Significant components of deferred tax assets and liabilities consisted of the following at December 31:

(In millions)	2022	2021
Accrued expenses	\$ 170	\$ 171
Share-based compensation	116	134
Net operating loss and credit carry-forwards	805	804
Leasing liabilities	170	194
Other	163	194
Subtotal	1,424	1,497
Valuation allowance	(620)	(697)
Total deferred tax assets	804	800
Capitalized software development costs	(481)	(633)
Intangible assets	(2,319)	(2,676)
Property and equipment	(308)	(280)
Capitalized commissions	(106)	(95)
Investments in joint ventures	(597)	(630)
Leasing right-of-use assets	(134)	(142)
Other	(405)	(474)
Total deferred tax liabilities	(4,350)	(4,930)
Total	\$ (3,546)	\$ (4,130)

The Company maintained a valuation allowance of \$620 million and \$697 million at December 31, 2022 and 2021, respectively, against its deferred tax assets. Substantially all of the valuation allowance relates to certain foreign and state net operating loss carryforwards.

Deferred tax assets and liabilities are reported in the consolidated balance sheets as follows at December 31:

(In millions)	2022			2021		
Noncurrent assets	\$	56	\$	42		
Noncurrent liabilities		(3,602)		(4,172)		
Total	\$	(3,546)	\$	(4,130)		

Noncurrent deferred tax assets are included in other long-term assets in the consolidated balance sheets at December 31, 2022 and 2021.

The following table presents the amounts of federal, state and foreign net operating loss carryforwards and general business credit carryforwards at December 31:

(In millions)	 2022		
Net operating loss carryforwards: (1)			_
Federal	\$ 214	\$	178
State	2,810		3,763
Foreign	2,373		2,580
General business credit carryforwards (2)	17		12

⁽¹⁾ At December 31, 2022, the Company had federal net operating loss carryforwards of \$214 million, most of which do not expire, state net operating loss carryforwards of \$2.8 billion, most of which expire in 2023 through 2042, and foreign net operating loss carryforwards of \$2.4 billion, of which \$276 million expire in 2023 through 2041, and the remainder of which do not expire.

The Company asserts that its investment in its foreign subsidiaries is intended to be indefinitely reinvested. Undistributed historical and future earnings of its foreign subsidiaries are not considered to be indefinitely reinvested. Should these earnings be distributed in the future in the form of dividends or otherwise, the Company may be subject to foreign or U.S. taxes. The Company has the ability and intent to limit distributions so as to not make a distribution in excess of its investment in those

⁽²⁾ Substantially all of the general business credit carryforwards relate to foreign tax credits.

subsidiaries. The Company will continue to monitor its global cash requirements and the need to recognize a deferred tax liability.

Unrecognized tax benefits were as follows at December 31:

(In millions)	2022	2021	2020
Unrecognized tax benefits - Beginning of year	\$ 124	\$ 171	\$ 145
Increases for tax positions taken during the current year	3	16	9
Increases for tax positions taken in prior years	_	5	53
Decreases for tax positions taken in prior years	(18)	(41)	(23)
Decreases for settlements	(2)	(1)	(2)
Lapse of the statute of limitations	(11)	(26)	(11)
Unrecognized tax benefits - End of year	\$ 96	\$ 124	\$ 171

At December 31, 2022, unrecognized tax benefits of \$58 million, net of federal and state benefits, would affect the effective income tax rate if recognized. The Company believes it is reasonably possible that the liability for unrecognized tax benefits may decrease by up to \$10 million over the next twelve months as a result of possible closure of federal tax audits, potential settlements with certain states and foreign countries, and the lapse of the statute of limitations in various state and foreign jurisdictions.

The Company classifies interest expense and penalties related to income taxes as components of its income tax provision. The income tax provision included interest expense (benefits) and penalties on unrecognized tax benefits of less than \$1 million in 2022, \$(6) million in 2021 and \$3 million in 2020. Accrued interest expense and penalties related to unrecognized tax benefits totaled \$13 million and \$15 million at December 31, 2022 and 2021, respectively.

The Company's U.S. federal income tax returns for 2021 and 2022, and tax returns in certain states and foreign jurisdictions for 2015 through 2022, remain subject to examination by taxing authorities.

18. Commitments and Contingencies

Litigation

In the normal course of business, the Company or its subsidiaries are named as defendants in lawsuits in which claims are asserted against the Company. In 2021, the Company resolved a matter, for which the Company previously had accrued, with a class of merchants related to alleged violations by an independent sales organization resulting in a payment of \$28 million. In 2020, the Company resolved a matter with the Federal Trade Commission related to a U.S.-based wholesale independent sales organization resulting in a payment of \$40 million, for which the Company previously had accrued. The Company maintained accruals of \$21 million and \$32 million at December 31, 2022 and 2021, respectively, related to its various legal proceedings, primarily associated with the Company's merchant acquiring business and certain tax matters. The Company's estimate of the possible range of exposure for various litigation matters in excess of amounts accrued is \$0 million to approximately \$60 million. In the opinion of management, the liabilities, if any, which may ultimately result from such legal proceedings are not expected to have a material adverse effect on the Company's consolidated financial statements.

Electronic Payments Transactions

In connection with the Company's processing of electronic payments transactions, which are separate and distinct from the settlement payment transactions described in Note 5, funds received from subscribers are invested from the time the Company collects the funds until payments are made to the applicable recipients. These subscriber funds are invested in short-term, highly liquid investments. Subscriber funds, which are not included in the Company's consolidated balance sheets, can fluctuate significantly based on consumer bill payment and debit card activity and totaled approximately \$1.7 billion and \$1.6 billion at December 31, 2022 and 2021, respectively.

Indemnifications and Warranties

The Company may indemnify its clients from certain costs resulting from claims of patent, copyright or trademark infringement associated with its clients' use of the Company's products or services. The Company may also warrant to clients that its products and services will operate substantially in accordance with identified specifications. From time to time, in connection with sales of businesses, the Company agrees to indemnify the buyers of such businesses for liabilities associated with the businesses that are sold. Payments, net of recoveries, under such indemnification or warranty provisions were not material to the Company's consolidated financial statements.

19. Related Party Transactions

Merchant Alliances

A portion of the Company's business is conducted through merchant alliances between the Company and financial institutions (see Note 8). To the extent the Company maintains a controlling financial interest in an alliance, the alliance's financial statements are consolidated with those of the Company and the related processing fees are treated as an intercompany transaction and eliminated in consolidation. To the extent the Company has significant influence in, but not control of, an alliance, the Company uses the equity method to account for its investment in the alliance. As a result, the processing and other service fees charged to merchant alliances accounted for under the equity method are recognized in the Company's consolidated statements of income primarily as processing and services revenue. Such fees totaled \$187 million, \$171 million and \$183 million during the years ended December 31, 2022, 2021 and 2020, respectively. No directors or officers of the Company have ownership interests in any of the alliances. The formation of each of these alliances generally involves the Company and the financial institution contributing contracts with merchants to the alliance and a cash payment from one owner to the other to achieve the desired ownership percentage for each. The Company and the financial institution enter into a long-term processing service agreement, which governs the Company's provision of transaction processing services to the alliance. The Company had approximately \$43 million and \$36 million of amounts due from unconsolidated merchant alliances included within trade accounts receivable, net in the Company's consolidated balance sheets at December 31, 2022 and 2021, respectively.

