
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 10-Q

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

For the quarterly period ended September 30, 2019

OR

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

For the transition period from _____ to _____

Commission File Number 1-38962

FISERV, INC.

(Exact Name of Registrant as Specified in Its Charter)

Wisconsin
(State or Other Jurisdiction of
Incorporation or Organization)

39-1506125
(I. R. S. Employer
Identification No.)

255 Fiserv Drive Brookfield, WI 53045

(Address of Principal Executive Offices and zip code)

(262) 879-5000

(Registrant's Telephone Number, Including Area Code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.01 per share	FISV	The NASDAQ Stock Market LLC
0.375% Senior Notes due 2023	FISV23	The NASDAQ Stock Market LLC
1.125% Senior Notes due 2027	FISV27	The NASDAQ Stock Market LLC
1.625% Senior Notes due 2030	FISV30	The NASDAQ Stock Market LLC
2.250% Senior Notes due 2025	FISV25	The NASDAQ Stock Market LLC
3.000% Senior Notes due 2031	FISV31	The NASDAQ Stock Market LLC

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

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

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

As of October 31, 2019, there were 679,895,001 shares of common stock, \$.01 par value, of the registrant outstanding.

INDEX

	<u>Page</u>	
 PART I – FINANCIAL INFORMATION		
Item 1.	Financial Statements (Unaudited)	
	Consolidated Statements of Income	1
	Consolidated Statements of Comprehensive Income	2
	Consolidated Balance Sheets	3
	Consolidated Statements of Cash Flows	4
	Notes to Consolidated Financial Statements	5
Item 2.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	38
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	52
Item 4.	Controls and Procedures	53
 PART II – OTHER INFORMATION		
Item 1.	Legal Proceedings	53
Item 1A.	Risk Factors	53
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	65
Item 6.	Exhibits	66
	 Exhibit Index	
	Signatures	

PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Fiserv, Inc.
Consolidated Statements of Income
(In millions, except per share data)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenue:				
Processing and services	\$ 2,608	\$ 1,223	\$ 5,229	\$ 3,668
Product	520	189	913	604
Total revenue	<u>3,128</u>	<u>1,412</u>	<u>6,142</u>	<u>4,272</u>
Expenses:				
Cost of processing and services	1,204	568	2,445	1,696
Cost of product	413	181	755	551
Selling, general and administrative	1,137	305	1,821	930
(Gain) loss on sale of businesses	—	2	(10)	(227)
Total expenses	<u>2,754</u>	<u>1,056</u>	<u>5,011</u>	<u>2,950</u>
Operating income	374	356	1,131	1,322
Interest expense, net	(164)	(45)	(279)	(134)
Debt financing activities	49	(8)	(47)	(8)
Other (expense) income	(3)	1	—	3
Income before income taxes and income from investments in unconsolidated affiliates	<u>256</u>	<u>304</u>	<u>805</u>	<u>1,183</u>
Income tax provision	(53)	(78)	(144)	(290)
Income from investments in unconsolidated affiliates	<u>22</u>	<u>1</u>	<u>12</u>	<u>8</u>
Net income	225	227	673	901
Less: Net income attributable to noncontrolling interests	<u>27</u>	<u>—</u>	<u>27</u>	<u>—</u>
Net income attributable to Fiserv, Inc.	<u>\$ 198</u>	<u>\$ 227</u>	<u>\$ 646</u>	<u>\$ 901</u>
Net income attributable to Fiserv, Inc. per share – basic				
	\$ 0.34	\$ 0.56	\$ 1.42	\$ 2.21
Net income attributable to Fiserv, Inc. per share – diluted				
	\$ 0.33	\$ 0.55	\$ 1.39	\$ 2.16
Shares used in computing net income per share:				
Basic	584.8	403.8	456.3	408.4
Diluted	596.9	412.0	465.2	416.6

See accompanying notes to consolidated financial statements.

Fiserv, Inc.
Consolidated Statements of Comprehensive Income
(In millions)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net income	\$ 225	\$ 227	\$ 673	\$ 901
Other comprehensive (loss) income:				
Fair market value adjustment on cash flow hedges, net of income tax benefit of \$1 million, \$2 million, \$46 million and \$4 million	(4)	(6)	(134)	(11)
Reclassification adjustment for net realized gains on cash flow hedges included in cost of processing and services, net of income tax benefit of \$1 million	—	—	—	(3)
Reclassification adjustment for net realized losses on cash flow hedges included in net interest expense, net of income tax provision of \$1 million, \$0, \$2 million and \$1 million	4	1	6	3
Foreign currency translation	(186)	(8)	(184)	(14)
Total other comprehensive loss	(186)	(13)	(312)	(25)
Comprehensive income	\$ 39	\$ 214	\$ 361	\$ 876
Less: Comprehensive income attributable to noncontrolling interests	27	—	27	—
Comprehensive income attributable to Fiserv, Inc.	\$ 12	\$ 214	\$ 334	\$ 876

See accompanying notes to consolidated financial statements.

Fiserv, Inc.
Consolidated Balance Sheets
(In millions)
(Unaudited)

	September 30, 2019	December 31, 2018
Assets		
Cash and cash equivalents	\$ 1,028	\$ 415
Trade accounts receivable, net	2,653	1,049
Prepaid expenses and other current assets	1,330	274
Settlement assets	12,980	486
Total current assets	17,991	2,224
Property and equipment, net	1,639	398
Customer relationships, net	14,540	1,348
Other intangible assets, net	3,197	795
Goodwill	35,517	5,702
Contract costs, net	481	419
Investments in unconsolidated affiliates	2,618	65
Other long-term assets	1,881	311
Total assets	\$ 77,864	\$ 11,262
Liabilities and Shareholders' Equity		
Accounts payable and accrued expenses	\$ 2,901	\$ 1,146
Short-term and current maturities of long-term debt	368	4
Contract liabilities	412	380
Settlement obligations	12,980	480
Total current liabilities	16,661	2,010
Long-term debt	22,123	5,955
Deferred income taxes	4,110	745
Long-term contract liabilities	129	89
Other long-term liabilities	989	170
Total liabilities	44,012	8,969
Commitments and contingencies (see Note 23)		
Redeemable noncontrolling interest	92	—
Fiserv, Inc. shareholders' equity:		
Preferred stock, no par value: 25.0 million shares authorized; none issued	—	—
Common stock, \$0.01 par value: 1,800.0 million shares authorized; 791.4 million shares issued	8	8
Additional paid-in capital	23,668	1,057
Accumulated other comprehensive loss	(379)	(67)
Retained earnings	12,281	11,635
Treasury stock, at cost, 110.6 million and 398.9 million shares	(2,909)	(10,340)
Total Fiserv, Inc. shareholders' equity	32,669	2,293
Noncontrolling interests	1,091	—
Total equity	33,760	2,293
Total liabilities and equity	\$ 77,864	\$ 11,262

See accompanying notes to consolidated financial statements.

Fiserv, Inc.
Consolidated Statements of Cash Flows
(In millions)
(Unaudited)

	Nine Months Ended September 30,	
	2019	2018
Cash flows from operating activities:		
Net income	\$ 673	\$ 901
Adjustments to reconcile net income to net cash provided by operating activities from continuing operations:		
Depreciation and other amortization	386	278
Amortization of acquisition-related intangible assets	476	120
Amortization of financing costs, debt discounts and other	116	8
Net foreign currency gain on financing activities	(50)	—
Share-based compensation	121	54
Deferred income taxes	26	105
Gain on sale of business	(10)	(227)
Income from investments in unconsolidated affiliates	(12)	(8)
Distributions from unconsolidated affiliates	6	1
Settlement of interest rate hedge contracts	(183)	—
Other operating activities	(3)	11
Changes in assets and liabilities, net of effects from acquisitions and dispositions:		
Trade accounts receivable	151	(29)
Prepaid expenses and other assets	(41)	(63)
Contract costs	(141)	(107)
Accounts payable and other liabilities	117	48
Contract liabilities	(15)	(111)
Net cash provided by operating activities from continuing operations	1,617	981
Cash flows from investing activities:		
Capital expenditures, including capitalization of software costs	(431)	(263)
Proceeds from sale of businesses	39	419
Payments for acquisition of business, net of cash acquired	(16,004)	—
Distributions from unconsolidated affiliates	85	—
Purchases of investments	(4)	—
Other investing activities	6	(13)
Net cash (used in) provided by investing activities from continuing operations	(16,309)	143
Cash flows from financing activities:		
Debt proceeds	18,855	3,627
Debt repayments	(3,051)	(3,256)
Payments of debt financing, redemption and other costs	(247)	—
Proceeds from issuance of treasury stock	116	60
Purchases of treasury stock, including employee shares withheld for tax obligations	(271)	(1,254)
Distributions paid to noncontrolling interest and redeemable noncontrolling interest	(46)	—
Other financing activities	(5)	4
Net cash provided by (used in) financing activities from continuing operations	15,351	(819)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(4)	—
Net change in cash, cash equivalents, and restricted cash from continuing operations	655	305
Net cash flows from discontinued operations	—	43
Cash, cash equivalents, and restricted cash beginning balance	415	325
Cash, cash equivalents, and restricted cash ending balance	\$ 1,070	\$ 673
Discontinued operations cash flow information:		
Net cash used in operating activities	\$ —	\$ (7)
Net cash provided by investing activities	—	50
Net change in cash and cash equivalents from discontinued operations	\$ —	\$ 43

See accompanying notes to consolidated financial statements.

Fiserv, Inc.
Notes to Consolidated Financial Statements
(Unaudited)

1. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements for the three and nine months ended September 30, 2019 and 2018 are unaudited. In the opinion of management, all adjustments necessary for a fair presentation of the consolidated financial statements have been included. Such adjustments consisted of normal recurring items. Interim results are not necessarily indicative of results for a full year. The consolidated financial statements and accompanying notes are presented as permitted by Form 10-Q and do not contain certain information included in the annual consolidated financial statements and accompanying notes of Fiserv, Inc. (the “Company”). These interim consolidated financial statements should be read in conjunction with the consolidated financial statements and accompanying notes included in the Company’s Annual Report on Form 10-K for the year ended December 31, 2018.

On January 16, 2019, the Company entered into a definitive merger agreement to acquire First Data Corporation (“First Data”). The Company completed the acquisition on July 29, 2019 by acquiring 100% of the First Data stock that was issued and outstanding as of the date of acquisition. The consolidated financial statements as of and during the three and nine months ended September 30, 2019 include the financial results of First Data from the date of acquisition. The combined company provides technology capabilities that enable a range of payments and financial services, 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 solution.

Effective January 1, 2019, the Company adopted Accounting Standards Update (“ASU”) No. 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), and its related amendments using the optional transition method applied to all leases. Prior period amounts have not been restated. Additional information about the Company’s lease policies and the related impact of the adoption is included in Notes 2 and 15 to the consolidated financial statements.

Principles of Consolidation

The consolidated financial statements include the accounts of Fiserv, Inc. and its subsidiaries in which the Company holds a controlling financial interest. Control is normally established when ownership and voting interests in an entity is 50% or greater. Investments in less than 50% owned affiliates in which the Company has significant influence but not control are accounted for using the equity method of accounting. Significant influence over an affiliate’s operations generally coincides with an ownership interest in an entity of between 20% and 50%. All intercompany transactions and balances have been eliminated in consolidation.

In connection with the acquisition of First Data, the Company acquired majority controlling interests in certain entities, mostly related to consolidated merchant alliances (see Note 21). 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 interest. Noncontrolling interests are presented as a component of equity in the consolidated balance sheet and reflect the minority shareholders’ share of acquired fair value in the consolidated subsidiaries, along with their proportionate share of the earnings or losses of the subsidiaries, net of dividends or distributions. Noncontrolling interests that are redeemable at the option of the holder are presented outside of equity and are carried at their estimated redemption value (see Note 22).

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and investments with original maturities of 90 days or less. Cash and cash equivalents 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 sheet and totaled \$42 million as of September 30, 2019.

Reserve for Merchant Credit Losses

With respect to the merchant acquiring business obtained through the acquisition of First Data (see Note 4), 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 the 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 minimize this obligation. Collateral held by the Company is classified within settlement assets and the obligation to repay the collateral is classified within settlement obligations on the Company's consolidated balance sheet. The Company also utilizes a number of systems and procedures to manage merchant risk. Despite these efforts, the Company experiences some level of losses due to merchant defaults. The aggregate merchant credit losses incurred by the Company was \$17 million for the three and nine months ended September 30, 2019, and is included within cost of processing and services in the consolidated statements of income. The amount of collateral held by the Company was \$510 million as of September 30, 2019. The Company's reserve relates to imprecision in its estimates of required collateral, which is recorded based primarily on historical experience of credit losses and other relevant factors such as economic downturns or increases in merchant fraud. The aggregate merchant credit loss reserve recorded was \$35 million as of September 30, 2019.

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. The Company's policy is to enter into derivatives with creditworthy institutions and not to enter into such derivatives for speculative purposes.

Leasing Receivables

In connection with the acquisition of First Data, the Company acquired certain leasing receivables associated with the point-of-sale ("POS") terminal leasing businesses of First Data. Leasing receivables are included in prepaid expenses and other current assets and other long-term assets in the consolidated balance sheet. The Company recognizes interest income on its leasing receivables using the effective interest method. Interest income from leasing receivables is included in product revenue in the consolidated statements of income. Initial direct costs are expensed as incurred if the fair value of the underlying asset is different from its carrying amount at the commencement date of the lease. See Note 15 for additional information.

Pension Plans

In connection with the acquisition of First Data, the Company acquired frozen defined benefit pension plans covering certain employees in Europe and the United States. The funded status of the defined benefit plans is recognized as an asset or a liability within other long-term assets or other long-term liabilities in the consolidated balance sheet. The plan assets are recognized at fair value. The Company recognizes actuarial gains/losses and prior service cost in the consolidated balance sheet and recognizes changes in these amounts during the year in which changes occur through other comprehensive income. 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). See Note 20 for additional information.

Settlement Assets and Obligations

Settlement assets and obligations result from timing differences between collection and fulfillment of payment transactions primarily associated with the Company's merchant services transactions. Settlement assets represent cash received or amounts receivable from agents, payment networks or directly from consumers. Settlement obligations represent amounts payable to clients and payees. Certain merchant settlement assets that relate to settlement obligations are held by partner banks to which the Company does not have legal ownership but has the right to use the assets to satisfy the related settlement obligations. The Company records corresponding settlement obligations for amounts payable to merchants and for payment instruments not yet presented for settlement.

Net Income Per Share

Net income per share in each period is calculated using actual, unrounded amounts. Basic net income per share is computed by dividing net income attributable to Fiserv, Inc. by the weighted-average number of common shares outstanding during the period. Diluted net income per share is computed by dividing net income attributable to Fiserv, Inc. by the weighted-average number of common shares and common stock equivalents outstanding during the period. 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.