Effective July 1, 2020, the Company and Bank of America dissolved their BAMS joint venture, of which the Company had a 51% controlling ownership interest. Upon dissolution of the joint venture's operations, the joint venture transferred a proportionate share of value, primarily the client contracts, to each party via an agreed upon contractual separation. The revenues and expenses of the BAMS joint venture were consolidated into the Company's financial results through the date of dissolution. See Note 4 for additional information.

Joint Venture Transition Services Agreements

Pursuant to certain transition services agreements, the Company provides, at fair value, various administration, business process outsourcing, and technical and data center related services for defined periods to certain joint ventures accounted for under the equity method. Amounts transacted through these agreements, including with InvestCloud through June 30, 2021, totaled \$18 million, \$37 million and \$58 million during the years ended December 31, 2022, 2021 and 2020, respectively, and were primarily recognized as processing and services revenue in the Company's consolidated statements of income.

Share Repurchases

On May 3, 2021, New Omaha Holdings L.P. ("New Omaha"), a shareholder of the Company, completed an underwritten secondary public offering of 23.0 million shares of Fisery, Inc. common stock (the "2021 offering"). The Company did not sell any shares in, nor did it receive any proceeds from, the 2021 offering. New Omaha received all of the net proceeds from the 2021 offering. In connection with the 2021 offering, the Company repurchased from the underwriters 5.0 million shares of its common stock that were subject to the 2021 offering, at a price equal to the price per share paid by the underwriters to New Omaha in the 2021 offering (the "2021 share repurchase"). The 2021 share repurchase totaled \$588 million and was funded with cash on hand. The repurchased shares were cancelled and no longer outstanding following the completion of the 2021 share repurchase. Prior to the 2021 offering, New Omaha owned approximately 13% of the Company's outstanding shares of common stock, and immediately following the 2021 offering, New Omaha owned approximately 9% of such outstanding shares. As of December 31, 2022, New Omaha did not own any of the outstanding shares of the Company's common stock.

On December 14, 2020, New Omaha completed an underwritten secondary public offering of 20.1 million shares of Fisery, Inc. common stock (the "2020 offering"). The Company did not sell any shares in, nor did it receive any proceeds from, the 2020 offering. New Omaha received all of the net proceeds from the 2020 offering. In connection with the 2020 offering, the Company repurchased from the underwriters 1.8 million shares of its common stock that were subject to the 2020 offering, at a price equal to the price per share paid by the underwriters to New Omaha in the 2020 offering (the "2020 share repurchase"). The 2020 share repurchase totaled \$200 million and was funded with cash on hand. The repurchased shares were cancelled and no longer outstanding following the completion of the 2020 share repurchase. Prior to the 2020 offering, New Omaha owned approximately 16% of the Company's outstanding shares of common stock, and immediately following the 2020 offering, New Omaha owned approximately 13% of such outstanding shares.

20. Business Segment Information

The Company's operations are comprised of the Acceptance segment, the Fintech segment and the Payments segment. The businesses in the Acceptance segment provide a wide range of commerce-enabling solutions and serve merchants of all sizes around the world. These solutions include merchant acquiring and digital commerce services; mobile payment services; security and fraud protection products; Clover[®], the Company's cloud-based POS and integrated commerce operating system for small and mid-sized businesses and independent software vendors; and CaratSM, the Company's integrated operating system for enterprises. The Company distributes the products and services in the global Acceptance segment businesses through a variety of channels, including direct sales teams, strategic partnerships with agent sales forces, independent software vendors, financial institutions and other strategic partners in the form of joint venture alliances, revenue sharing alliances and referral agreements. Merchants, financial institutions and distribution partners in the Acceptance segment are frequently clients of the Company's other segments.

The businesses in the Fintech segment provide financial institutions around the world with the technology solutions they need to run their operations, including products and services that enable financial institutions to process customer deposit and loan accounts and manage an institution's general ledger and central information files. As a complement to the core account processing functionality, the global Fintech segment businesses also provide digital banking, financial and risk management, professional services and consulting, item processing and source capture, and other products and services that support numerous types of financial transactions. Certain of the businesses in the Fintech segment provide products or services to corporate clients to facilitate the management of financial processes and transactions. Many of the products and services offered in the Fintech segment are integrated with products and services provided by the Company's other segments.

The businesses in the Payments segment provide financial institutions and corporate clients around the world with the products and services required to process digital payment transactions. This includes card transactions such as debit, credit and prepaid card processing and services; a range of network services, security and fraud protection products, card production and print services. In addition, the Payments segment businesses offer non-card digital payment software and services, including bill payment, account-to-account transfers, person-to-person payments, electronic billing, and security and fraud protection products. Clients of the global Payments segment businesses reflect a wide range of industries, including merchants, distribution partners and financial institution customers in the Company's other segments.

Corporate and Other supports the reportable segments described above, and consists of amortization of acquisition-related intangible assets, unallocated corporate expenses and other activities that are not considered when management evaluates segment performance, such as gains or losses on sales of businesses, certain assets or investments, costs associated with acquisition and divestiture activity, certain transition services revenue associated with various dispositions, and the Company's Output Solutions postage reimbursements. Corporate and Other also includes the historical results of the Company's Investment Services business prior to the Company's disposal of its controlling financial interest in February 2020 (see Note 4).

Operating results for each segment were as follows:

	Reportable Segments					-				
(In millions)	Acceptance Fintech Page 1		Payments Corporate and Other				Total			
2022										
Processing and services revenue	\$	6,288	\$	2,986	\$	5,164	\$	22	\$	14,460
Product revenue		1,004		184		1,098		991		3,277
Total revenue		7,292		3,170		6,262		1,013		17,737
Operating income (loss)		2,321		1,157		2,823		(2,561)		3,740
Capital expenditures, including capitalized software and other intangibles		464		259		286		470		1,479
Depreciation and amortization expense		276		241		275		2,420		3,212
2021										
Processing and services revenue	\$	5,560	\$	2,832	\$	4,883	\$	32	\$	13,307
Product revenue		919		190		950		860		2,919
Total revenue		6,479		3,022		5,833		892		16,226
Operating income (loss)		1,996		1,081		2,557		(3,346)		2,288
Capital expenditures, including capitalized software and other intangibles		314		222		272		352		1,160
Depreciation and amortization expense		245		226		254		2,523		3,248
2020										
Processing and services revenue	\$	4,736	\$	2,714	\$	4,702	\$	63	\$	12,215
Product revenue		786		187		802		862		2,637
Total revenue		5,522		2,901		5,504		925		14,852
Operating income (loss) (1)		1,427		992		2,361		(2,928)		1,852
Capital expenditures, including capitalized software and other intangibles		227		183		242		248		900
Depreciation and amortization expense		239		202		248		2,568		3,257

⁽¹⁾ Corporate and Other includes gains of \$428 million from the sale of a 60% interest of the Company's Investment Services business and \$36 million on the dissolution of BAMS.