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 is the local currency, 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 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 other (expense) income in the consolidated statements of income. The Company has designated its Euro- and British Pound-denominated senior 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 (see Note 17). Accordingly, foreign currency transaction gains or losses on the qualifying net investment hedge instruments are recorded as foreign currency translation within other comprehensive loss in the consolidated statements of comprehensive income and will remain in accumulated other comprehensive loss on the consolidated balance sheet until the sale or complete liquidation of the underlying foreign subsidiaries.

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. The Company recognized \$187 million and \$309 million of interest expense and \$23 million and \$30 million of interest income during the three and nine months ended September 30, 2019, respectively. The Company recognized \$47 million and \$137 million of interest expense and \$2 million and \$3 million of interest income during the three and nine months ended September 30, 2018, respectively.

2. Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In June 2018, the Financial Accounting Standards Board ("FASB") issued ASU No. 2018-07, *Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting* ("ASU 2018-07"), which simplifies the accounting for share-based payments granted to nonemployees by largely aligning it with the accounting for share-based payments to employees. For public entities, ASU 2018-07 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. Entities must apply the standard, using a modified retrospective transition approach, with a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption for all liability-classified nonemployee awards that have not been settled as of the adoption date and equity-classified nonemployee awards for which a measurement date has not been established. The Company adopted ASU 2018-07 on January 1, 2019, and the adoption did not have any impact on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, which requires lessees to recognize a lease liability and a right-of-use asset for each lease with a term longer than twelve months and adds new presentation and disclosure requirements for both lessees and lessors. The accounting guidance for lessors remains largely unchanged. The recognized liability is measured at the present value of lease payments not yet paid, and the corresponding asset represents the lessee's right to use the underlying asset over the lease term and is based on the liability, subject to certain adjustments. For income statement and statement of cash flow purposes, the standard retains the dual model with leases classified as either operating or finance. Operating leases result in straight-line expense while finance leases result in a front-loaded expense pattern. The standard prescribes a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. ASU 2016-02 was subsequently amended by ASU No. 2018-01, *Land Easement Practical Expedient for Transition to Topic 842*; ASU No. 2018-10, *Codification Improvements to Topic 842*; ASU No. 2018-11, *Leases (Topic 842) - Targeted Improvements* ("ASU 2018-11"); ASU No. 2018-20, *Narrow-Scope Improvements for Lessors*; and ASU No. 2019-01, *Leases (Topic 842) - Codification Improvements*. ASU 2018-11 provides an additional transition method allowing entities to initially apply the new lease standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. For public entities, ASU 2016-02 is effective for annual and interim periods beginning after December 15, 2018.

The Company adopted the new standard effective January 1, 2019 using the optional transition method in ASU 2018-11. Under this method, the Company has not adjusted its comparative period financial statements for the effects of the new standard or made the new, expanded required disclosures for periods prior to the effective date. The Company elected the package of practical expedients permitted under the transition guidance in ASU 2016-02 to not reassess prior conclusions related to contracts containing leases, lease classification and initial direct costs. The Company also elected the practical expedient not to separate the non-lease components of a contract from the lease component to which they relate.

The adoption of the new lease standard resulted in the recognition of lease liabilities of \$383 million and right-of-use assets of \$343 million, which include the impact of existing deferred rents and tenant improvement allowances on the consolidated balance sheet as of January 1, 2019 for real and personal property operating leases. The adoption of ASU 2016-02 did not have a material impact on the Company's consolidated statements of income or consolidated statements of cash flows.

Recently Issued Accounting Pronouncements

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15"), which aligns the requirements for capitalizing implementation costs incurred in a cloud computing hosting arrangement that is a service contract with the requirements under Accounting Standards Codification ("ASC") 350 for capitalizing implementation costs incurred to develop or obtain internal-use software. For public entities, ASU 2018-15 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2019, with early adoption permitted. Entities are permitted to apply either a retrospective or prospective transition approach to adopt the guidance. The Company plans to adopt ASU 2018-15 on January 1, 2020 and does not expect the adoption to have a material impact on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU 2018-13"), which removes, modifies, and adds certain disclosure requirements of ASC Topic 820, *Fair Value Measurement*. ASU 2018-13 is effective for fiscal years, including interim periods within those fiscal years, beginning after December 15, 2019, with the additional disclosures required to be applied prospectively and the modified and removed disclosures required to be applied retrospectively to all periods presented. Entities are permitted to early adopt the removed or modified disclosures and delay the adoption of the additional disclosures until the effective date. The Company is currently assessing the impact that the adoption of ASU 2018-13 will have on its disclosures.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326)* ("ASU 2016-13" or "CECL"), which prescribes an impairment model for most financial instruments based on expected losses rather than incurred losses. Under this model, an estimate of expected credit losses over the contractual life of the instrument is to be recorded as of the end of a reporting period as an allowance to offset the amortized cost basis, resulting in a net presentation of the amount expected to be collected on the financial instrument. For public entities, ASU 2016-13 is effective for fiscal years, including interim periods within those fiscal years, beginning after December 15, 2019. For most instruments, entities must apply the standard using a cumulative-effect adjustment to beginning retained earnings as of the beginning of the fiscal year of adoption. The Company plans to adopt ASU 2016-13 on its effective date, January 1, 2020.

The Company is currently in the process of evaluating the impacts of adopting this standard, including the development of accounting policies and the assessment of existing credit loss methodologies for necessary enhancements. Additionally, the Company continues to evaluate current processes, systems, data, and controls that will be necessary to estimate credit reserves for impacted areas in accordance with CECL. Financial assets and liabilities held by the Company subject to the "expected credit loss" model prescribed by CECL include trade and other receivables, net investments in leases, settlement assets and other credit exposures such as financial guarantees not accounted for as insurance. While the Company continues to evaluate the expected impact on its consolidated financial statements and related disclosures, it currently expects the adoption of this guidance will result in an acceleration in the timing for recognition of credit losses, and may also result in an increase in the reserve for these credit losses due to the requirement to record expected losses over the remaining contractual lives of its financial instruments.

3. 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.

Disaggregation of Revenue

The tables below present the Company's revenue disaggregated by major business, including a reconciliation with its reportable segments. Most of the Company's revenue is earned domestically within these major businesses, with revenue from clients outside the United States comprising approximately 14% and 6% of total revenue for the three months ended September 30, 2019 and 2018, respectively, and approximately 10% and 5% of total revenue for the nine months ended September 30, 2019 and 2018, respectively.

(In millions)	Reportable Segments				
	First Data	Payments	Financial	Corporate and Other	Total
Three Months Ended September 30, 2019					
Major Business					
Global Business Solutions	\$ 992	\$ —	\$ —	\$ —	\$ 992
Global Financial Solutions	375	—	—	—	375
Network & Security Solutions	247	—	—	—	247
Total First Data	1,614	—	—	—	1,614
Digital Money Movement	—	376	—	—	376
Card and Related Services	—	470	—	—	470
Other	—	80	—	—	80
Total Payments	—	926	—	—	926
Account and Item Processing	—	—	533	—	533
Other	—	—	63	—	63
Total Financial	—	—	596	—	596
Corporate and Other	—	—	—	(8)	(8)
Total Revenue	\$ 1,614	\$ 926	\$ 596	\$ (8)	\$ 3,128

(In millions)	Reportable Segments			
	Payments	Financial	Corporate and Other	Total
Three Months Ended September 30, 2018				
Major Business				
Digital Money Movement	\$ 363	\$ —	\$ —	\$ 363
Card and Related Services	401	—	—	401
Other	80	—	—	80
Total Payments	844	—	—	844
Account and Item Processing	—	516	—	516
Other	—	58	—	58
Total Financial	—	574	—	574
Corporate and Other	—	—	(6)	(6)
Total Revenue	\$ 844	\$ 574	\$ (6)	\$ 1,412

(In millions)	Reportable Segments				
	First Data	Payments	Financial	Corporate and Other	Total
Nine Months Ended September 30, 2019					
Major Business					
Global Business Solutions	\$ 992	\$ —	\$ —	\$ —	\$ 992
Global Financial Solutions	375	—	—	—	375
Network & Security Solutions	247	—	—	—	247
Total First Data	1,614	—	—	—	1,614
Digital Money Movement	—	1,105	—	—	1,105
Card and Related Services	—	1,408	—	—	1,408
Other	—	244	—	—	244
Total Payments	—	2,757	—	—	2,757
Account and Item Processing	—	—	1,592	—	1,592
Other	—	—	206	—	206
Total Financial	—	—	1,798	—	1,798
Corporate and Other	—	—	—	(27)	(27)
Total Revenue	\$ 1,614	\$ 2,757	\$ 1,798	\$ (27)	\$ 6,142

(In millions)	Reportable Segments			
	Payments	Financial	Corporate and Other	Total
Nine Months Ended September 30, 2018				
Major Business				
Digital Money Movement	\$ 1,071	\$ —	\$ —	\$ 1,071
Card and Related Services	1,215	—	—	1,215
Other	237	—	—	237
Total Payments	2,523	—	—	2,523
Account and Item Processing	—	1,552	—	1,552
Lending Solutions	—	56	—	56
Other	—	172	—	172
Total Financial	—	1,780	—	1,780
Corporate and Other	—	—	(31)	(31)
Total Revenue	\$ 2,523	\$ 1,780	\$ (31)	\$ 4,272

Contract Balances

The following table provides information about contract assets and contract liabilities from contracts with customers.

(In millions)	September 30, 2019	December 31, 2018
Contract assets	\$ 361	\$ 171
Contract liabilities	541	469

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.

The Company recognized \$327 million of revenue during the nine months ended September 30, 2019 that was included in the contract liability balance at the beginning of the period, which exceeded advance cash receipts for services yet to be provided. See Note 4 for contract liabilities assumed in connection with the acquisition of First Data.

Transaction Price Allocated to Remaining Performance Obligations

The following table includes estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at the end of the reporting period.

(In millions) September 30, 2019	Remainder of:				
	2019	2020	2021	2022	Thereafter
Processing and services	\$ 618	\$ 2,211	\$ 1,787	\$ 1,332	\$ 2,478
Product	9	38	24	14	13

The Company applies the optional exemption in paragraph 606-10-50-14(b) and does not disclose information about remaining performance obligations for account- and transaction-based processing fees that qualify for recognition in accordance with paragraph 606-10-55-18. 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 in paragraph 606-10-50-14A 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.

4. Acquisitions

Acquisition of First Data

On July 29, 2019, the Company completed the acquisition of First Data, a global leader in commerce-enabling technology and solutions for merchants, financial institutions and card issuers, by acquiring 100% of the First Data stock that was issued and outstanding as of the date of acquisition. The acquisition increases the Company's footprint as a global payments and financial technology provider by expanding the portfolio of services provided to financial institutions, corporate and merchant clients, and consumers.

As a result of the acquisition, First Data stockholders received 286 million shares of Fiserv, Inc.'s common stock, at an exchange ratio of 0.303 Fiserv, Inc. shares for each share of First Data common stock, with cash paid in lieu of fractional shares. The Company also converted approximately 15 million outstanding First Data equity awards into corresponding equity awards relating to Fiserv, Inc. common stock pursuant to an exchange ratio in the merger agreement as described in further detail within Note 7. In addition, concurrent with the closing of the acquisition, the Company made a cash payment of approximately \$16.4 billion to repay existing First Data debt. The Company funded the transaction-related expenses and the repayment of First Data debt through a combination of available cash on-hand and proceeds from debt issuances as discussed in Note 14.

The total purchase price paid for First Data is as follows:

(In millions)	
Fair value of stock exchanged for Fiserv, Inc. shares ⁽¹⁾	\$ 29,293
Repayment of First Data debt	16,414
Fair value of vested portion of First Data stock awards exchanged for Fiserv, Inc. awards ⁽²⁾	768
Total purchase price	\$ 46,475

⁽¹⁾ The fair value of the 286 million shares of the Company's common stock issued as of the acquisition date was determined based on a per share price of \$102.30, which was the closing price of the Company's common stock on July 26, 2019, the last trading day before the acquisition closed the morning of July 29, 2019. This includes a nominal amount of cash paid in lieu of fractional shares.

⁽²⁾ Represents the portion of the fair value of the replacement awards related to services provided prior to the acquisition. The remaining portion of the fair value is associated with future service and will be recognized as expense over the future service period. See Note 7 for additional information.

The acquisition was accounted for as a business combination using the acquisition method of accounting in accordance with ASC 805, *Business Combinations* ("ASC 805"). The purchase price was allocated to the assets acquired and liabilities assumed based on the estimated fair values at the date of acquisition. The excess of the purchase price over the fair value of the net assets acquired was allocated to goodwill, none of which is expected to be deductible for tax purposes. Goodwill is primarily

attributed to synergies from future expected economic benefits, including enhanced revenue growth from expanded capabilities and geographic presence as well as substantial cost savings from duplicative overhead, streamlined operations and enhanced operational efficiency.

The September 30, 2019 consolidated balance sheet includes the assets and liabilities of First Data, which have been measured at fair value as of the acquisition date. The preliminary allocation of purchase price recorded for First Data was as follows:

(In millions)	
Assets acquired ⁽¹⁾	
Cash and cash equivalents	\$ 311
Trade accounts receivable	1,754
Prepaid expenses and other current assets	1,072
Settlement assets	10,397
Property and equipment	1,233
Customer relationships	13,637
Other intangible assets	2,391
Goodwill	29,955
Investments in unconsolidated affiliates	2,637
Other long-term assets	1,154
Total assets acquired	\$ 64,541
Liabilities assumed ⁽¹⁾	
Accounts payable and accrued expenses	\$ 1,515
Short-term and current maturities of long-term debt ⁽²⁾	237
Contract liabilities	74
Settlement obligations	10,397
Deferred income taxes	3,388
Long-term contract liabilities	16
Long-term debt and other long-term liabilities ⁽³⁾	1,232
Total liabilities assumed	\$ 16,859
Net assets acquired	\$ 47,682
Redeemable noncontrolling interest	88
Noncontrolling interests	1,119
Total purchase price	\$ 46,475

⁽¹⁾ In connection with the acquisition of First Data, the Company acquired two businesses which it intended to sell. Therefore, such businesses were classified as held for sale and were included within prepaid expenses and other current assets and accounts payable and accrued expenses in the above preliminary allocation of purchase price (see Note 5).

⁽²⁾ Includes foreign lines of credit, current portion of finance lease obligations and other financing obligations (see Note 14).

⁽³⁾ Includes the receivable securitized loan and the long-term portion of finance lease obligations (see Note 14).

The above fair values of assets acquired and liabilities assumed are preliminary and are based on the information that was available as of the reporting date. The fair values of the assets acquired and liabilities assumed were preliminarily determined using the income and cost approaches. In many cases, the determination of the fair values required estimates about discount rates, future expected cash flows and other future events that are judgmental and subject to change. The fair value measurements were primarily based on significant inputs that are not observable in the market and thus represent a Level 3 measurement of the fair value hierarchy as defined in ASC 820, *Fair Value Measurements* ("ASC 820"). Intangible assets consisting of customer relationships, technology, and trade names were valued using the multi-period excess earnings method ("MEEM"), or the relief from royalty ("RFR") method, both are forms of the income approach. A cost and market approach was applied, as appropriate, for property and equipment, including land.