Fiserv, Inc.
Schedule II — Valuation and Qualifying Accounts
(In millions)

			Addi	tions			
Description		lance at ginning Period	Charged to Costs and Expenses	Charged to Other Accounts	Deductions	Balance at End of Period	
Year ended December 31, 2022							
Deferred tax asset valuation allowance	\$	697	33	(41)	(69)	\$	620
Year ended December 31, 2021							
Deferred tax asset valuation allowance	\$	888	13	$(127)^{(1)}$	$(77)^{(1)}$	\$	697
Year ended December 31, 2020							
Deferred tax asset valuation allowance	\$	1,145	6	64	(327) (1)	\$	888

 $^{^{(1)}}$ The decrease in the deferred tax asset valuation allowance is primarily due to subsidiary restructurings.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Fisery, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Fisery, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes and the schedule listed in Item 8 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 23, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue – Refer to Note 1 and Note 3 to the consolidated financial statements

Critical Audit Matter Description

The Company generates revenue from the delivery of processing, service and product solutions. Revenue is measured based on consideration specified in a contract with a customer, and the Company recognizes revenue when it satisfies a performance obligation by transferring control over a product or service to a customer, which may be at a point in time or over time. The Company's revenue consists of a significant volume of transactions sourced from multiple systems and applications. The processing of such transactions and recording of the majority of revenue is system-driven and based on contractual terms with customers. In addition, contract modifications occur when the Company and its customers agree to modify existing customer contracts to change the scope or price (or both) of the contract. Contract modifications also occur when a customer terminates some, or all, of the existing services provided by the Company, which may result in the customer paying a termination fee to the Company based upon the terms in the initial contract. When a contract modification occurs, it requires the Company to exercise judgment to determine if the modification should be accounted for as: (i) a separate contract, (ii) the termination of the original contract and creation of a new contract, or (iii) a cumulative catch-up adjustment to the original contract. Further, contract modifications require the identification and evaluation of the performance obligations of the modified contract,

including the allocation of consideration to the remaining performance obligations and the period of recognition for each identified performance obligation.

We identified the complexity of revenue processing and revenue recognition, including customer contract modifications, as a critical audit matter because of the increased extent of effort and involvement of professionals in our firm having expertise in information technology (IT) to identify, test, and evaluate the Company's systems and automated controls and the management judgments necessary to determine the appropriate accounting. This required an increased extent of effort and a high degree of auditor judgment when performing audit procedures to evaluate whether revenue transactions were recognized appropriately.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to revenue recognition included the following, among others:

- We evaluated management's significant accounting policies.
- We tested internal controls within the relevant revenue business processes, including those in place to reconcile the
 various reports extracted from the IT systems to the Company's general ledger and those related to the Company's
 accounting for contract modifications.
- With the assistance of professionals in our firm having expertise in IT, we:
 - Identified the relevant systems used to process revenue transactions and tested the general IT controls over each of these systems, including testing of user access controls, change management controls, and IT operations controls.
 - Tested system interface controls and automated controls within the relevant revenue streams, as well as the controls designed to assess the accuracy and completeness of revenue.
- We developed expectations of revenue at a disaggregated level based on historical transaction prices and current year volumes. We compared those estimates to revenue recognized by the Company.
- For a sample of revenue transactions, we tested selected transactions by agreeing the amounts of revenue recognized to source documents and testing the mathematical accuracy of the recorded revenue.
- We selected a sample of significant customer contract modifications and performed the following procedures:
 - Obtained and read the customer contracts.
 - Evaluated whether the contract represented a new contract or a contract modification and, if applicable, assessed the treatment of any change in scope or price.
 - Tested management's identification of remaining performance obligations.
 - Recalculated the transaction price and assessed the appropriateness of the allocation of consideration to each performance obligation.
 - Assessed the pattern of delivery for each distinct performance obligation.

Goodwill — Certain Reporting Units — Refer to Note 1 and Note 7 to the consolidated financial statements

Critical Audit Matter Description

The Company's evaluation of goodwill for impairment involves the comparison of the fair value of each reporting unit to its carrying value. The Company determines the fair value of its reporting units using both a discounted cash flow model and a market approach. The determination of fair value using the discounted cash flow model requires management to make significant estimates and assumptions, which include assumptions related to revenue growth rates, margin growth rates and discount rates. The goodwill balance was \$36,811 million as of December 31, 2022. For all reporting units, the fair values exceeded the carrying values and therefore, no impairment was recognized.

The four reporting units we identified as a critical audit matter have goodwill balances of \$1,602 million, \$813 million, \$7,280 million, and \$1,194 million, respectively, and their fair values exceeded their carrying values as of the annual assessment, ranging between 7% and 18%. Revenue growth rates, margin growth rates, and discounts rates for these four reporting units are sensitive to significant and long-term deterioration in the macroeconomic environment, industry or market conditions.

We identified goodwill for these four reporting units as a critical audit matter because of the significant estimates and assumptions management makes to estimate the fair value of these reporting units and the sensitivity of operations to changes in the macroeconomic environment, industry or market conditions. This required a high degree of auditor judgment and an

increased extent of effort, including the need to involve professionals in our firm having expertise in valuation, when performing audit procedures to evaluate the reasonableness of management's estimates and assumptions related to revenue growth rates, margin growth rates, and selection of the discount rates.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the revenue growth rates, margin growth rates, and the selection of discount rates for the four reporting units included the following, among others:

- We tested the effectiveness of controls over management's goodwill impairment evaluation, including those over the determination of the fair value of these reporting units, specifically controls related to management's forecasts and selection of the discount rates.
- We evaluated management's ability to accurately forecast by comparing actual results to management's historical forecasts.
- We evaluated the reasonableness of management's forecasts by comparing the forecasts to (1) historical results, (2) industry reports containing analyses of the Company's and its competitors' products and (3) forecasted information included in Company press releases as well as in analyst and industry reports of the Company and companies in its peer group.
- With the assistance of professionals in our firm having expertise in valuation, we evaluated the discount rates including testing the underlying source information and the mathematical accuracy of the calculations and developing a range of independent estimates and comparing those to the discount rates selected by management.

/s/ Deloitte & Touche LLP

Milwaukee, Wisconsin February 23, 2023

We have served as the Company's auditor since 1985.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

(a) Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934). Based on this evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures were effective as of December 31, 2022.

(b) Management Report on Internal Control Over Financial Reporting

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Securities Exchange Act of 1934. Our internal control over financial reporting is designed 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.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to risk that controls may become inadequate because of changes in conditions.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework (2013)*. Based on management's assessment, our management believes that, as of December 31, 2022, our internal control over financial reporting was effective based on those criteria.

Our independent registered public accounting firm has issued their attestation report on our internal control over financial reporting. The report is included below under the heading "Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting."

(c) Changes in Internal Control Over Financial Reporting

There was no change in internal control over financial reporting that occurred during the three months ended December 31, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

(d) Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

Our independent registered public accounting firm, Deloitte & Touche LLP, assessed the effectiveness of our internal control over financial reporting and has issued their report as set forth below.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Fisery, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Fisery, Inc. and subsidiaries (the "Company") as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2022, of the Company and our report dated February 23, 2023, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Annual Report on Internal Control Over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP

Milwaukee, Wisconsin February 23, 2023

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Except for information concerning our executive officers included in Part I of this Form 10-K under the caption "Information About Our Executive Officers," which is incorporated by reference herein, and the information regarding our Code of Conduct below, the information required by Item 10 is incorporated by reference to the information set forth under the captions "Our Board of Directors – Who We Are," "Our Board of Directors – How We Are Selected, Elected and Evaluated," and "Our Board of Directors – How We Are Organized – Our Committees – Audit Committee" in our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2022.