- Customer relationship intangible assets were valued using the MEEM method. The significant assumptions used include 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.

- Technology and trade name intangible assets were valued using the RFR method. The significant assumptions used include the estimated annual net cash flows (including appropriate revenue attributable to the asset, applicable tax rate, royalty rate, and other factors such as technology related obsolescence rates), the discount rate, reflecting the risks inherent in the future cash flow stream, and the tax amortization benefit, among other factors.
- The cost approach, which estimates value by determining the current cost of replacing an asset with another of equivalent economic utility, was used, as appropriate, for property and equipment. The cost to replace a given asset reflects the estimated reproduction or replacement cost for the property, less an allowance for loss in value due to depreciation.
- The market approach, which estimates value by leveraging comparable land sale data/listings and qualitatively comparing them to the in-scope properties, was used to value the land.
- An income approach was applied to derive fair value for both consolidated investments with a noncontrolling interest and equity method investments accounted for under the equity method of accounting. The significant assumptions used include the estimated annual cash flows, the discount rate, the long-term growth rate and operating margin, among other factors.

The Company believes that the information provides a reasonable basis for estimating the fair values of the acquired assets and assumed liabilities, but the potential for measurement period adjustments exists based on the Company's continuing review of matters related to the acquisition. The Company expects to complete the purchase price allocation as soon as practicable, but no later than one year from the acquisition date.

The amounts, based on preliminary valuations and subject to final adjustment, allocated to intangible assets are as follows:

(In millions)	Gross Carrying Amount⁽¹⁾	Weighted-Average Useful Life
Customer relationships	\$ 13,637	15 years
Acquired software and technology	1,914	7 years
Trade names	477	9 years
Total	<u>\$ 16,028</u>	14 years

⁽¹⁾ In connection with the acquisition of First Data, the Company acquired two businesses which it intends to sell. As such, gross carrying amounts exclude amounts held for sale (see Note 5).

Since the acquisition date, the results of operations for First Data of \$1.6 billion of revenue and \$396 million of operating income for the three and nine months ended September 30, 2019, respectively, have been included within the accompanying consolidated statements of income (see Note 19).

The Company incurred transaction expenses of approximately \$45 million and \$172 million for the three and nine months ended September 30, 2019. Approximately \$45 million and \$74 million of these expenses were included in selling, general and administrative expenses within the Company's consolidated statements of income for the three and nine months ended September 30, 2019, respectively, and \$98 million in debt financing activities for the nine months ended September 30, 2019.

The following unaudited supplemental pro forma combined financial information presents the Company's results of operations for the three and nine months ended September 30, 2019 and 2018 as if the acquisition of First Data had occurred on January 1, 2018. The pro forma financial information is presented for comparative purposes only and is not necessarily indicative of the Company's operating results that may have actually occurred had the acquisition of First Data been completed on January 1, 2018. In addition, the unaudited pro forma financial information does not give effect to any anticipated cost savings, operating efficiencies or other synergies that may be associated with the acquisition, or any estimated costs that have been or will be incurred by the Company to integrate the assets and operations of First Data.

(In millions, except for per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Total revenue	\$ 3,935	\$ 3,772	\$ 11,730	\$ 11,343
Net income	306	434	939	851
Net income attributable to Fiserv, Inc.	284	405	847	766
Net income per share attributable to Fiserv, Inc.:				
Basic	0.42	0.59	1.25	1.10
Diluted	0.41	0.57	1.22	1.08

The unaudited pro forma financial information reflects pro forma adjustments to present the combined pro forma results of operations as if the acquisition had occurred on January 1, 2018 to give effect to certain events the Company believes to be directly attributable to the acquisition. These pro forma adjustments primarily include:

- a net increase in amortization expense that would have been recognized due to acquired intangible assets;
- an adjustment to interest expense to reflect (i) the additional borrowings of the Company in conjunction with the acquisition and (ii) the repayment of First Data's historical debt in conjunction with the acquisition;
- a reduction in expenses for the three and nine months ended September 30, 2019 and a corresponding increase in the nine months ended September 30, 2018 for acquisition-related transaction costs and other one-time costs directly attributable to the acquisition;
- a reduction in operating revenues due to the elimination of deferred revenues assigned no value at the acquisition date;
- an adjustment to stock compensation expense to reflect the cost of the replacement awards as if they had been issued on January 1, 2018; and
- the related income tax effects of the adjustments noted above.

Acquisition of Elan

On October 31, 2018, the Company acquired the debit card processing, ATM Managed Services, and MoneyPass® surcharge-free network of Elan Financial Services, a unit of U.S. Bancorp ("Elan"), for approximately \$659 million. Such purchase price includes an initial cash payment of \$691 million, less the receipt of post-closing working capital adjustments of \$57 million in 2019, plus contingent consideration related to earn-out provisions estimated at a fair value of \$12 million and future payments under a transition services agreement estimated to be in excess of fair value of \$13 million. This acquisition, included within the Payments segment, deepens the Company's presence in debit card processing, broadens its client reach and scale, and provides new solutions to enhance the value proposition for its existing debit solution clients.

During the third quarter of 2019, the Company identified and recorded measurement period adjustments to the preliminary purchase price allocation, which were the result of additional analysis performed and information identified based on facts and circumstances that existed as of the acquisition date. The measurement period adjustments resulted in a decrease in goodwill of \$24 million with an offset to intangible assets and prepaid expenses and other current assets. The following allocation of purchase price for Elan was finalized in the third quarter of 2019:

(In millions)	
Trade accounts receivable	\$ 20
Prepaid expenses and other current assets	98
Property and equipment	9
Intangible assets	373
Goodwill	214
Accounts payable and other current liabilities	(55)
Total purchase price	\$ 659

Goodwill, deductible for tax purposes, is primarily attributed to synergies, including the migration of Elan's clients to the Company's debit platform, and the anticipated value created by selling the Company's products and services outside of card payments to Elan's existing client base. The values allocated to intangible assets are as follows:

(In millions)	Gross Carrying Amount	Weighted-Average Useful Life
Customer relationships	\$ 370	15 years
Trade name	3	8 years
Total	<u>\$ 373</u>	15 years

In conjunction with the acquisition, the Company entered into a transition services agreement for the provision of certain processing, network, administrative and managed services for a period of two years. The results of operations for Elan consisting of \$41 million and \$132 million of revenue and \$(8) million and \$6 million of operating (loss) income, including \$17 million and \$29 million of acquired intangible asset amortization, for the three and nine months ended September 30, 2019, respectively, have been included within the accompanying consolidated statements of income.

5. Discontinued Operations

On January 10, 2018, the Company completed the sale of the retail voucher business, MyVoucherCodes, acquired as part of its acquisition of Monitise plc in September 2017 for proceeds of £37 million (\$50 million). The corresponding proceeds received during the nine months ended September 30, 2018 are presented within discontinued operations in the consolidated statement of cash flows since the business was never considered part of the Company's ongoing operations. There was no impact to operating income or gain/loss recognized on the sale during the nine months ended September 30, 2018. Cash flows from discontinued operations during the nine months ended September 30, 2018 also included tax payments of \$7 million related to income recognized in 2017 from a prior disposition.

In connection with the acquisition of First Data, the Company acquired two businesses which it intended to sell. Therefore, such businesses are classified as held for sale and were included within prepaid expenses and other current assets and accounts payable and accrued expenses in the consolidated balance sheet as of September 30, 2019 since the businesses were never considered part of the Company's ongoing operations. As of September 30, 2019, the Company recorded, at acquired fair value, \$148 million in assets held for sale, included in prepaid expenses and other current assets in the consolidated balance sheet and \$25 million in liabilities held for sale, included in accounts payable and accrued expenses in the consolidated balance sheet. In October 2019, the Company completed the sale of these two businesses for proceeds of \$133 million.

6. Investments in Unconsolidated Affiliates

On March 29, 2018, the Company completed the sale of a 55% controlling interest of each of Fiserv Automotive Solutions, LLC and Fiserv LS LLC, which were subsidiaries of the Company that owned its Lending Solutions business (collectively, the "Lending Joint Ventures"), to funds affiliated with Warburg Pincus LLC. The Lending Joint Ventures, which were reported within the Financial segment, included all of the Company's automotive loan origination and servicing products, as well as its LoanServ™ mortgage and consumer loan servicing platform. The Company received gross sale proceeds of \$419 million from the transactions. During the nine months ended September 30, 2018, the Company recognized a pre-tax gain on the sale of \$227 million, with the related tax expense of \$77 million recorded through the income tax provision, in the consolidated statements of income. The pre-tax gain included \$124 million related to the remeasurement of the Company's 45% retained interests based upon the estimated enterprise value of the Lending Joint Ventures. During the nine months ended September 30, 2019, the Company recognized a pre-tax gain on the sale of \$10 million, with the related tax expense of \$2 million recorded through the income tax provision, as contingent special distribution provisions within the transaction agreement were resolved and thereby realized.

Prior to the sale transactions described above, the Lending Joint Ventures entered into variable-rate term loan facilities for an aggregate amount of \$350 million in senior unsecured debt and variable-rate revolving credit facilities for an aggregate amount of \$35 million with a syndicate of banks, which transferred to the Lending Joint Ventures as part of the sale. The Company has guaranteed this debt of the Lending Joint Ventures and does not anticipate that the Lending Joint Ventures will fail to fulfill their debt obligations. These debt facilities mature in March 2023, and there are no outstanding borrowings on the revolving credit facilities as of September 30, 2019. The Company recorded an initial \$34 million liability as a reduction to the gain on sale transactions for the estimated fair value of its obligations to stand ready to perform over the term of the guarantees, which is reported primarily within other long-term liabilities in the consolidated balance sheets. Such guarantees will be amortized in future periods over the contractual term. The Company recognized \$2 million and \$1 million during the three months ended September 30, 2019 and 2018, respectively, and \$5 million and \$3 million during the nine months ended September 30, 2019 and 2018, respectively, within other (expense) income in its consolidated statements of income related to its release from risk under the guarantees. The Company has not made any payments under the guarantees, nor has it been called upon to do so. In conjunction with the sale transactions described above, the Company also entered into certain transition services agreements to provide, at fair value, various administration, business process outsourcing, technical and

data center related services for defined periods to the Lending Joint Ventures. Amounts transacted through these agreements approximated \$9 million and \$27 million during the three and nine months ended September 30, 2019, respectively, and \$10 million and \$20 million during the three and nine months ended September 30, 2018, respectively, and were primarily recognized as processing and services revenue in the consolidated statements of income.

In August 2019, the Sagent Auto, LLC joint venture formerly known as Fiserv Automotive Solutions, LLC, completed a merger with a third-party, resulting in a dilution of the Company's ownership interest in the new combined entity. The Company recognized a pre-tax gain of \$14 million within income from investments in unconsolidated affiliates in the consolidated statements of income, with related tax expense of \$3 million, during the three months ended September 30, 2019, reflecting the Company's 31% ownership interest in the combined joint venture entity. In connection with the merger, Sagent Auto, LLC borrowed in aggregate an additional \$50 million on its variable-rate term loan facility and increased the notional amount of its variable-rate revolving credit facility by \$10 million. The Company has guaranteed this incremental debt and does not anticipate that the joint venture will fail to fulfill its debt obligations. The Company recorded a \$4 million liability for the estimated fair value of its obligations to stand ready to perform over term of the guarantees. Such guarantees will be amortized in future periods over the contractual term, based upon amounts to be received by the Company for the respective guarantees. The Company has not made any payments under the guarantees, nor has it been called upon to do so.

The Company's remaining ownership interests in the Lending Joint Ventures are accounted for as equity method investments, with the Company's share of net (loss) income reported as income from investments in unconsolidated affiliates and the related tax (benefit) expense reported within the income tax provision in the consolidated statements of income. The revenues, expenses and cash flows of the Lending Joint Ventures after the sale transactions described above are not included in the Company's consolidated financial statements.

On July 29, 2019, the Company acquired unconsolidated investments in connection with the acquisition of First Data (see Note 4). As of September 30, 2019, there were 17 affiliates accounted for as equity method investments, comprised of merchant alliances and strategic investments in companies in related markets. The Company's share of net (loss) income are reported as income from investments in unconsolidated affiliates and the related tax expense reported within the income tax provision in the consolidated statements of income. The most significant of these affiliates are related to the Company's merchant bank alliance program. A merchant alliance, as it pertains to investments accounted for under the equity method, 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 bank. The 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 primarily based on contractual pricing (see Note 21).

A summary of financial information for the Company's unconsolidated affiliates accounted for under the equity method of accounting is presented below:

(In millions)	September 30, 2019	
Total current assets	\$	4,103
Total long-term assets		1
Total assets	\$	4,104
Total current liabilities	\$	4,063
Total long-term liabilities		—
Total liabilities	\$	4,063

The primary components of assets and liabilities are settlement asset and obligation related accounts similar to those described in Note 1 of these consolidated financial statements.

(In millions)	Nine Months Ended September 30, 2019	
Total revenues	\$	189
Total expenses		106
Operating income	\$	83
Net income	\$	81
Income from investments in unconsolidated affiliates ⁽¹⁾	\$	11

- (1) Amount reflects the Company's share of investee's net income or loss and the amortization basis difference between the estimated fair value and the underlying book value of equity method intangibles.

The Company received cash distributions of \$91 million from unconsolidated affiliates during the three and nine months ended September 30, 2019, respectively, and were recorded as reductions in the Company's investments in unconsolidated affiliates. Such distributions primarily represented returns of the Company's investments and are reported in cash flows from investing activities.

In addition, the Company holds equity securities amounting to \$182 million without a readily determinable fair value, which are only adjusted for impairment and changes resulting from observable price changes in orderly transactions for the same or similar equity securities. The equity securities were acquired primarily through the First Data acquisition and were recorded at fair market value at the acquisition date. No adjustments were made during the three and nine months ended September 30, 2019.

7. 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 and primarily consist of the following:

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 options generally vest over a three-year period beginning on the first anniversary of the grant. 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.

Restricted Stock Units and Awards – The Company grants restricted stock units and awards to employees and non-employee directors. The Company recognizes compensation expense for restricted stock units and awards based on the market price of the common stock on the grant date over the period during which the units or awards vest.

Performance Share Units and Awards – The Company grants performance share units and awards to employees. The number of shares issued at the end of the performance period is determined by the level of achievement of pre-determined performance and market goals, including earnings, revenue growth, synergy attainment and shareholder return. The Company recognizes compensation expense on performance share units and awards ratably over the requisite performance period of the award 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.

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 85% of the closing price of the Company's common stock on the last business day of each calendar quarter. The Company recognizes compensation expense related to the 15% discount on the purchase date.