Our board of directors has adopted a Code of Conduct and Business Ethics ("Code of Conduct") that applies to all of our directors and employees, including our chief executive officer, chief financial officer, chief accounting officer and other persons performing similar functions as well as our other executive officers. We have posted a copy of our Code of Conduct on the "About – Investor Relations – Corporate Governance – Governance Documents" section of our website at www.fiserv.com. We intend to satisfy the disclosure requirements under Item 5.05 of Form 8-K regarding amendments to, or waivers from, the Code of Conduct by posting such information on the "About – Investor Relations" section of our website at www.fiserv.com. We are not including the information contained on our website as part of, or incorporating it by reference into, this report.

Item 11. Executive Compensation

The information required by Item 11 is incorporated by reference to the information set forth under the captions "Our Board of Directors – How We Are Paid," "Compensation Discussion and Analysis," "Compensation Committee Report," "Compensation Committee Interlocks and Insider Participation," "Executive Compensation," and "Pay Ratio" in our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2022.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information set forth under the caption "Our Shareholders – Common Stock Ownership" in our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2022, is incorporated by reference herein.

Equity Compensation Plan Information

The table below sets forth information with respect to compensation plans under which equity securities are authorized for issuance as of December 31, 2022.

	(a)	(b)	(c)
Plan Category	Number of shares to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of shares remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by our shareholders (1)	7,798,417 (2)	68.97 ⁽³⁾	22,016,049 (4)
Equity compensation plans not approved by our shareholders	N/A	N/A	N/A
Total (5)	7,798,417 (2)	68.97 ⁽³⁾	22,016,049 (4)

- (1) Columns (a) and (c) of the table above do not include 5,359,961 unvested restricted stock units outstanding under the Amended and Restated Fisery, Inc. 2007 Omnibus Incentive Plan (the "Incentive Plan") or 23,280,806 shares authorized for issuance under the Fisery, Inc. Amended and Restated Employee Stock Purchase Plan.
- (2) Consists of options outstanding under the Incentive Plan; 3,156,682 shares subject to performance share units at the target award level under the Incentive Plan; and 166,867 shares subject to non-employee director deferred compensation notional units under the Incentive Plan.
- (3) Represents the weighted-average exercise price of outstanding options under the Incentive Plan and does not take into account outstanding performance share units or non-employee director deferred compensation notional units under the Incentive Plan.
- (4) Reflects the number of shares available for future issuance under the Incentive Plan.
- This table does not include 1,860,693 options outstanding under the 2007 Stock Incentive Plan for Key Employees of First Data Corporation and its Affiliates (the "2007 First Data Plan") and the First Data Corporation 2015 Omnibus Incentive Plan (the "2015 First Data Plan" and together with the 2007 First Data Plan, the "First Data Plans") as of December 31, 2022 at a weighted-average exercise price of \$48.34. We assumed the First Data Plans in connection with our acquisition of First Data Corporation on July 29, 2019 and converted certain outstanding First Data equity awards into corresponding equity awards relating to common stock of Fiserv, Inc. in accordance with an exchange ratio in the merger agreement. This table also does not include 89,851 shares of restricted stock and restricted stock units outstanding under the 2015 First Data Plan, as of December 31, 2022. No additional equity awards will be made under the First Data Plans.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by Item 13 is incorporated by reference to the information set forth under the captions "Our Board of Directors – How We Are Organized – Our Independence," and "Our Board of Directors – How We Govern – Review, Approval or Ratification of Transactions with Related Persons," in our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2022.

Item 14. Principal Accounting Fees and Services

The information required by Item 14 is incorporated by reference to the information set forth under the captions "Independent Registered Public Accounting Firm and Fees" and "Audit Committee Pre-Approval Policy" in our definitive proxy statement for our 2023 annual meeting of shareholders, which will be filed with the Securities and Exchange Commission no later than 120 days after the close of the fiscal year ended December 31, 2022.

PART IV

Item 15. Exhibits, Financial Statement Schedules

Financial Statement Schedules

Financial statement schedules have been omitted because they are not applicable or the required information is shown in the consolidated financial statements or accompanying notes.

Exhibits

The exhibits listed in the accompanying exhibit index are filed as part of this Annual Report on Form 10-K.

EXHIBIT INDEX

Exhibit <u>Number</u>	Exhibit Description
3.1	Restated Articles of Incorporation (1)
3.2	Amended and Restated By-laws (2)
4.1	Description of Securities of the Registrant (3)
	Indenture, dated as of November 20, 2007, by and among Fisery, Inc., the guarantors named therein and
4.2	U.S. Bank National Association (4)
4.3	Thirteenth Supplemental Indenture, dated as of May 22, 2015, between Fisery, Inc. and U.S. Bank National Association (5)
4.4	Fourteenth Supplemental Indenture, dated as of September 25, 2018, between Fisery, Inc. and U.S. Bank National Association (6)
4.5	Fifteenth Supplemental Indenture, dated as of September 25, 2018, between Fisery, Inc. and U.S. Bank National Association (6)
4.6	Sixteenth Supplemental Indenture, dated as of June 24, 2019, between Fisery, Inc. and U.S. Bank National Association (7)
4.7	Seventeenth Supplemental Indenture, dated as of June 24, 2019, between Fisery, Inc. and U.S. Bank National Association (7)
4.8	Eighteenth Supplemental Indenture, dated as of June 24, 2019, between Fiserv, Inc. and U.S. Bank National Association (7)
4.9	Nineteenth Supplemental Indenture, dated as of June 24, 2019, between Fiserv, Inc. and U.S. Bank National Association (7)
4.10	Twentieth Supplemental Indenture, dated as of July 1, 2019, between Fisery, Inc. and U.S. Bank National Association (8)
4.11	Twenty-First Supplemental Indenture, dated as of July 1, 2019, between Fisery, Inc. and U.S. Bank National Association (8)
4.12	Twenty-Second Supplemental Indenture, dated as of July 1, 2019, between Fiserv, Inc. and U.S. Bank National Association (8)
4.13	Twenty-Third Supplemental Indenture, dated as of July 1, 2019, between Fisery, Inc. and U.S. Bank National Association (8)
4.14	Twenty-Fourth Supplemental Indenture, dated as of July 1, 2019, between Fisery, Inc. and U.S. Bank National Association (8)
4.15	Twenty-Fifth Supplemental Indenture, dated as of May 13, 2020, between Fisery, Inc. and U.S. Bank National Association (9)
4.16	Twenty-Sixth Supplemental Indenture, dated as of May 13, 2020, between Fisery, Inc. and U.S. Bank National Association (9)
4.17	Agency Agreement, dated as of July 1, 2019, by and among Fisery, Inc., Elavon Financial Services DAC, UK Branch, and U.S. Bank National Association (8)
4.18	Term Loan Credit Agreement, dated as of February 15, 2019, among Fisery, Inc. and the financial institutions party thereto (10)
4.19	Amendment No. 1 to Term Loan Credit Agreement, dated as of July 26, 2019 (11)

	Pursuant to Item 601(b)(4)(iii) of Regulation S-K, the Company agrees to furnish to the Securities and Exchange Commission, upon request, any instrument defining the rights of holders of long-term debt that is not filed as an exhibit to this Form 10-K.
10.1	Amended and Restated Fiserv, Inc. 2007 Omnibus Incentive Plan (12)*
	Amended and Restated Fiserv, Inc. 2007 Omnibus Incentive Plan Forms of Award Agreements
10.2	- Form of Restricted Stock Unit Agreement (Non-Employee Director) (13)*
10.3	- Form of Restricted Stock Unit Agreement (Employee-E) (14)*
10.4	- Form of Restricted Stock Unit Agreement (Employee-SO)*
10.5	- Form of Restricted Stock Unit Agreement (Employee-ST)*
10.6	- Form of Restricted Stock Unit Agreement (Employee-N)*
10.7	- Form of Non-Qualified Stock Option Agreement (Non-Employee Director-LE) (13)*
10.8	- Form of First Amendment to Non-Qualified Stock Option Agreement (Non-Employee Director - LE) (15)*
10.9	- Form of Non-Qualified Stock Option Agreement (Non-Employee Director - EE) (15)*
10.10	- Form of Second Amendment to Non-Qualified Stock Option Agreement (Non-Employee Director - LE/EE) (16)*
10.11	- Form of Stock Option Agreement (Employee-F) (14)*
10.12	- Form of Amendment to Stock Option Agreement (Employee-F) (17)*
10.13	- Form of Stock Option Agreement (Employee-E) (14)*
10.14	- Form of Stock Option Agreement (Employee-SO)*
10.15	- Form of Stock Option Agreement (Employee-ST)*
10.16	- Form of Performance Share Unit Agreement (Employee-SO)*
10.17	- Form of Performance Share Unit Agreement (Employee-ST)*
10.18	2007 Stock Incentive Plan for Key Employees of First Data Corporation and its Affiliates (18)*
	2007 Stock Incentive Plan for Key Employees of First Data Corporation and its Affiliates Forms of Award Agreements
10.19	- Form of Stock Option Agreement for Executive Committee Members (19)*
10.20	- Form of Stock Option Agreement for U.S. Employees effective for grants in or after January 2014 (19)*
10.21	First Data Corporation 2015 Omnibus Incentive Plan (18)*
	First Data Corporation 2015 Omnibus Incentive Plan Forms of Award Agreements
10.22	- Form of Option Agreement for Management Committee and Directors (19)*
10.23	- Form of Option Grant Notice and Option Grant Agreement (19)*
10.24	- Form of Restricted Stock Award Agreement (19)*
10.25	Fiserv, Inc. Executive Severance and Change of Control Policy, effective August 10, 2021 (20)*
10.26	Fiserv, Inc. Executive Officer Cash Severance Policy (2)*
10.27	Employment Agreement, dated December 21, 2022, between Fiserv, Inc. and Frank J. Bisignano (21)*
10.28	Sign-On Agreement for Suzan Kereere dated May 14, 2021 (22)*+
10.29	Fiserv, Inc. Amended and Restated Non-Qualified Deferred Compensation Plan (3)*
10.30	Form of Non-Employee Director Indemnity Agreement (23)
10.31	Fiserv, Inc. Non-Employee Director Deferred Compensation Plan (16)*
10.32	Non-Employee Director Compensation Schedule (24)*
10.33	Credit Agreement, dated as of June 16, 2022, among Fiserv, Inc., JPMorgan Chase Bank, N.A., as administrative agent, and the financial institutions party thereto (25)*
10.34	Letter Agreement, dated February 18, 2022, by and between Fiserv, Inc. and ValueAct Capital Management, L.P. (26)
21.1	Subsidiaries of Fiserv, Inc.
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

32.1	Certification of the Chief Executive Officer and the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS**	Inline XBRL Instance Document - The XBRL Instance Document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.
101.SCH**	Inline XBRL Taxonomy Extension Schema Document
101.CAL**	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF**	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB**	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

- * This exhibit is a management contract or compensatory plan or arrangement.
- ** Filed with this Annual Report on Form 10-K are the following documents formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Consolidated Statements of Income for the years ended December 31, 2022, 2021 and 2020, (ii) the Consolidated Statements of Comprehensive Income for the years ended December 31, 2022, 2021 and 2020, (iii) the Consolidated Balance Sheets at December 31, 2022 and 2021, (iv) the Consolidated Statements of Equity for the years ended December 31, 2022, 2021 and 2020, (v) the Consolidated Statements of Cash Flows for the years ended December 31, 2022, 2021 and 2020, and (vi) Notes to Consolidated Financial Statements.
- + Portions of the exhibit have been omitted pursuant to SEC confidential treatment under 17 C.F.R. Section 229.601(b)(10)(iv).
- (1) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on February 27, 2018, and incorporated herein by reference.
- (2) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on November 21, 2022, and incorporated herein by reference.
- (3) Previously filed as an exhibit to the Company's Annual Report on Form 10-K filed on February 27, 2020, and incorporated herein by reference.
- (4) Previously filed as an exhibit to the Company's Registration Statement on Form S-3 (File No. 333-147309) filed on November 13, 2007, and incorporated herein by reference.
- (5) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on May 22, 2015, and incorporated herein by reference.
- (6) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on September 25, 2018, and incorporated herein by reference.
- (7) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on June 24, 2019, and incorporated herein by reference.
- (8) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on July 1, 2019, and incorporated herein by reference.
- (9) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on May 13, 2020, and incorporated herein by reference.
- (10) Previously filed as an exhibit to the Company's Annual Report on Form 10-K filed on February 21, 2019, and incorporated herein by reference.
- (11) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on July 29, 2019, and incorporated herein by reference.
- (12) Previously filed as an exhibit to the Company's Quarterly Report on Form 10-Q filed on May 2, 2018, and incorporated herein by reference.

- (13) Previously filed as an exhibit to the Company's Annual Report on Form 10-K filed on February 24, 2012, and incorporated herein by reference.
- (14) Previously filed as an exhibit to the Company's Annual Report on Form 10-K filed on February 23, 2017, and incorporated herein by reference.
- (15) Previously filed as an exhibit to the Company's Quarterly Report on Form 10-Q filed on August 2, 2017, and incorporated herein by reference.
- (16) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on December 1, 2017, and incorporated herein by reference.
- (17) Previously filed as an exhibit to the Company's Annual Report on Form 10-K filed on February 20, 2015, and incorporated herein by reference.
- (18) Previously filed as an exhibit to the Company's Post-Effective Amendment No. 1 on Form S-8 to the Form S-4 Registration Statement of Fisery, Inc. filed July 29, 2019, and incorporated herein by reference.
- (19) Previously filed as an exhibit to the Company's Quarterly Report on Form 10-Q filed on November 7, 2019, and incorporated herein by reference.
- (20) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on August 12, 2021, and incorporated herein by reference.
- (21) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on December 22, 2022, and incorporated herein by reference.
- (22) Previously filed as an exhibit to the Company's Annual Report on Form 10-K filed on February 24, 2022, and incorporated herein by reference.
- (23) Previously filed as an exhibit to the Company's Annual Report on Form 10-K filed on February 28, 2008, and incorporated herein by reference.
- (24) Previously filed as an exhibit to the Company's Quarterly Report on Form 10-Q filed on July 27, 2022, and incorporated herein by reference.
- (25) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on June 21, 2022, and incorporated herein by reference.
- (26) Previously filed as an exhibit to the Company's Current Report on Form 8-K filed on February 23, 2022, and incorporated herein by reference.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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 on February 23, 2023.