The Company recognized \$87 million and \$121 million of share-based compensation expense during the three and nine months ended September 30, 2019, respectively, and \$18 million and \$54 million of share-based compensation expense during the three and nine months ended September 30, 2018, respectively. At September 30, 2019, the total remaining unrecognized compensation cost for unvested stock options, restricted stock units and awards and performance share units, net of estimated forfeitures, of \$565 million is expected to be recognized over a weighted-average period of 1.8 years. During the nine months ended September 30, 2019 and 2018, stock options to purchase 3.3 million and 2.2 million shares, respectively, were exercised.

Acquisition of First Data

Upon the completion of the First Data acquisition on July 29, 2019 (see Note 4), First Data's equity awards, whether vested or unvested, were either settled in shares of the Company's common stock or converted into equity awards denominated in shares of the Company's common stock based on a defined exchange ratio of 0.303, as described below.

First Data time-vesting awards that were granted at or prior to the initial public offering of First Data ("First Data IPO") were accelerated in full in accordance with their terms, except for certain executive officer awards and certain awards held by retirement-eligible employees, which were not accelerated and instead converted into equity awards denominated in shares of

the Company's common stock. Each such time-vesting, pre-IPO restricted stock and restricted stock unit award was settled in shares of the Company's common stock based on the exchange ratio. Each time-vesting, pre-IPO stock option award was converted into an option to purchase a number of shares of the Company's common stock based on the exchange ratio with an exercise price per share equal to the exercise price per share of such stock option award immediately prior to the completion of the acquisition divided by the exchange ratio.

First Data equity awards granted at the time of First Data's IPO that were subject to vesting solely upon achievement of a \$32 price per share of First Data common stock were converted into equity awards denominated in shares of the Company's common stock and remained eligible to vest upon satisfaction of an adjusted performance condition based on a target price per share of the Company's common stock equal to the existing First Data target price divided by the exchange ratio. Each restricted stock and restricted stock unit award that was a performance-vesting IPO award was converted into an award denominated in shares of the Company's common stock based on the exchange ratio, and each stock option award that was a performance-vesting award was converted into an option to purchase a number of shares of the Company's common stock based on the exchange ratio with an exercise price per share equal to the exercise price per share of such stock option award immediately prior to the completion of the acquisition divided by the exchange ratio. As converted, the performance-vesting awards continued to be governed by the same terms and conditions as were applicable prior to the acquisition and vested during the three months ended September 30, 2019 upon satisfaction of the adjusted performance condition.

The remaining existing First Data equity awards, whether vested or unvested, were converted into equity awards denominated in shares of the Company's common stock based on the exchange ratio, with an exercise price per share for option awards equal to the exercise price per share of such stock option award immediately prior to the completion of the acquisition divided by the exchange ratio, and will continue to be governed by generally the same terms and conditions as were applicable prior to the acquisition; provided that, subject to compliance with Section 409A of the Internal Revenue Code, such awards will accelerate upon a covered termination as defined in the merger agreement.

The portion of the fair value of the replacement awards related to services provided prior to the acquisition was \$768 million and was accounted for as consideration transferred. The remaining portion of the fair value of \$467 million is associated with future service and will be recognized as compensation expense, net of estimated forfeitures, over the weighted-average remaining vesting period of 1.2 years. The fair value of options that the Company assumed in connection with the acquisition of First Data were estimated using the Black-Scholes model with the following assumptions:

Expected life (in years)	2.5
Average risk-free interest rate	1.9%
Expected volatility	27.4%
Expected dividend yield	0%

Share-Based Compensation Activity

The weighted-average estimated fair value of stock options granted during the nine months ended September 30, 2019 and 2018 was \$28.44 and \$22.48 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:

	2019	2018
Expected life (in years)	6.4	6.3
Average risk-free interest rate	2.7%	2.2%
Expected volatility	28.5%	28.3%
Expected dividend yield	0%	0%

The Company determined the expected life of stock options using historical data adjusted for known factors that could alter historical exercise behavior. The risk-free interest rate is based on the U.S. treasury yield curve in effect as of the grant date. Expected volatility is 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 (In millions)
Stock options outstanding - December 31, 2018	12,052	\$ 33.96		
Converted First Data stock options	7,591	62.54		
Granted	1,177	84.77		
Forfeited	(158)	68.17		
Exercised	(3,265)	35.94		
Stock options outstanding - September 30, 2019	17,397	\$ 49.19	5.03	\$ 1,079
Stock options exercisable - September 30, 2019	14,531	\$ 45.00	4.37	\$ 986

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

	Restricted Stock Units		Performance Share Units	
	Shares (In thousands)	Weighted-Average Grant Date Fair Value	Shares (In thousands)	Weighted-Average Grant Date Fair Value
Units - December 31, 2018	1,821	\$ 53.22	524	\$ 57.60
Converted First Data units	6,025	102.30	1,333	101.96
Granted	533	91.35	1,107	96.72
Forfeited	(173)	74.02	(238)	50.96
Vested	(945)	70.21	(405)	90.03
Units - September 30, 2019	7,261	\$ 93.97	2,321	\$ 99.25

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

	Restricted Stock Awards		Performance Share Awards	
	Shares (In thousands)	Weighted-Average Grant Date Fair Value	Shares (In thousands)	Weighted-Average Grant Date Fair Value
Awards - December 31, 2018	—	\$ —	—	\$ —
Converted First Data awards	96	102.30	264	87.57
Granted	—	—	—	—
Forfeited	—	—	(16)	87.57
Vested	—	—	(248)	87.57
Awards - September 30, 2019	96	\$ 102.30	—	\$ —

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

(In millions)	2019	2018
Total intrinsic value of stock options exercised	\$ 211	\$ 119
Fair value of restricted stock units vested	158	36
Income tax benefit from stock options exercised and restricted stock units vested	89	36
Cash received from stock options exercised	73	25

As of September 30, 2019, 33.2 million share-based awards were available for grant under the Amended and Restated Fiserv, Inc. 2007 Omnibus Incentive Plan. Under its employee stock purchase plan, the Company issued 0.5 million shares during the first nine months of 2019, and 0.5 million shares during the first nine months of 2018. As of September 30, 2019, there were 24.9 million shares available for issuance under the employee stock purchase plan.

8. Income Taxes

The Company's income tax provision and effective income tax rate were as follows:

(In millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Income tax provision	\$ 53	\$ 78	\$ 144	\$ 290
Effective income tax rate	20.7%	25.7%	17.9%	24.5%

The income tax provision as a percentage of income before income from investments in unconsolidated affiliates was 20.7% and 25.7% in the three months ended September 30, 2019 and 2018, respectively, and was 17.9% and 24.5% in the nine months ended September 30, 2019 and 2018, respectively. The decrease in the effective tax rate for the three months ended September 30, 2019 compared to the prior year period is primarily related to equity compensation related tax benefits. The effective tax rate in the nine months ended September 30, 2019 includes discrete benefits due to a loss from subsidiary restructuring. The effective tax rate in the nine months ended September 30, 2018 includes \$77 million of income tax expense associated with the \$227 million gain on the sale of a 55% interest of the Company's Lending Solutions business (see Note 6).

Deferred tax assets and liabilities reported in the consolidated balance sheets were as follows:

(In millions)	September 30, 2019	December 31, 2018
Noncurrent assets	\$ 51	\$ 20
Noncurrent liabilities	(4,110)	(745)
Total	\$ (4,059)	\$ (725)

In connection with the acquisition of First Data (see Note 4), the Company recorded, on a preliminary basis, \$3.4 billion of deferred tax liabilities for the deferred tax effects associated with the fair value of assets acquired and liabilities assumed using the applicable tax rates, with a corresponding adjustment to goodwill.

The tax effects described above, as well as other changes in deferred tax assets and liabilities as a result of the acquisition of First Data, may be adjusted as additional information becomes available during the measurement period.

The Company maintains its assertion that the original investment in its foreign subsidiaries is intended to be indefinitely reinvested. However, 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 withholding taxes. The Company has the ability and intent to limit distributions so as to not make a distribution in excess of the historical investment in those subsidiaries. The Company will continue to monitor its global cash requirements and the need to recognize a deferred tax liability.

The Company's liability for unrecognized tax benefits before interest and penalties totaled \$145 million at September 30, 2019 and \$49 million at December 31, 2018. The increase as of September 30, 2019 is attributable to \$18 million related to subsidiary restructuring and other items that occurred during the first nine months of 2019, along with \$78 million from pre-acquisition uncertain tax positions of First Data assumed by the Company. The Company believes it is reasonably possible that the liability for unrecognized tax benefits may decrease by up to \$29 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.

As of September 30, 2019, in connection with the acquisition of First Data, the Company is subject to income tax examination by the U.S. federal jurisdiction from 2010 forward. State and local examinations are substantially complete through 2010. Foreign jurisdictions generally remain subject to examination by their respective authorities from 2006 forward, none of which are considered significant jurisdictions.

9. Shares Used in Computing Net Income Per Share Attributable to Fiserv, Inc.

The computation of shares used in calculating basic and diluted net income attributable to Fiserv, Inc. per common share is as follows:

(In millions)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Weighted-average common shares outstanding used for the calculation of net income attributable to Fiserv, Inc. per share – basic	584.8	403.8	456.3	408.4
Common stock equivalents	12.1	8.2	8.9	8.2
Weighted-average common shares outstanding used for the calculation of net income attributable to Fiserv, Inc. per share – diluted	596.9	412.0	465.2	416.6

For each of the three months ended September 30, 2019 and 2018, stock options for 1.2 million shares were excluded from the calculation of diluted weighted-average outstanding shares because their impact was anti-dilutive. For the nine months ended September 30, 2019 and 2018, stock options for 1.1 million and 1.0 million shares, respectively, were excluded from the calculation of diluted weighted-average outstanding shares because their impact was anti-dilutive. See Notes 4 and 7 for a description of Fiserv, Inc. common stock and equity awards issued in connection with the acquisition of First Data.

10. 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 ASC 820, *Fair Value Measurements*, considering 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 the Company's own assumptions about the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk.

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's 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 17). The estimated fair value of the contingent consideration liability related to the acquisition of Elan (see Note 4) was based on the present value of a probability-weighted assessment approach derived from the likelihood of achieving the earn-out criteria. This estimated fair value has not changed since the acquisition date.

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

(In millions)	Classification	Fair Value Hierarchy	Fair Value at	
			September 30, 2019	December 30, 2018
Assets				
Cash flow hedges	Prepaid expenses and other current assets	Level 1	\$ 4	\$ —
Liabilities				
Contingent consideration	Other long-term liabilities	Level 3	\$ 12	\$ 12

The Company's senior notes and debt guarantee arrangements 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 aggregate carrying value of the Company's debt guarantee arrangements of \$28 million and \$29 million approximate the fair values at September 30, 2019 and December 31,

2018, respectively (Level 3 of the fair value hierarchy). The carrying value of the Company's term loan credit agreement, revolving credit facility borrowings and debt associated with the receivables securitization agreement 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 \$23.3 billion and \$6.0 billion as of September 30, 2019 and December 31, 2018, respectively, and the carrying value was \$22.2 billion and \$6.0 billion as of September 30, 2019 and December 31, 2018, respectively. See Note 14 for a description of debt financing activities in connection with the Company's acquisition of First Data. See Note 6 for a description of the Company's debt guarantee arrangements with the Lending Joint Ventures.

11. Intangible Assets

Identifiable intangible assets consisted of the following:

(In millions)	Gross Carrying Amount	Accumulated Amortization	Net Book Value
September 30, 2019			
Customer relationships	\$ 16,220	\$ 1,680	\$ 14,540
Acquired software and technology	2,227	556	1,671
Trade names	586	75	511
Capitalized software development costs	950	355	595
Purchased software	557	137	420
Total	<u>\$ 20,540</u>	<u>\$ 2,803</u>	<u>\$ 17,737</u>

(In millions)	Gross Carrying Amount	Accumulated Amortization	Net Book Value
December 31, 2018			
Customer relationships	\$ 2,642	\$ 1,294	\$ 1,348
Acquired software and technology	591	490	101
Trade names	120	71	49
Capitalized software development costs	810	314	496
Purchased software	261	112	149
Total	<u>\$ 4,424</u>	<u>\$ 2,281</u>	<u>\$ 2,143</u>

The Company estimates that annual amortization expense with respect to acquired intangible assets recorded at September 30, 2019, which include customer relationships, acquired software and technology, and trade names, will be approximately \$1.0 billion in 2019, \$2.1 billion in 2020, \$2.1 billion in 2021, \$1.9 billion in 2022, and \$1.8 billion in 2023. Amortization expense with respect to capitalized and purchased software recorded at September 30, 2019 is estimated to approximate \$270 million in 2019.

12. Goodwill

Goodwill represents the excess of the purchase price over the fair value of identifiable net assets acquired and liabilities assumed in a business combination. Changes in the carrying amount of goodwill for the nine months ended September 30, 2019 consisted of the following:

(In millions)	Reportable Segments			
	First Data	Payments	Financial	Total
Goodwill at December 31, 2018	\$ —	\$ 3,996	\$ 1,706	\$ 5,702
Acquisitions and valuation adjustments (see Note 4)	29,955	(27)	2	29,930
Foreign currency translation	(114)	(2)	1	(115)
Goodwill at September 30, 2019	<u>\$ 29,841</u>	<u>\$ 3,967</u>	<u>\$ 1,709</u>	<u>\$ 35,517</u>

13. Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses consisted of the following at:

(In millions)	September 30, 2019	December 31, 2018
Trade accounts payable	\$ 402	\$ 127
Client deposits	625	564
Accrued compensation and benefits	310	199
Other accrued expenses	1,564	256
Total	<u>\$ 2,901</u>	<u>\$ 1,146</u>

14. Debt

The Company's debt consisted of the following:

(In millions)	September 30, 2019	December 31, 2018
Short-term debt and current maturities of long-term debt:		
Lines of credit	\$ 248	\$ —
Finance lease and other financing obligations	120	4
Total short-term and current maturities of long-term debt	<u>\$ 368</u>	<u>\$ 4</u>
Long-term debt:		
2.7% senior notes due 2020	\$ 850	\$ 850
4.75% senior notes due 2021	400	400
3.5% senior notes due 2022	700	700
3.8% senior notes due 2023	1,000	1,000
0.375% senior notes due 2023	547	—
2.75% senior notes due 2024	2,000	—
3.85% senior notes due 2025	900	900
2.25% senior notes due 2025	645	—
3.2% senior notes due 2026	2,000	—
1.125% senior notes due 2027	547	—
4.2% senior notes due 2028	1,000	1,000
3.5% senior notes due 2029	3,000	—
1.625% senior notes due 2030	547	—
3.0% senior notes due 2031	645	—
4.4% senior notes due 2049	2,000	—
Receivable securitized loan	500	—
Term loan facility	4,400	—
Unamortized discount and unamortized deferred financing costs	(167)	(29)
Revolving credit facility	406	1,129
Finance lease and other financing obligations	203	5
Total long-term debt	<u>\$ 22,123</u>	<u>\$ 5,955</u>

On January 16, 2019, in connection with the definitive merger agreement to acquire First Data (see Note 4), the Company entered into a bridge facility commitment letter pursuant to which a group of financial institutions committed to provide a 364-day senior unsecured bridge term loan facility in an aggregate principal amount of \$17.0 billion for the purpose of funding the repayment of certain indebtedness of First Data and its subsidiaries on the closing date of the merger, making cash payments in lieu of fractional shares as part of the merger consideration, and paying fees and expenses related to the merger, the refinancing and the related transactions. The Company recorded \$2 million and \$98 million of expenses, reported within debt financing activities in the consolidated statements of income, related to the bridge term loan facility during the three and nine months ended September 30, 2019, respectively. The aggregate commitments of \$17.0 billion under the bridge facility commitment letter were replaced with a corresponding amount of permanent financing through the term loan credit agreement and issuance of senior notes, as described below, resulting in the termination of the bridge term loan facility effective July 1, 2019.

On February 6, 2019, the Company entered into an amendment to its amended and restated revolving credit facility to (i) amend the maximum leverage ratio covenant to permit it to elect to increase the permitted maximum leverage ratio from three and one-half times the Company's consolidated net earnings before interest, taxes, depreciation, amortization, non-cash charges and expenses and certain other adjustments ("EBITDA") to either four times or four and one-half times the Company's EBITDA for a specified period following certain acquisitions and (ii) permit it to make drawings under the revolving credit facility on the closing date of its acquisition of First Data subject to only limited conditions. In addition, on February 15, 2019, the Company entered into a second amendment to its existing revolving credit agreement in order to increase the aggregate commitments available thereunder by \$1.5 billion to \$3.5 billion of total capacity, and to make certain additional amendments to facilitate the operation of the combined business following the acquisition of First Data. Further on July 26, 2019, the Company entered into a third amendment to its existing revolving credit agreement to (i) remove as a condition precedent to borrowings on the closing date of the acquisition of First Data the requirement that amounts under the Receivables Financing Agreement, as defined below, be repaid, and (ii) amend the debt and liens covenants to increase the Company's flexibility to enter into receivables financing arrangements in the future. The increased commitments and amendments contemplated by the second and third amendments to the revolving credit facility became effective upon the closing of the acquisition of First Data. Borrowings under the amended and restated revolving credit facility continue to bear interest at a variable rate based on 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. The variable interest rate on the revolving credit facility borrowings was 2.92% at September 30, 2019.

On February 15, 2019, the Company entered into a new term loan credit agreement with a syndicate of financial institutions pursuant to which such financial institutions committed to provide the Company with a senior unsecured term loan facility in an aggregate principal amount of \$5.0 billion, consisting of \$1.5 billion in commitments to provide loans with a three-year maturity and \$3.5 billion in commitments to provide loans with a five-year maturity. On July 26, 2019, the Company entered into an amendment to its term loan credit facility to (i) remove as a condition precedent to borrowings on the closing date of the acquisition of First Data the requirement that amounts under the Receivables Financing Agreement, as defined below, be repaid and the related liens and guarantees be terminated in order to allow First Data's accounts receivable securitization program, as described below, to remain in place following consummation of the acquisition and (ii) amend the debt and liens covenants to increase the Company's flexibility to enter into receivables financing arrangements in the future. On July 29, 2019, concurrent with the closing of the acquisition of First Data, the term loan credit agreement was funded. Loans drawn under the term loan facility are subject to amortization at a quarterly rate of 1.25% for the first eight quarters and 1.875% each quarter thereafter (with loans outstanding under the five-year tranche subject to amortization at a quarterly rate of 2.5% after the fourth anniversary of the commencement of amortization), with accrued and unpaid amortization amounts required to be paid on the last business day in December of each year. Borrowings under the term loan facility bear interest at variable rates based on 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. The variable interest rate on the term loan facility borrowings was 3.30% at September 30, 2019. The Company was also required to pay a ticking fee that accrued on the aggregate undrawn commitments under the term loan facility at a per annum rate based upon the Company's long-term debt rating in effect from time to time. The term loan credit agreement contains affirmative, negative and financial covenants, and events of default, that are substantially the same as those set forth in the Company's existing revolving credit facility, as amended as described above.

On June 24, 2019, the Company completed an offering of \$9.0 billion aggregate principal amount of senior notes comprised of \$2.0 billion aggregate principal amount of 2.75% senior notes due in July 2024, \$2.0 billion aggregate principal amount of 3.2% senior notes due in July 2026, \$3.0 billion aggregate principal amount of 3.5% senior notes due in July 2029 and \$2.0 billion aggregate principal amount of 4.4% senior notes due in July 2049. The senior notes pay interest semi-annually on January 1 and July 1, commencing on January 1, 2020. The indentures governing the 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 in part, at any time prior to the applicable par call date.

On July 1, 2019, the Company completed an offering of €1.5 billion aggregate principal amount and £1.05 billion aggregate principal amount of senior notes comprised of €500 million aggregate principal amount of 0.375% senior notes due in July 2023, €500 million aggregate principal amount of 1.125% senior notes due in July 2027, €500 million aggregate principal amount of 1.625% senior notes due in July 2030, £525 million aggregate principal amount of 2.25% senior notes due in July 2025, and £525 million aggregate principal amount of 3.0% senior notes due in July 2031. The senior notes pay interest annually on July 1, commencing on July 1, 2020. The indentures governing the senior notes contain covenants that are substantially the same as those set forth in the Company's \$9.0 billion aggregate principal amount senior notes described above.

In connection with the anticipated issuance of the foreign currency-denominated senior notes described above, the Company entered into foreign exchange forward contracts in June 2019 to minimize foreign currency exposure to the Euro and British Pound upon settlement of the proceeds from the foreign currency-denominated senior notes. The foreign exchange forward contracts matured on July 1, 2019, concurrent with the closing of the offering of the foreign currency-denominated senior notes. The Company realized foreign currency transaction gains of \$1 million and \$3 million, recorded within debt financing activities in the consolidated statements of income, during the three and nine months ended September 30, 2019, respectively, from these foreign exchange forward contracts. Further, upon completion of the acquisition of First Data, the Company designated its Euro- and British Pound-denominated senior notes as net investment hedges to hedge a portion of its net investment in certain Euro- and British Pound-denominated subsidiaries (see Note 17). Prior to designating the foreign currency-denominated senior notes as net investment hedges, the Company realized foreign currency transaction gains of \$69 million, recorded within debt financing activities in the consolidated statements of income, during the three and nine months ended September 30, 2019, respectively, as a result of changes in the U.S. dollar equivalent of the Euro- and British Pound-denominated senior notes due to fluctuations in foreign currency exchange rates. In addition, the Company held a portion of the proceeds from the issuance of these foreign currency-denominated senior notes in Euro- and British Pound-denominated cash and cash equivalents. The Company realized foreign currency transaction losses of \$19 million, recorded within debt financing activities in the consolidated statements of income, during the three and nine months ended September 30, 2019, respectively, as a result of changes in the U.S. dollar equivalent of the Euro- and British Pound-denominated cash due to fluctuations in foreign currency exchange rates.

A portion of the net proceeds from the senior note offerings described above was used in June 2019 to repay outstanding borrowings totaling \$790 million under the Company's amended and restated revolving credit facility. On July 29, 2019, concurrent with the acquisition of First Data, the Company used the remaining net proceeds from the senior notes offerings described above, as well as the net proceeds of the term loan facility described above and a drawing on its revolving credit facility described above, to repay approximately \$16.4 billion of existing First Data debt and to pay fees and its expenses related to such repayment, the First Data acquisition and related transactions.

Foreign Lines of Credit and Other Arrangements

In connection with the acquisition of First Data, the Company assumed certain short-term lines of credit with foreign banks and alliance partners primarily to fund settlement activity. These arrangements are primarily associated with international operations and are in various functional currencies, the most significant of which are the Australian dollar, Polish zloty, Euro and Argentine peso. The Company had amounts outstanding on these lines of credit totaling \$248 million as of September 30, 2019. As of September 30, 2019, the weighted average interest rate associated with foreign lines of credit was 17.0%.

Receivable Securitization Agreement

In connection with the acquisition of First Data, the Company acquired a consolidated wholly-owned subsidiary, First Data Receivables, LLC ("FDR"). FDR is a party to certain receivables financing arrangements, including an agreement ("Receivables Financing Agreement") 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 have agreed to transfer and contribute receivables to FDR, and FDR in turn may obtain borrowings from the financial institutions and other lender parties to the Receivables Financing Agreement secured by liens on those receivables. FDR's assets are not available to satisfy the obligations of any other entities or affiliates of the Company, and FDR's creditors would be 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. The receivables held by FDR are recorded within trade accounts receivable, net in the Company's consolidated balance sheet. As of September 30, 2019, FDR held \$757 million in receivables as part of the securitization program. The maximum borrowing capacity, subject to collateral availability, under the Receivables Financing Agreement at September 30, 2019 was \$500 million. FDR utilized the receivables as collateral in borrowings of \$500 million, at an average interest rate of 2.87%, as of September 30, 2019. The term of the Receivables Financing Agreement is through July 2022.

15. Leases

The Company adopted ASU 2016-02 and its related amendments (collectively known as “ASC 842”) effective January 1, 2019 using the optional transition method in ASU 2018-11. Therefore, the reported results for the three and nine months ended September 30, 2019 and the financial position as of September 30, 2019 reflect the application of ASC 842 while the reported results for the three and nine months ended September 30, 2018 and the financial position as of December 31, 2018 were not adjusted and continue to be reported under the accounting guidance, ASC 840, *Leases* (“ASC 840”), in effect for the prior periods.

Company as Lessee

The Company primarily leases certain office space, land, 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 elected the package of practical expedients permitted under the transition guidance within ASU 2016-02 to not reassess prior conclusions related to contracts containing leases, lease classification and initial direct costs. The Company’s leases have remaining lease terms ranging from one to 18 years.

The Company uses the right-of-use (“ROU”) 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 a variable lease expense 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 balance sheet; 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)	September 30, 2019	
Assets		
Operating lease assets ⁽¹⁾	\$	675
Finance lease assets ⁽²⁾		271
Total lease assets	\$	946
Liabilities		
Current		
Operating lease liabilities ⁽¹⁾	\$	138
Finance lease liabilities ⁽²⁾		73
Noncurrent		
Operating lease liabilities ⁽¹⁾		585
Finance lease liabilities ⁽²⁾		158
Total lease liabilities	\$	954

⁽¹⁾ 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 Company's consolidated balance sheet.

⁽²⁾ 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 Company's consolidated balance sheets.

Components of Lease Cost

(In millions)	Three Months Ended September 30, 2019		Nine Months Ended September 30, 2019	
Operating lease cost ⁽¹⁾	\$	64	\$	141
Finance lease cost ⁽²⁾				
Amortization of right-of-use assets		16		18
Interest on lease liabilities		3		3
Total lease cost	\$	83	\$	162

⁽¹⁾ 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 Company's consolidated statements of income. Operating lease cost includes approximately \$14 million and \$42 million of variable lease costs for the three and nine months ended September 30, 2019, respectively.

⁽²⁾ 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 Company's consolidated statements of income.

Supplemental Cash Flow Information

(In millions)	Nine Months Ended September 30, 2019	
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	\$	94
Operating cash flows from finance leases		3
Financing cash flows from finance leases		17
Right-of-use assets obtained in exchange for lease liabilities		
Operating leases	\$	459
Finance leases		288

Lease Term and Discount Rate

	September 30, 2019
Weighted-average remaining lease term	
Operating leases	6 years
Finance leases	3 years
Weighted-average discount rate	
Operating leases	3.0%
Finance leases	3.5%

Maturity of Lease Liabilities under ASC 842

Future minimum rental payments on leases with initial non-cancellable lease terms in excess of one year were due as follows at September 30, 2019:

(In millions)		
Year ending December 31,	Operating Leases ⁽¹⁾	Finance Leases
Remainder of 2019	\$ 48	\$ 16
2020	146	82
2021	129	70
2022	110	58
2023	95	7
Thereafter	254	6
Total lease payments	782	239
Less: Interest	(59)	(8)
Present value of lease liabilities	\$ 723	\$ 231

⁽¹⁾ Operating lease payments include \$55 million related to options to extend lease terms that are reasonably certain of being exercised and exclude \$6 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 real estate and equipment and will commence in 2019 and 2020 with lease terms of one to 10 years.

Maturity of Lease Liabilities under ASC 840

Future minimum rental payments on operating leases with initial non-cancellable lease terms in excess of one year were due as follows at December 31, 2018:

(In millions)		
Year ending December 31,		
2019	\$	94
2020		75
2021		62
2022		51
2023		40
Thereafter		108
Total	\$	430

Rent expense for all operating leases was \$118 million and \$126 million during the years ended December 31, 2018 and 2017, respectively.

Company as Lessor

The Company owns certain POS terminal equipment which it leases to third party merchants. Leases are classified as operating or sales-type 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 two 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 sheet and depreciated to its estimated residual value over the lease term. 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 fair 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 sheet. 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)	Three and Nine Months Ended September 30, 2019	
Sales-type and direct financing leases		
Selling profit ⁽¹⁾	\$	8
Interest income ⁽¹⁾		15
Operating lease income ⁽²⁾		14

- ⁽¹⁾ Selling profit includes \$21 million recorded within product revenue with a corresponding charge of \$13 million recorded in cost of product in the consolidated statements of income for the three and nine months ended September 30, 2019. Interest income is included within product revenue in the consolidated statements of income.
- ⁽²⁾ Operating lease income includes an immaterial amount of variable lease income and is included within product revenue in the Company's consolidated statements of income for the three and nine months ended September 30, 2019.

Components of Net Investment in Sales-Type and Direct Financing Leases

(In millions)	September 30, 2019	
Minimum lease payments	\$	374
Residual values		37
Less: Unearned interest income		(160)
Net investment in leases ⁽¹⁾	\$	251

- ⁽¹⁾ 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 sheet.

Maturities of Future Minimum Lease Payment Receivables

Future minimum lease payments receivable on sales-type leases were as follows at September 30, 2019:

(In millions)	Sales-Type Leases	
Year ending December 31,		
2019	\$	45
2020		149
2021		107
2022		56
2023		16
Thereafter		1
Total minimum lease payments	\$	374

16. Shareholders' Equity

The following tables provide changes in shareholders' equity during the three and nine months ended September 30, 2019 and 2018.

Fiserv, Inc. Shareholders' Equity									
Three Months Ended September 30, 2019	Number of Shares		Amount						
	Common Shares	Treasury Shares	Common Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Treasury Stock	Noncontrolling Interests	Total Equity
(In millions)									
Balance at June 30, 2019	791	399	\$ 8	\$ 1,056	\$ (193)	\$ 12,083	\$ (10,408)	\$ —	\$ 2,546
Shares issued to acquire First Data (see Note 4)		(286)		22,582			7,478	1,119	31,179
Distributions paid to noncontrolling interests								(51)	(51)
Net income ⁽¹⁾						198		23	221
Other comprehensive loss					(186)				(186)
Share-based compensation				87					87
Shares issued under stock plans		(2)		(57)			57		—
Purchases of treasury stock		—					(36)		(36)
Balance at September 30, 2019	791	111	\$ 8	\$ 23,668	\$ (379)	\$ 12,281	\$ (2,909)	\$ 1,091	\$ 33,760

⁽¹⁾ The total net income presented in shareholders' equity for the three months ended September 30, 2019 is different than the amounts presented in the unaudited consolidated statement of income due to the net income attributable to the redeemable noncontrolling interest of \$4 million not included in equity.