FISERV, INC.

By: /s/ Frank J. Bisignano

Frank J. Bisignano

Chairman, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 23, 2023.

Name	Capacity
/s/ Frank J. Bisignano	Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)
Frank J. Bisignano	Chief Financial Officer
/s/ Robert W. Hau Robert W. Hau	(Principal Financial Officer)
/s/ Kenneth F. Best Kenneth F. Best	Chief Accounting Officer (Principal Accounting Officer)
/s/ Alison Davis	Director
Alison Davis	
/s/ Henrique De Castro	Director
Henrique De Castro	
/s/ Harry F. DiSimone	Director
Harry F. DiSimone	
/s/ Dylan G. Haggart Dylan G. Haggart	Director
/s/ Wafaa Mamilli	Director
Wafaa Mamilli	
/s/ Heidi G. Miller	Director
Heidi G. Miller	
/s/ Doyle R. Simons	Director
Doyle R. Simons	
/s/ Kevin M. Warren	Director
Kevin M. Warren	

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Frank J. Bisignano, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Fisery, Inc.;
- 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: February 23, 2023 By: /s/ Frank J. Bisignano

Frank J. Bisignano

President and Chief Executive Officer

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert W. Hau, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Fisery, Inc.;
- 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: February 23, 2023

By: /s/ Robert W. Hau

Robert W. Hau

Chief Financial Officer

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 Annual Report on Form 10-K of Fiserv, Inc. (the "Company") for the year ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Frank J. Bisignano, as President and Chief Executive Officer of the Company, and Robert W. Hau, as Chief Financial Officer of the Company, each hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) 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.

By: /s/ Frank J. Bisignano

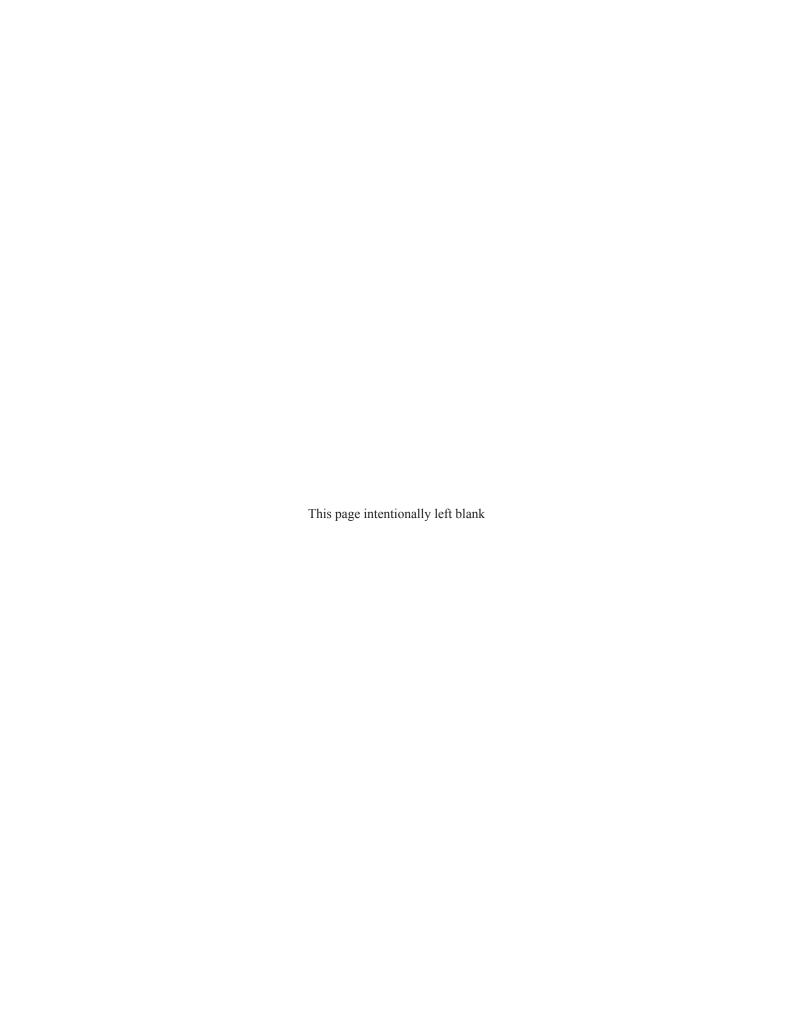
Frank J. Bisignano

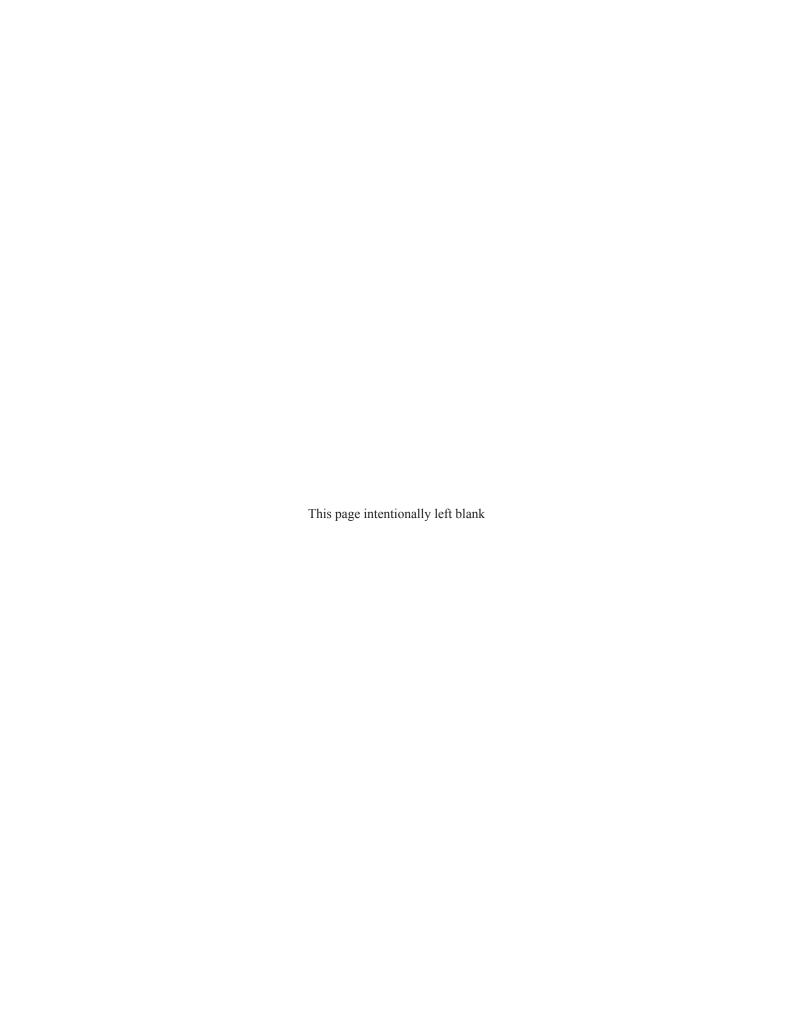
President and Chief Executive Officer

February 23, 2023

By: /s/ Robert W. Hau

Robert W. Hau Chief Financial Officer February 23, 2023





Financial Highlights









Non-GAAP Financial Measures

This document includes unaudited non-GAAP financial measures. Due to the financial impact of the First Data Corporation acquisition, the company's 2019 non-GAAP financial performance measures have been recalculated in this document on a combined company basis. The combined financial information has been prepared by making certain adjustments to the sum of historical First Data financial information determined in accordance with generally accepted accounting principles ("GAAP") and historical Fiserv financial information determined in accordance with GAAP. The historical combined financial information includes various estimates and is not necessarily indicative of the operating results of the combined companies had the transaction been completed at the assumed date. The historical combined financial information does not reflect any cost savings or other synergies anticipated as a result of the acquisition. In addition, the historical combined financial information does not reflect the impact of any purchase accounting adjustments that arose from the acquisition as such impacts would be excluded in the preparation of the combined financial information. The historical combined financial information is not pro forma information prepared in accordance with Article 11 of Regulation S-X of the Securities and Exchange Commission, and the preparation of information in accordance with Article 11 would result in a significantly different presentation.

This document includes the following unaudited non-GAAP financial measures: "combined revenue," "adjusted revenue," "organic revenue growth," "combined operating income," "adjusted operating income," "adjusted operating margin," "combined net income attributable to Fisery," "adjusted net income," "combined earnings per share," "adjusted earnings per share," "combined net cash provided by operating activities," and "free cash flow." Management believes that providing combined historical financial information, making adjustments for certain non-cash or other items and the exclusion of certain pass-through revenue and expenses should enhance shareholders' ability to evaluate the company's performance, as such measures provide additional insights into the factors and trends affecting its business. Organic revenue growth of 11% in 2022 is calculated using actual, unrounded amounts and is measured as the change in adjusted revenue from 2021 to 2022 of \$1,380 million, plus the 2022 impact of foreign currency fluctuations of \$294 million, less 2022 revenue attributable to acquisitions of \$41 million and dispositions of \$24 million; divided by adjusted revenue from 2021 of \$15,393 million, less 2021 revenue attributable to 2022 dispositions of \$107 million. Foreign currency fluctuations are measured as the increase or decrease in adjusted revenue for the current period by applying prior period foreign currency exchange rates to present a constant currency comparison to prior periods.

Forward-Looking Statements

This document contains forward-looking statements, including statements that describe the company's future plans, objectives or goals. Please refer to the "Risk Factors" in the company's Annual Report on Form 10-K for the year ended December 31, 2022 for a description of the assumptions, risks and uncertainties that may cause actual results to differ materially from those contemplated by such forward-looking statements.

Adjusted Net Income and Adjusted Earnings Per Share

	2019	2020	2021	2022
GAAP net income	\$893	\$958	\$1,334	\$2,530
GAAP net income attributable to First Data ¹	303	-	_	_
Combined net income attributable to Fiserv	1,196	958	1,334	2,530
Combined adjustments:				
Merger and integration costs ²	467	902	865	173
Severance and restructuring costs ³	150	108	81	209
Amortization of acquisition-related intangible assets ⁴	1,222	2,024	1,982	1,814
Debt financing activities ⁵	287	-		-
Impact of divestitures ⁶	(46)	-	-	-
Non wholly-owned entity activities 7	(53)	94	51	9
Net gain on sale of businesses and other assets ⁶	(12)	(464)	-	(54)
Tax impact of adjustments ⁸	(467)	(595)	(685)	(476)
Discrete tax items ⁹	(5)	(7)	118	-
Adjusted net income	\$2,739	\$3,020	\$3,746	\$4,205
Weighted average common shares outstanding - diluted	522.6	683.4	671.6	647.9
Issuance of shares for combination	167.0	-	_	-
Dilutive impact of exchanged equity awards	4.5	-	_	-
Combined weighted average common shares outstanding - diluted ¹⁰	694.1	683.4	671.6	647.9
GAAP earnings per share 10	\$1.71	\$1.40	\$1.99	\$3.91
Combined earnings per share ¹⁰	\$1.72	\$1.40	\$1.99	\$3.91
Combined adjustments - net of income taxes:				
Merger and integration costs ²	0.52	1.02	0.99	0.21
Severance and restructuring costs ³	0.17	0.12	0.09	0.25
Amortization of acquisition-related intangible assets ⁴	1.36	2.28	2.27	2.21
Debt financing activities 5	0.32	-	_	-
Impact of divestitures ⁶	(0.05)	-	-	-
Non wholly-owned entity activities 7	(0.06)	0.11	0.06	(0.02)
Net gain on sale of businesses and other assets ⁶	(0.01)	(0.50)	_	(0.06)
Discrete tax items ⁹	(0.01)	(0.01)	0.18	-
Adjusted earnings per share	\$3.95	\$4.42	\$5.58	\$6.49
2022 adjusted earnings per share growth				16%

Free Cash Flow

	2019	2020	2021	2022
Net cash provided by operating activities	\$2,795	\$4,147	\$4,034	\$4,618
First Data net cash provided by operating activities ¹	1,370	-	-	-
First Data payments for contract assets 11	(51)	-	-	-
Combined net cash provided by operating activities	4,114	4,147	4,034	4,618
Combined capital expenditures	(1,118)	(900)	(1,160)	(1,479)
Combined adjustments:				
Distributions paid to noncontrolling interests and redeemable noncontrolling interests	(271)	(104)	(62)	(42)
Distributions from unconsolidated affiliates included in cash flows from investing activities 12	113	109	115	138
Severance, restructuring, merger and integration payments	375	505	712	306
Settlement of interest rate hedge contracts	183	_	_	-
Tax payments on adjustments and debt financing	(105)	(109)	(161)	(64)
Tax payments on gain on sale of investments in unconsolidated affiliates	-	-	54	49
Other	(4)	-	-	(11)
Free cash flow	\$3,287	\$3,648	\$3,532	\$3,515

^{\$} in millions.

Adjusted Revenue, Adjusted Operating Income and Adjusted Operating Margin

	2019	2020	2021	2022
Revenue	\$10,187	\$14,852	\$16,226	\$17,737
First Data revenue ¹	5,609	-	-	-
Combined revenue	15,796	14,852	16,226	17,737
Combined adjustments:				
Intercompany eliminations 13	(4)	-	-	-
Output Solutions postage reimbursements	(978)	(864)	(860)	(989)
Deferred revenue purchase accounting adjustments	18	46	27	25
Merchant Services adjustment 14	(387)	(126)	-	-
Adjusted revenue	\$14,445	\$13,908	\$15,393	\$16,773
Operating income	\$1,609	\$1,852	\$2,288	\$3,740
First Data operating income ¹	1,088			
Combined operating income	2,697	1,852	2,288	3,740
Combined adjustments:				
Merger and integration costs ²	467	902	861	173
Severance and restructuring costs ³	150	108	81	209
Amortization of acquisition-related intangible assets ⁴	1,222	2,024	1,982	1,814
Merchant Services adjustment 14	(230)	(59)	-	-
Net gain on sale of businesses and other assets ⁶	(12)	(464)	_	(54)
Adjusted operating income	\$4,294	\$4,363	\$5,212	\$5,882
Operating margin	15.8%	12.5%	14.1%	21.1%
Adjusted operating margin	29.7%	31.4%	33.9%	35.1%
2022 adjusted operating margin expansion				120 bps

^{\$} in millions. Operating margin percentages are calculated using actual, unrounded amounts.