Fiserv, Inc. Shareholders' Equity									
Three Months Ended September 30, 2018	Number of Shares		Amount						
	Common Shares	Treasury Shares	Common Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Treasury Stock	Total Equity	
(In millions)									
Balance at June 30, 2018	791	385	\$ 8	\$ 1,023	\$ (66)	\$ 11,122	\$ (9,237)	\$ —	\$ 2,850
Net income						227			227
Other comprehensive loss					(13)				(13)
Share-based compensation				18					18
Shares issued under stock plans		(1)		4			12		16
Purchases of treasury stock		6					(437)		(437)
Balance at September 30, 2018	791	390	\$ 8	\$ 1,045	\$ (79)	\$ 11,349	\$ (9,662)	\$ —	\$ 2,661

Fiserv, Inc. Shareholders' Equity
**Nine Months Ended
September 30, 2019**

(In millions)	Number of Shares		Amount						
	Common Shares	Treasury Shares	Common Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Treasury Stock	Noncontrolling Interests	Total Equity
	Balance at December 31, 2018	791	399	\$ 8	\$ 1,057	\$ (67)	\$ 11,635	\$ (10,340)	\$ —
Shares issued to acquire First Data (see Note 4)		(286)		22,582			7,478	1,119	31,179
Distributions paid to noncontrolling interests								(51)	(51)
Net income ⁽¹⁾						646		23	669
Other comprehensive loss					(312)				(312)
Share-based compensation				121					121
Shares issued under stock plans		(4)		(92)			109		17
Purchases of treasury stock		2					(156)		(156)
Balance at September 30, 2019	791	111	\$ 8	\$ 23,668	\$ (379)	\$ 12,281	\$ (2,909)	\$ 1,091	\$ 33,760

⁽¹⁾ The total net income presented in shareholders' equity for the nine months ended September 30, 2019 is different than the amounts presented in the unaudited consolidated statement of income due to the net income attributable to the redeemable noncontrolling interest of \$4 million not included in equity.

Fiserv, Inc. Shareholders' Equity
**Nine Months Ended
September 30, 2018**

(In millions)	Number of Shares		Amount						
	Common Shares	Treasury Shares	Common Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings	Treasury Stock	Total Equity	
	Balance at December 31, 2017	791	376	\$ 8	\$ 1,031	\$ (54)	\$ 10,240	\$ (8,494)	\$ 2,731
Net income						901		901	
Other comprehensive loss					(25)			(25)	
Share-based compensation				54				54	
Shares issued under stock plans		(3)		(40)			58	18	
Purchases of treasury stock		17					(1,226)	(1,226)	
Cumulative-effect adjustment of ASU 2014-09 adoption						208		208	
Cumulative-effect adjustment of ASU 2017-12 adoption						3	(3)	—	
Cumulative-effect adjustment of ASU 2018-02 adoption						(3)	3	—	
Balance at September 30, 2018	791	390	\$ 8	\$ 1,045	\$ (79)	\$ 11,349	\$ (9,662)	\$ 2,661	

17. Accumulated Other Comprehensive Loss

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

	Three Months Ended September 30, 2019			
(In millions)	Cash Flow Hedges	Foreign Currency Translation	Other	Total
Balance at June 30, 2019	\$ (144)	\$ (47)	\$ (2)	\$ (193)
Other comprehensive loss before reclassifications	(4)	(186)	—	(190)
Amounts reclassified from accumulated other comprehensive loss	4	—	—	4
Net current-period other comprehensive loss	—	(186)	—	(186)
Balance at September 30, 2019	<u>\$ (144)</u>	<u>\$ (233)</u>	<u>\$ (2)</u>	<u>\$ (379)</u>
	Three Months Ended September 30, 2018			
(In millions)	Cash Flow Hedges	Foreign Currency Translation	Other	Total
Balance at June 30, 2018	\$ (20)	\$ (44)	\$ (2)	\$ (66)
Other comprehensive loss before reclassifications	(6)	(8)	—	(14)
Amounts reclassified from accumulated other comprehensive loss	1	—	—	1
Net current-period other comprehensive loss	(5)	(8)	—	(13)
Balance at September 30, 2018	<u>\$ (25)</u>	<u>\$ (52)</u>	<u>\$ (2)</u>	<u>\$ (79)</u>
	Nine Months Ended September 30, 2019			
(In millions)	Cash Flow Hedges	Foreign Currency Translation	Other	Total
Balance at December 31, 2018	\$ (16)	\$ (49)	\$ (2)	\$ (67)
Other comprehensive loss before reclassifications	(134)	(184)	—	(318)
Amounts reclassified from accumulated other comprehensive loss	6	—	—	6
Net current-period other comprehensive loss	(128)	(184)	—	(312)
Balance at September 30, 2019	<u>\$ (144)</u>	<u>\$ (233)</u>	<u>\$ (2)</u>	<u>\$ (379)</u>
	Nine Months Ended September 30, 2018			
(In millions)	Cash Flow Hedges	Foreign Currency Translation	Other	Total
Balance at December 31, 2017	\$ (14)	\$ (38)	\$ (2)	\$ (54)
Net current-period other comprehensive loss	(11)	(14)	—	(25)
Cumulative-effect adjustment of ASU 2017-12 adoption from retained earnings	3	—	—	3
Cumulative-effect adjustment of ASU 2018-02 adoption to retained earnings	(3)	—	—	(3)
Balance at September 30, 2018	<u>\$ (25)</u>	<u>\$ (52)</u>	<u>\$ (2)</u>	<u>\$ (79)</u>

The Company has entered into foreign exchange forward contracts, which have been designated as cash flow hedges, to hedge foreign currency exposure to the Indian Rupee. As of September 30, 2019, the notional amount of these derivatives was \$216 million, and the fair value totaling \$4 million is reported in prepaid expenses and other current assets in the consolidated balance sheet. As of December 31, 2018, the notional amount of these derivatives was \$202 million, and the fair value was nominal. Based on the amounts recorded in accumulated other comprehensive loss at September 30, 2019, the Company

estimates that it will recognize gains of approximately \$3 million in cost of processing and services during the next twelve months as foreign exchange forward contracts settle.

In March 2019, the Company entered into treasury lock agreements (“Treasury Locks”), designated as cash flow hedges, in the aggregate notional amount of \$5 billion to manage exposure to fluctuations in benchmark interest rates in anticipation of the issuance of fixed rate debt in connection with the refinancing of certain indebtedness of First Data and its subsidiaries. On June 24, 2019, concurrent with the issuance of U.S dollar-denominated senior notes (see Note 14), the Treasury Locks were settled resulting in a payment, included in cash flows from operating activities, of \$183 million recorded in accumulated other comprehensive loss, net of income taxes, that will be amortized to earnings over the terms of the originally forecasted interest payments. Based on the amounts recorded in accumulated other comprehensive loss at September 30, 2019, the Company estimates that it will recognize approximately \$21 million in interest expense, net during the next twelve months related to settled interest rate hedge contracts.

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 foreign currency-denominated debt as an economic hedge of its net investments in such foreign currency-denominated subsidiaries. In conjunction with the acquisition of First Data (see Note 4), the Company designated its Euro- and British Pound-denominated senior notes (see Note 14) 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. Accordingly, foreign currency transaction gains or losses on the qualifying net investment hedge instruments are recorded as foreign currency translation within other comprehensive loss in the consolidated statements of comprehensive income and will remain in accumulated other comprehensive loss on the consolidated balance sheet until the sale or complete liquidation of the underlying foreign subsidiaries. The Company recorded a foreign currency translation adjustment, net of tax, of \$28 million during the three and nine months ended September 30, 2019 from the Euro- and British Pound-denominated senior notes.

18. Cash Flow Information

Supplemental cash flow information consisted of the following:

(In millions)	Nine Months Ended September 30,	
	2019	2018
Interest paid	\$ 149	\$ 98
Income taxes paid	155	203
Treasury stock purchases settled after the balance sheet date	10	20

19. Business Segment Information

The Company’s operations are comprised of the First Data segment, the Payments segment, and the Financial segment. Since the Company’s acquisition of First Data on July 29, 2019 (see Note 4), the chief operating decision maker of the Company has managed the operations of First Data as a separate business segment while evaluating its organizational structure and related integration plans, including the allocation of resources and the assessment of performance. The Company expects that it will realign its business segments in early 2020 when its new reporting structure and First Data integration plans are finalized.

The First Data segment provides a wide-range of solutions to merchants, including retail point-of-sale merchant transaction processing and acquiring, e-commerce services, mobile payment services, and the cloud-based Clover™ point-of-sale operating system. The businesses in this segment also provide technology solutions for bank and non-bank issuers and a wide range of value-added solutions complementing the merchant and issuer technology solutions.

The Payments segment primarily provides electronic bill payment and presentment services, internet and mobile banking software and services, account-to-account transfers, person-to-person payment services, debit and credit card processing and services, payments infrastructure services, and other electronic payments software and services. The businesses in this segment also provide card and print personalization services, investment account processing services for separately managed accounts, and fraud and risk management products and services.

The Financial segment provides financial institutions with account processing services, item processing and source capture services, loan origination and servicing products, cash management and consulting services, and other products and services that support numerous types of financial transactions.

Corporate and Other primarily consists of intercompany eliminations, amortization of acquisition-related intangible assets, unallocated corporate expenses of the combined company and other activities that are not considered when management evaluates segment performance, such as gains on sales of businesses and associated transition services.

(In millions)	First Data	Payments	Financial	Corporate and Other	Total
Three Months Ended September 30, 2019					
Processing and services revenue	\$ 1,279	\$ 754	\$ 562	\$ 13	\$ 2,608
Product revenue	335	172	34	(21)	520
Total revenue	<u>\$ 1,614</u>	<u>\$ 926</u>	<u>\$ 596</u>	<u>\$ (8)</u>	<u>\$ 3,128</u>
Operating income	<u>\$ 396</u>	<u>\$ 309</u>	<u>\$ 196</u>	<u>\$ (527)</u>	<u>\$ 374</u>
Three Months Ended September 30, 2018					
Processing and services revenue	\$ —	\$ 674	\$ 535	\$ 14	\$ 1,223
Product revenue	—	170	39	(20)	189
Total revenue	<u>\$ —</u>	<u>\$ 844</u>	<u>\$ 574</u>	<u>\$ (6)</u>	<u>\$ 1,412</u>
Operating income	<u>\$ —</u>	<u>\$ 267</u>	<u>\$ 187</u>	<u>\$ (98)</u>	<u>\$ 356</u>
Nine Months Ended September 30, 2019					
Processing and services revenue	\$ 1,279	\$ 2,224	\$ 1,686	\$ 40	\$ 5,229
Product revenue	335	533	112	(67)	913
Total revenue	<u>\$ 1,614</u>	<u>\$ 2,757</u>	<u>\$ 1,798</u>	<u>\$ (27)</u>	<u>\$ 6,142</u>
Operating income	<u>\$ 396</u>	<u>\$ 899</u>	<u>\$ 598</u>	<u>\$ (762)</u>	<u>\$ 1,131</u>
Nine Months Ended September 30, 2018					
Processing and services revenue	\$ —	\$ 1,992	\$ 1,646	\$ 30	\$ 3,668
Product revenue	—	531	134	(61)	604
Total revenue	<u>\$ —</u>	<u>\$ 2,523</u>	<u>\$ 1,780</u>	<u>\$ (31)</u>	<u>\$ 4,272</u>
Operating income	<u>\$ —</u>	<u>\$ 807</u>	<u>\$ 590</u>	<u>\$ (75)</u>	<u>\$ 1,322</u>

20. Employee Benefit Plans

Defined Contribution Plans

The Company and its subsidiaries maintain defined contribution savings plans covering substantially all 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. In connection with the acquisition of First Data (see Note 4), the Company assumed defined contribution savings plans and defined contribution pension plans covering substantially all employees of the former First Data. The Plans provide tax-deferred amounts for each participant, consisting of employee elective contributions, company matching and discretionary company contributions. Contributions to the plans are expected to be approximately \$66 million in 2019.

Defined Benefit Plans

In connection with the acquisition of First Data, the Company assumed noncontributory defined benefit pension plans covering a portion of the employees in the United Kingdom (U.K.), United States (U.S.), Germany and Austria. These frozen plans provide benefits to eligible employees based on an employee's average final compensation and years of service.

Upon acquisition, the Company recognized the funded status of the assumed defined benefit pension plans, measured as the difference between the fair value of the plan assets and the projected benefit obligation, in the consolidated balance sheet as follows:

(In millions)	July 29, 2019
U.K. plan	
Plan benefit obligations	\$ (674)
Fair value of plan assets	850
Net pension assets ⁽¹⁾	\$ 176
U.S. and other plans	
Plan benefit obligations	\$ (217)
Fair value of plan assets	161
Net pension liabilities ⁽²⁾	\$ (56)
Funded status of the plans	\$ 120

⁽¹⁾ Pension assets are included in other long-term assets in the consolidated balance sheet

⁽²⁾ Pension liabilities are included in other long-term liabilities in the consolidated balance sheet

Plan Assets

The Company's investment strategy for the U.S. plan employs a total return investment approach whereby a mix of equities and fixed income investments are used to maximize the long-term return of plan assets for a prudent level of risk. The investment portfolio contains a diversified blend of equity and fixed-income investments. 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 as of September 30, 2019 was 50% equity securities and 50% debt securities. The Company's investment strategy for the U.K. plan is to allocate the assets into two pools: (i) off-risk assets whereby the focus is risk management, protection, and insurance relative to the liability target invested in, but not limited to, debt, U.K. government bonds, and U.K. government index-linked bonds; and (ii) on-risk assets whereby the focus is on return generation and taking risk in a controlled manner. Such assets could include equities, government bonds, high-yield bonds, property, commodities, or hedge funds. The Company's target allocation for the U.K. plan is 60% off-risk assets and 40% on-risk assets. As of July 29, 2019, total plan assets were comprised of approximately 15% of Level 1 securities, 85% of Level 2 securities, and a nominal amount of Level 3 securities. Investment risk is measured and monitored on an ongoing basis through quarterly investment portfolio reviews, annual liability measurements, and periodic asset and liability studies.