- 1 Represents the financial results of First Data prior to the date of acquisition. For the year ended December 31, 2019, this includes the results of First Data from January 1, 2019 through July 28, 2019.
- Represents acquisition and related integration costs incurred in connection with various acquisitions, primarily related to the First Data acquisition in 2021, 2020 and 2019. Merger and integration costs in 2022 primarily include share-based compensation and third-party professional service fees attributable to various acquisitions. First Data integration costs in 2021 primarily include \$370 million of third party professional service fees associated with integration activities; \$44 million of incremental share-based compensation, including the fair value of stock awards assumed by Fiserv; and \$277 million of other integration-related compensation costs. First Data integration costs in 2020 primarily include \$224 million of third party professional service fees associated with integration activities; \$165 million of incremental share-based compensation, including the fair value of stock awards assumed by Fiserv; \$137 million of other integration-related compensation costs; \$118 million of accelerated depreciation and amortization associated with the termination of certain vendor contracts; and \$124 million of non-cash impairment charges associated with the early exit of certain leased facilities. First Data integration costs in 2019 primarily include \$199 million of legal and other professional service fees, primarily consisting of transaction costs, and \$108 million of incremental share-based compensation, including the fair value of stock awards assumed by Fiserv. The company completed the integration activities associated with the achievement of cost synergies related to the First Data acquisition as of December 31, 2021.
- 3 Represents severance costs associated with the achievement of expense management initiatives, including those related to the First Data acquisition in 2021, 2020 and 2019. Severance and restructuring costs in 2019 include a non-cash impairment charge of \$48 million, primarily related to an international core processing platform.
- 4 Represents amortization of intangible assets acquired through various acquisitions, including customer relationships, software/technology and trade names. This adjustment does not exclude the amortization of other intangible assets such as contract costs (sales commissions and deferred conversion costs), capitalized and purchased software, and financing costs and debt discounts.
- 5 Represents losses on early debt extinguishments and other costs associated with the refinancing of certain First Data indebtedness. Debt financing activities include \$220 million of early debt extinguishment costs and \$98 million of bridge term loan facility expenses, partially offset by \$50 million of net currency transaction gains related to foreign currency denominated debt.
- Represents the earnings attributable to divested businesses and the net gain or loss on the associated divestiture transactions, including on the sale of Fiserv Costa Rica, S.A., the company's Systems Integration Services operations, the company's Korea operations and certain merchant contracts in conjunction with the mutual termination of one of the company's merchant alliance joint ventures during 2022; the dissolution of the Banc of America Merchant Services joint venture and the sale of a 60% interest in the Investment Services business in 2020; and two businesses acquired as part of the First Data acquisition that were sold in 2019.
- Represents the company's share of amortization of acquisition-related intangible assets and, in 2022, expenses associated with debt refinancing activities at its unconsolidated affiliates, as well as the minority interest share of amortization of acquisition- related intangible assets at its subsidiaries in which the company holds a controlling financial interest. This adjustment also includes gains totaling \$201 million related to certain equity investment transactions and other net expense of \$43 million associated with joint venture debt guarantees in 2022, net gains totaling \$98 million related to the fair value remeasurement and sale of certain equity investments in 2021 and \$14 million related to the merger of a joint venture in 2019.
- 8 The tax impact of adjustments is calculated using a tax rate of 21% for 2022, and 23% for 2021, 2020 and 2019, which approximates the company's annual effective tax rate, exclusive of the actual tax impacts associated with the net gain on the sale of businesses, other assets and certain equity investment transactions.
- 9 Represents certain discrete tax items, such as foreign derived intangible income tax benefits from a subsidiary restructuring, the revaluation of deferred taxes due to a change in the respective statutory tax rates in the United Kingdom and Argentina, non-deductible transaction costs associated with the acquisition of First Data, and deferred tax on basis difference related to the company's definitive agreement to sell 60% of its Investment Services business in 2019.
- GAAP earnings per share is computed by dividing GAAP net income by the weighted average common shares outstanding diluted during the year. Combined earnings per share in 2019 is computed by dividing combined net income attributable to Fiserv by the combined weighted average common shares outstanding diluted during the year. The combined weighted average common shares outstanding diluted in 2019 is computed based on the historical Fiserv weighted average shares outstanding diluted determined in accordance with GAAP, adjusted to include the Fiserv shares issued as merger consideration and shares subject to First Data equity awards assumed by Fiserv in connection with the First Data acquisition.
- 11 Represents the conformity of First Data's historical classification of payments for contract assets to be consistent with the company's classification and treatment.
- 12 Distributions from unconsolidated affiliates totaled \$211 million, \$149 million and \$151 million in 2022, 2021 and 2020, respectively, of which \$73 million, \$34 million and \$42 million are recorded within net cash provided by operating activities, respectively. Distributions from unconsolidated affiliates totaled \$234 million in 2019, of which \$121 million was recorded within First Data net cash provided by operating activities.
- 13 Represents the elimination of intercompany revenue and expense between First Data and the company.
- 14 Represents an adjustment primarily related to the company's joint venture with Bank of America. The Banc of America Merchant Services joint venture (BAMS) was dissolved effective July 1, 2020. The company owned 51% of BAMS and, through June 30, 2020, BAMS' financial results were 100% consolidated into the company's financial statements for GAAP reporting purposes. In connection with the dissolution of the joint venture, the company received a 51% share of the joint venture's value via an agreed upon contractual separation. In addition, the company will continue providing merchant processing and related services to Bank of America for its merchant clients. This non-GAAP adjustment reduces adjusted revenue and adjusted operating income by the joint venture revenue and expense that was not expected to be retained by the company upon dissolution and is partially offset by an increase to processing and services revenue.

Leadership

Board of Directors

Chairman

Frank J. Bisignano

Directors

Alison Davis

Henrique de Castro

Harry F. DiSimone

Dylan G. Haggart

Wafaa Mamilli

Heidi G. Miller

Doyle R. Simons

Kevin M. Warren

Executive Leadership

Frank J. Bisignano

Chairman, President and Chief Executive Officer

Leigh Asher

Chief Marketing Officer

Guy Chiarello

Chief Operating Officer

Ivo Distelbrink

Head of Asia Pacific Region

Christopher M. Foskett

Chief Revenue Officer

Andrew Gelb

Head of Issuer Solutions

John Gibbons

Co-Head of Banking

Robert W. Hau

Chief Financial Officer

Tom Higgins

Head of General Services

Katia Karpova

Head of EMEA Region

Suzan Kereere

Head of Global Business

Solutions

Jennifer M. Manchester

Chief Human Resources Officer

Gustavo Marin

Head of Latin America Region

Himanshu Patel

Co-Head of Banking

Adam Rosman

Chief Administrative Officer and Chief Legal Officer

Joanne Sebby

Chief Risk Officer

Neil H. Wilcox

Head of Corporate Social

Responsibility

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