Projected Benefit Obligations

The Company records amounts relating to its defined benefit pension 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 on the consolidated balance sheet, and are generally amortized to operating income over future periods, with the deferred amount recorded in accumulated other comprehensive loss on the consolidated balance sheet. The Company's funding policy is to contribute quarterly an amount as recommended by the plans' independent actuaries. Contributions to the plans are expected to be approximately \$1 million in 2019. 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 as of July 29, 2019 and net periodic benefit expense during the three and nine months ended September 30, 2019 were as follows:

	Projected Benefit Obligation	Net Periodic Benefit Expense
Discount rate	2.35%	2.74%
Expected long-term return on plan assets	n/a	2.79%

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

(In millions)

Year ended December 31,

2019	\$	28
2020		30
2021		32
2022		34
2023		36
Thereafter		194
Total	\$	354

The components of net periodic benefit expense were as follows:

	Three and Nine Months Ended September 30, 2019	
<u>(In millions)</u>		
Service costs	\$	1
Interest costs		3
Expected return on plan assets		(5)
Net periodic benefit expense	\$	(1)

21. Related Party Transactions

Merchant Alliances

A significant portion of the Company's business within the First Data segment is conducted through merchant alliances between the Company and financial institutions. 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 but not control in an alliance, the Company uses the equity method of accounting to account for its investment in the alliance. As a result, the Company's consolidated revenues include processing fees, administrative service fees, and other fees charged to alliances accounted for under the equity method. Such fees totaled \$31 million for both the three and nine months ended September 30, 2019. 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 bank contributing contractual merchant relationships 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 bank enter into a long-term processing service agreement as part of the negotiation process. This agreement governs the Company's provision of transaction processing services to the alliance. As of September 30, 2019, the Company had approximately \$35 million of amounts due from unconsolidated merchant alliances included within trade accounts receivable, net in the Company's consolidated balance sheet.

In July 2019, the Company and Bank of America jointly announced the dissolution of the Banc of America Merchant Services joint venture ("BAMS"), to be effective June 2020. The Company owns 51% of BAMS and BAMS' financial results are consolidated into the Company's financial statements. Upon dissolution of the joint venture, the Company is entitled to receive a 51% share of the joint venture's value via an agreed upon contractual process. In addition, Bank of America has the right to require the Company to continue providing merchant processing and related services to the joint venture clients allocated to Bank of America in the dissolution of the joint venture through June 2023 at current pricing. The Company anticipates an ongoing relationship with Bank of America to provide processing and other support services to other Bank of America merchant clients following the joint venture's dissolution.

22. Redeemable Noncontrolling Interest

One of the Company's noncontrolling interests assumed through the acquisition of First Data (see Note 4) is presented outside of equity and carried at its estimated redemption value as the agreement with the minority partner that owns 1% of the joint venture contains redemption features whereby interests held by the minority partner are 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. Specifically, under the terms of the agreement, either party may terminate for convenience any time after September 1, 2021 upon six months prior notice. In the event of termination for cause, as a result of a change in control, or for convenience after September 1, 2021, the Company must purchase the minority partner membership interests at a price equal to the fair market value of the minority interest's portfolio multiplied by a percentage that varies between 28.5% and 30% depending upon the date of termination.

The following table presents a summary of the redeemable noncontrolling interest activity during the nine months ended September 30, 2019:

(In millions)	
Balance as of December 31, 2018	\$ —
Acquired	88
Share of income	4
Balance as of September 30, 2019	<u>\$ 92</u>

23. 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 connection with the acquisition of First Data, the Company assumed certain legal proceedings, including without limitation merchant matters associated with alleged processing errors or disclosure issues and claims that one of the subsidiaries of First Data has violated a federal or state requirement regarding credit reporting or collection in connection with its check verification guarantee and collection activities or other claims arising from its merchant business. The various matters are not expected to be material to the financial statements.

Electronic Payments Transactions

In connection with the Company's processing of electronic payments transactions, 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 \$1.2 billion at September 30, 2019.

Indemnifications and Warranties

Subject to limitations and exclusions, 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 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 results of operations or financial position.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

This quarterly report 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 possibility that we may be unable to achieve expected synergies and operating efficiencies from the acquisition of First Data Corporation (“First Data”) within the expected time frames or at all or to successfully integrate the operations of First Data into our operations; such integration may be more difficult, time-consuming or costly than expected; profitability following the transaction may be lower than expected, including due to unexpected costs, charges or expenses resulting from the transaction; operating costs, customer loss and business disruption (including, without limitation, difficulties in maintaining relationships with employees, customers, clients or suppliers) may be greater than expected following the transaction; unforeseen risks relating to our liabilities or those of First Data may exist; our ability to meet expectations regarding the accounting and tax treatments of the transaction; 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; rapid technological developments and changes, and the ability of our technology to keep pace with a rapidly evolving marketplace; the successful management of our merchant alliance program which involves several alliances not under our sole control; the impact of a security breach or operational failure on our business including disruptions at other participants in the global financial system; the failure of our third party vendors and merchants to satisfy their obligations; the successful management of credit and fraud risks in our business units and merchant alliances; changes in local, regional, national and international economic or political conditions and the impact they may have on us and our customers; the effect of proposed and enacted legislative and regulatory actions affecting the financial services industry as a whole and/or us and our subsidiaries individually or collectively; 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; the impact of our strategic initiatives; our ability to attract and retain key personnel; changes in the interest rate environment that increase interest on our borrowings or the interest rate at which we can refinance our borrowings; adverse impacts from currency exchange rates or currency controls imposed by any government or otherwise; and other factors identified in this Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 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.

Management's discussion and analysis of financial condition and results of operations is provided as a supplement to our unaudited 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. Our discussion is organized as follows:

- *Overview.* This section contains background information on our company and the services and products 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.
- *Changes in critical accounting policies and estimates.* This section contains a discussion of changes since our Annual Report on Form 10-K for the year ended December 31, 2018 in 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.
- *Results of operations.* This section contains an analysis of our results of operations presented in the accompanying unaudited consolidated statements of income by comparing the results for the three and nine months ended September 30, 2019 to the comparable periods in 2018.
- *Liquidity and capital resources.* This section provides an analysis of our cash flows and a discussion of our outstanding debt as of September 30, 2019.

Overview

Company Background

We are a leading global provider of financial services technology. We provide account processing systems; electronic payments processing products and services; internet and mobile banking systems; merchant transaction processing and acquiring, including the Clover™ line of payment solutions and related applications; prepaid and payroll services; and check verification. We serve clients around the globe, including banks, credit unions, other financial institutions and merchants.

Our operations are comprised of the First Data segment, the Payments and Industry Products (“Payments”) segment and the Financial Institution Services (“Financial”) segment.

On July 29, 2019, we completed the acquisition of First Data Corporation, a global leader in commerce-enabling technology and solutions for merchants, financial institutions and card issuers. The First Data segment primarily provides merchant acquiring, eCommerce, mobile commerce, and other business solutions at the point-of-sale (“POS”) to businesses of all sizes and types; credit card and loan account processing, commercial payments, customer communications, plastics solutions, customer service, and other products to support issuers; and a range of network solutions and security, risk and fraud management solutions to business and financial institution clients, including U.S. debit card processing, our STAR network, stored value commerce solutions (both closed-loop and open-loop), and our suite of security and fraud solutions. The businesses in the First Data segment are subject to a modest level of seasonality, with the first quarter representing the lowest level of sales and the fourth quarter representing the highest level of sales.

The Payments segment primarily provides electronic bill payment and presentment services, internet and mobile banking software and services, account-to-account transfers, person-to-person payment services, debit and credit card processing and services, payments infrastructure services, and other electronic payments software and services. Our businesses in this segment also provide card and print personalization services, investment account processing services for separately managed accounts, and fraud and risk management products and services.

The Financial segment provides financial institutions with account processing services, item processing and source capture services, loan origination and servicing products, cash management and consulting services, and other products and services that support numerous types of financial transactions. Our Payments and Financial segment operations are principally located in the United States. The majority of our revenue within these segments is generated from recurring account- and transaction-based fees under multi-year contracts with high renewal rates. Most of the services we provide within our Payments and Financial segments are necessary for our clients to operate their businesses and are, therefore, non-discretionary in nature.

Corporate and Other primarily consists of intercompany eliminations, amortization of acquisition-related intangible assets, unallocated corporate expenses of the combined company and other activities that are not considered when management evaluates segment performance, such as gains on sales of businesses and associated transition services.

Acquisitions and Dispositions

We frequently review our portfolio to ensure we have the right set of businesses to execute on 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; or similar considerations. We expect to divest businesses that are not in line with our market, product or financial strategies.

On July 29, 2019, we completed the acquisition of First Data Corporation for a total purchase price of approximately \$46.5 billion by acquiring 100% of the First Data stock that was issued and outstanding as of the date of acquisition. As a result of the acquisition, First Data stockholders received 286 million shares of common stock of Fiserv, Inc., using an exchange ratio of 0.303 shares of Fiserv, Inc. for each share of First Data common stock, with cash paid in lieu of fractional shares. We also converted approximately 15 million outstanding First Data equity awards into corresponding equity awards relating to common stock of Fiserv, Inc. in accordance with the exchange ratio. In addition, concurrent with the closing of the acquisition, we made a cash payment of approximately \$16.4 billion to repay existing First Data debt. We funded the transaction-related expenses and the repayment of First Data debt through a combination of available cash on-hand, proceeds from the issuance of senior notes and term loan and revolving credit facility borrowings. The acquisition of First Data enhances our position as a global payments and financial technology provider by expanding the portfolio of services provided to financial institutions, corporate and merchant clients and consumers.

On October 31, 2018, we acquired the debit card processing, ATM Managed Services, and Money Pass® surcharge-free network of Elan Financial Services, a unit of U.S. Bancorp, for approximately \$659 million, including post-closing working capital adjustments, estimated contingent consideration related to earn-out provisions and future payments under a transition services

agreement in excess of estimated fair value. This acquisition, included within the Payments segment, deepens our presence in debit card processing, broadens our client reach and scale, and provides new solutions to enhance the value proposition for our existing debit solution clients.

In March 2018, we sold a 55% interest of our Lending Solutions business, which was reported within the Financial segment, retaining 45% ownership interests in two joint ventures (the “Lending Joint Ventures”). In conjunction with this transaction, we 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 the Lending Joint Ventures. We received gross sale proceeds of \$419 million from the transactions. In August 2019, the Sagent Auto, LLC, formerly known as Fiserv Automotive Solutions, LLC, joint venture completed a merger with a third-party, resulting in the dilution of our ownership interest to 31% in the new, combined entity.

Enterprise Priorities

We continue to implement a series of strategic initiatives to move money and information in a way that moves the world. These strategic initiatives include active portfolio management of our businesses, enhancing the overall value of our existing client relationships, improving operational effectiveness, being disciplined in our allocation of capital, and differentiating our products and services through innovation. Our key enterprise priorities for 2019 have been expanded to now include delivering integration value from the First Data acquisition, while maintaining our original priorities to: (i) continue to build high-quality revenue while meeting our earnings goals; (ii) enhance client relationships with an emphasis on digital and payment solutions; and (iii) deliver innovation and integration which enables differentiated value for our clients. We will also devote significant resources to integrating First Data into our operations.

Industry Trends

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

Financial Institutions

The market for products and services offered by financial institutions continues to evolve rapidly. The traditional financial industry and other market entrants 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 continue to narrow as they seek to serve the same customers. At the same time, the evolving regulatory and cybersecurity landscape in the United States and abroad 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. Examples of these solutions include electronic payments and delivery methods such as internet, mobile and tablet banking, sometimes referred to as “digital channels.”

The focus on digital channels 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 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 electronic transactions through digital channels, will continue to increase, which we expect to create revenue opportunities for us.

In addition to the trends described above, the financial institutions marketplace has experienced change in composition as well. During the past 25 years, the number of financial institutions in the United States has declined at a relatively steady rate of approximately 3% per year, primarily as a result of voluntary mergers and acquisitions. Rather than reducing the overall market, these consolidations have transferred accounts among financial institutions. If a client loss occurs due to merger or acquisition, we 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. 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.

Merchants

In the merchant space, the rapid growth in and globalization of mobile and eCommerce, driven by consumers' desire for simpler, more efficient shopping experiences, has created an opportunity for merchants to reach consumers in high-growth online and mobile settings, which often requires a merchant acquiring provider to enable and optimize the acceptance of payments. Merchants are demanding simpler, integrated, and modern POS systems to 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 POS systems to streamline this complexity. Furthermore, merchants can now search, discover, compare, purchase, and even install a new POS system through direct, digital-only experiences. This direct, digital-only channel is quickly becoming a notable source of new merchant acquisition opportunities, especially smaller merchants with simpler solution needs, and we believe that our digital merchant acquisition solution is one of the few such solutions in the industry.

Additionally, there are numerous software-as-a-service ("SaaS") solutions in the industry, many of which have chosen to integrate merchant acquiring within their software in a way to further monetize their client relationships. SaaS solutions that integrate payments are often referred to as Independent Software Vendors, or ISVs, and we believe there are thousands of these potential distribution partnerships available.

Changes in Critical Accounting Policies and Estimates

Our consolidated financial statements and accompanying notes have been prepared in accordance with accounting principles generally accepted in the United States, which require management to make estimates, judgments and assumptions that affect the reported amount of assets, liabilities, revenue and expenses. In our Annual Report on Form 10-K for the year ended December 31, 2018, we identified our critical accounting policies and estimates. 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. There have been no material changes to our critical accounting policies and estimates from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018, except for the following as a result of our acquisition of First Data:

Reserve for Merchant Credit Losses

Our merchant clients assume the liability for any charges properly reversed by the cardholder. However, in the event that we are not able to collect such amounts from the merchants due to merchant fraud, insolvency, bankruptcy or another reason, we may be liable for any such reversed charges. Our risk in this area primarily relates to situations where the cardholder has purchased goods or services to be delivered in the future and which have yet to be delivered. We require cash deposits, guarantees, letters of credit or other types of collateral from certain merchants to minimize this obligation. Cash and cash equivalent collateral is included within settlement assets on our consolidated balance sheet. The amounts of collateral held was \$510 million as of September 30, 2019. We also utilize a number of systems and procedures to manage merchant risk. Despite these efforts, we may experience some level of losses due to merchant defaults. The aggregate merchant credit losses incurred was \$17 million for both the three and nine months ended September 30, 2019.

Our reserve relates to imprecision in our estimates of required collateral, which is recorded based primarily on historical experience of credit losses and other relevant factors such as economic downturns or increases in merchant fraud. The reserve recorded on our consolidated balance sheet relates to the business conducted by our consolidated subsidiaries. The reserve for unconsolidated alliances is recorded only in the alliances' respective financial statements. We have not recorded any reserve for estimated losses in excess of reserves recorded by the unconsolidated alliances nor have we identified needs to do so. The aggregate merchant credit loss reserve recorded was \$35 million as of September 30, 2019. The credit loss reserves are comprised of amounts for known losses and a provision for losses incurred but not reported. These reserves primarily are determined by performing a historical analysis of chargeback loss experience. Other factors are considered that could affect that experience in the future. Such items include the general economy and economic challenges in a specific industry or those affecting certain types of clients. Once these factors are considered, we establish a rate (percentage) that is calculated by dividing the expected chargeback (credit) losses by dollar volume processed. This rate is then applied against the dollar volume processed each month and charged against earnings. The resulting reserve balance is then compared to requirements for known losses and estimates for incurred but not reported items.

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, including the Company's increased 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 should be sustained. A tax position is recognized only when it is more likely than not to be sustained upon examination by the relevant tax authority, based on its technical merits. The amount of tax benefit recognized is the largest benefit that we believe is more likely than not to be realized on ultimate settlement. As new information becomes available, we evaluate our tax positions and adjust our liability for known tax exposures as appropriate.

First Data has historically generated tax 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. We believe that a significant portion of the deferred tax assets will be realized because of the existence of sufficient taxable income within the carryforward period available under the tax law, but have established valuation allowances for those deferred tax assets that in our judgment will not be realized. In making this determination, we have considered the relative impact of all of the available positive and negative evidences regarding future sources of taxable income and available tax planning strategies. However, there could be material impact to our effective tax rate if there is a significant change in our judgment. If and when our judgment changes, then the valuation allowances are adjusted generally through the provision for income taxes in the period in which this determination is made.

Results of Operations

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 unaudited consolidated financial statements and accompanying notes.

(In millions)	Three Months Ended September 30,					
	2019	2018	Percentage of Revenue ⁽¹⁾		Increase (Decrease)	
			2019	2018	\$	%
Revenue:						
Processing and services	\$ 2,608	\$ 1,223	83.4 %	86.6 %	\$ 1,385	113 %
Product	520	189	16.6 %	13.4 %	331	175 %
Total revenue	3,128	1,412	100.0 %	100.0 %	1,716	122 %
Expenses:						
Cost of processing and services	1,204	568	46.2 %	46.4 %	636	112 %
Cost of product	413	181	79.4 %	95.8 %	232	128 %
Sub-total	1,617	749	51.7 %	53.0 %	868	116 %
Selling, general and administrative	1,137	305	36.3 %	21.6 %	832	273 %
Loss on sale of business	—	2	— %	0.1 %	(2)	n/m
Total expenses	2,754	1,056	88.0 %	74.8 %	1,698	161 %
Operating income	374	356	12.0 %	25.2 %	18	5 %
Interest expense, net	(164)	(45)	(5.2)%	(3.2)%	119	264 %
Debt financing activities	49	(8)	1.6 %	(0.6)%	(57)	(713)%
Other (expense) income	(3)	1	(0.1)%	0.1 %	(4)	(400)%
Income before income taxes and income from investments in unconsolidated affiliates	256	304	8.2 %	21.5 %	(48)	(16)%
Income tax provision	(53)	(78)	(1.7)%	(5.5)%	(25)	(32)%
Income from investments in unconsolidated affiliates	22	1	0.7 %	0.1 %	21	n/m
Less: Net income attributable to noncontrolling interests	27	—	0.9 %	—	27	n/m
Net income attributable to Fiserv, Inc.	\$ 198	\$ 227	6.3 %	16.1 %	\$ (29)	(13)%

⁽¹⁾ Percentage of revenue is calculated as the relevant revenue, expense, income or loss 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)	Nine Months Ended September 30,					
			Percentage of Revenue ⁽¹⁾		Increase (Decrease)	
	2019	2018	2019	2018	\$	%
Revenue:						
Processing and services	\$ 5,229	\$ 3,668	85.1 %	85.9 %	\$ 1,561	43 %
Product	913	604	14.9 %	14.1 %	309	51 %
Total revenue	6,142	4,272	100.0 %	100.0 %	1,870	44 %
Expenses:						
Cost of processing and services	2,445	1,696	46.8 %	46.2 %	749	44 %
Cost of product	755	551	82.7 %	91.2 %	204	37 %
Sub-total	3,200	2,247	52.1 %	52.6 %	953	42 %
Selling, general and administrative	1,821	930	29.6 %	21.8 %	891	96 %
Gain on sale of businesses	(10)	(227)	(0.2)%	(5.3)%	(217)	(96)%
Total expenses	5,011	2,950	81.6 %	69.0 %	2,061	70 %
Operating income	1,131	1,322	18.4 %	31.0 %	(191)	(14)%
Interest expense, net	(279)	(134)	(4.5)%	(3.1)%	145	108 %
Debt financing activities	(47)	(8)	(0.8)%	(0.2)%	39	488 %
Other (expense) income	—	3	— %	0.1 %	(3)	n/m
Income before income taxes and income from investments in unconsolidated affiliates	805	1,183	13.1 %	27.7 %	(378)	(32)%
Income tax provision	(144)	(290)	(2.3)%	(6.8)%	(146)	(50)%
Income from investments in unconsolidated affiliates	12	8	0.2 %	0.2 %	4	50 %
Less: Net income attributable to noncontrolling interests	27	—	0.4 %	—	27	n/m
Net income attributable to Fiserv, Inc.	\$ 646	\$ 901	10.5 %	21.1 %	\$ (255)	(28)%

⁽¹⁾ Percentage of revenue is calculated as the relevant revenue, expense, income or loss 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.

Three Months Ended September 30,

(In millions)	First Data	Payments	Financial	Corporate and Other	Total
Total revenue:					
2019	\$ 1,614	\$ 926	\$ 596	\$ (8)	\$ 3,128
2018	—	844	574	(6)	1,412
Revenue growth	\$ 1,614	\$ 82	\$ 22	\$ (2)	\$ 1,716
Revenue growth percentage	n/m	10%	4%		122%
Operating income:					
2019	\$ 396	\$ 309	\$ 196	\$ (527)	\$ 374
2018	—	267	187	(98)	356
Operating income growth	\$ 396	\$ 42	\$ 9	\$ (429)	\$ 18
Operating income growth percentage	n/m	16%	5%		5%
Operating margin:					
2019	24.6%	33.3%	32.9%		12.0%
2018	—	31.5%	32.7%		25.2%
Operating margin growth ⁽¹⁾	n/m	180 bps	20 bps		(1,320) bps

Nine Months Ended September 30,

(In millions)	First Data	Payments	Financial	Corporate and Other	Total
Total revenue:					
2019	\$ 1,614	\$ 2,757	\$ 1,798	\$ (27)	\$ 6,142
2018	—	2,523	1,780	(31)	4,272
Revenue growth	\$ 1,614	\$ 234	\$ 18	\$ 4	\$ 1,870
Revenue growth percentage	n/m	9%	1%		44 %
Operating income:					
2019	\$ 396	\$ 899	\$ 598	\$ (762)	\$ 1,131
2018	—	807	590	(75)	1,322
Operating income growth	\$ 396	\$ 92	\$ 8	\$ (687)	\$ (191)
Operating income growth percentage	n/m	11%	1%		(14)%
Operating margin:					
2019	24.6%	32.6%	33.3%		18.4 %
2018	—	32.0%	33.2%		31.0 %
Operating margin growth ⁽¹⁾	n/m	60 bps	10 bps		(1,260) bps

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

Operating margin percentages are calculated using actual, unrounded amounts.

Total Revenue

Total revenue increased \$1,716 million, or 122%, in the third quarter of 2019 and increased \$1,870 million, or 44%, in the first nine months of 2019 compared to 2018. The increase in both the third quarter and first nine months of 2019 was primarily driven by the incremental revenue from the First Data acquisition, which contributed \$1,614 million of revenue to each period.

Revenue in our Payments segment increased \$82 million, or 10%, during the third quarter of 2019 and \$234 million, or 9%, during the first nine months of 2019 compared to 2018. Revenue from the acquired Elan business contributed 5% to Payments segment revenue growth in both the third quarter and first nine months of 2019. The remaining revenue growth in our Payments segment was driven by growth in our recurring revenue businesses, with our card services and electronic payments businesses contributing 3% and 1%, respectively, in the third quarter and 2% and 1%, respectively, in the first nine months of 2019.

Revenue in our Financial segment increased \$22 million, or 4%, during the third quarter of 2019 and \$18 million, or 1%, during the first nine months of 2019 compared to 2018. Financial segment revenue growth in 2019 was driven by growth in our bank solutions business from new business, customer migrations from in-house technology to outsourced solutions and growth with existing customers across a range of products. This growth was offset in the first nine months of 2019 from the disposition of a 55% interest of our Lending Solutions business in late March 2018, which reduced Financial segment revenue by 3%.

Revenue at Corporate and Other decreased \$2 million during the third quarter and increased \$4 million in the first nine months of 2019 compared to 2018. The increase in the first nine months of 2019 was primarily due to transition services revenue activity from the Lending Joint Ventures, which commenced in late March 2018.

Total Expenses

Total expenses increased \$1,698 million, or 161%, and increased \$2,061 million, or 70%, in the third quarter and first nine months of 2019, respectively, compared to 2018. Total expenses as a percentage of total revenue increased to 88.0% in the third quarter of 2019 and increased to 81.6% in the first nine months of 2019 compared to the prior year periods. Total expenses in 2019 include the expenses for First Data since the acquisition date, resulting in the overall significant increase in expenses compared to prior year periods.

Cost of processing and services as a percentage of processing and services revenue decreased to 46.2% in the third quarter of 2019 compared to 46.4% in the third quarter of 2018 and increased to 46.8% in the first nine months of 2019 compared to 46.2% in the first nine months of 2018. Cost of processing and services as a percentage of processing and services revenue in the third quarter of 2019 decreased by approximately 90 basis points from our First Data acquisition and approximately 50 basis points from a reduction in client-focused incremental investments, partially offset by an increase of approximately 80 basis points from our Elan acquisition and approximately 50 basis points from expenses shifting from cost of product to cost of processing and services as financial institutions continue to move from in-house technology to outsourced solutions. Cost of processing and services as a percentage of processing and services revenue in the first nine months of 2019 increased by approximately 80 basis points from our Elan acquisition and approximately 60 basis points from expenses shifting from cost of product to cost of processing with the move from in-house technology to outsourced solutions, partially offset by a decrease of approximately 70 basis points from our First Data acquisition and approximately 20 basis points from a reduction in client-focused incremental investments.

Cost of product as a percentage of product revenue decreased to 79.4% in the third quarter of 2019 compared to 95.8% in the third quarter of 2018 and decreased to 82.7% in the first nine months of 2019 compared to 91.2% in the first nine months of 2018. The reduction in cost of product as a percentage of product revenue was driven by the First Data acquisition, with favorable impacts of approximately 1,400 basis points and 600 basis points in the third quarter and first nine months of 2019, respectively, and as a result of expenses shifting from cost of product to cost of processing and services as financial institutions continue to move from in-house technology to outsourced solutions, with favorable impacts of approximately 350 basis points and 400 basis points in the third quarter and first nine months, respectively. Cost of product as a percentage of product revenue was also impacted by product mix, including an increase of approximately 200 basis points and 400 basis points from a decrease in higher-margin software license revenue in the third quarter and the first nine months of 2019, respectively.

Selling, general and administrative expenses as a percentage of total revenue increased to 36.3% in the third quarter of 2019 compared to 21.6% in the third quarter of 2018 and increased to 29.6% in the first nine months of 2019 compared to 21.8% in the first nine months of 2018. The increase in selling, general and administrative expenses as a percentage of total revenue in 2019 was due to increased costs, including acquisition, integration and acquired intangible asset amortization, associated with the First Data acquisition.

The gains on sale of business of \$10 million and \$227 million in the first nine months of 2019 and 2018, respectively, resulted from the sale of a 55% interest of our Lending Solutions business, including contingent consideration received in 2019.

Operating Income and Operating Margin

Total operating income increased \$18 million, or 5%, in the third quarter and decreased \$191 million, or 14%, in the first nine months of 2019 compared to the prior year periods. Operating income in our First Data segment of \$396 million in both the third quarter and first nine months of 2019 was incremental to our results due to the acquisition closing on July 29, 2019. Total operating margin decreased to 12.0% in the third quarter of 2019 and decreased to 18.4% in the first nine months of 2019 compared to the prior year periods.

Operating income in our Payments segment increased \$42 million, or 16%, and \$92 million, or 11%, in the third quarter and first nine months of 2019, respectively, compared to 2018. Operating margin increased 180 basis points to 33.3% in the third quarter of 2019 and increased 60 basis points to 32.6% in the first nine months of 2019 compared to the prior year periods.

Payments segment operating margin growth in the third quarter and first nine months of 2019 was driven by scalable revenue growth in our recurring revenue businesses of approximately 160 basis points and 70 basis points, respectively, and was reduced by approximately 60 basis points and 50 basis points, respectively, from our Elan acquisition. In addition, the Payment segment operating margin includes improvement of approximately 70 basis points and 20 basis points from client-focused incremental investments incurred in the third quarter and first nine months of 2018, respectively.

Operating income in our Financial segment increased \$9 million, or 5%, and \$8 million, or 1%, in the third quarter and first nine months of 2019, respectively, compared to 2018. Financial segment operating margin increased 20 basis points to 32.9% in the third quarter of 2019 and 10 basis points to 33.3% in the first nine months of 2019 compared to the prior year periods, primarily due to expense reduction efforts in our international business. The Financial segment operating margin improvement in the first nine months of 2019 was partially offset by approximately 90 basis points from a reduction in higher-margin software license revenue.

The operating loss in Corporate and Other increased \$429 million and \$687 million in the third quarter and first nine months of 2019, respectively, compared to 2018. The increase in Corporate and Other operating loss in 2019 was due to the acquisition of First Data, including acquisition and integration related costs of \$119 million and \$152 million in the third quarter and first nine months of 2019, respectively, amortization of acquired First Data intangible assets of \$243 million in both the third quarter and first nine months of 2019, and other First Data related corporate expenses since the date of acquisition. In addition, Corporate and Other was favorably impacted a \$227 million gain in the first nine months of 2018 from the sale of a 55% interest of our Lending Solutions business.

Interest Expense, Net

Interest expense, net increased \$119 million, or 264%, and \$145 million, or 108%, in the third quarter and first nine months of 2019, respectively, compared to the prior year periods due to the September 2018 issuance of \$2.0 billion of fixed-rate senior notes, as well as the June 2019 issuance of \$9.0 billion of fixed-rate senior notes, the July 2019 issuance of €1.5 billion and £1.05 billion of fixed-rate senior notes and \$5.0 billion of term loan borrowings for the purpose of funding the repayment of certain indebtedness of First Data and its subsidiaries on the closing date of the acquisition. See below under “First Data Acquisition Financing” for a description of our financing related to the First Data acquisition.

Debt Financing Activities

In connection with the definitive merger agreement entered into on January 16, 2019 to acquire First Data, we entered into a bridge facility commitment letter providing a 364-day senior unsecured bridge term loan facility in an aggregate principal amount of \$17.0 billion for the purpose of refinancing certain indebtedness of First Data on the closing date of the acquisition. We recorded \$98 million of expense during the nine months ended September 30, 2019 associated with such bridge term loan facility and other refinancing and related activities in connection with the acquisition of First Data. In addition, during the three and nine months ended September 30, 2019, we recorded \$50 million of net foreign currency transaction gains related to our foreign currency-denominated debt. See “First Data Acquisition Financing” for a description of our financing related to the First Data acquisition.

Income Tax Provision

Income tax provision as a percentage of income before income from investments in unconsolidated affiliates was 20.7% and 25.7% in the third quarter of 2019 and 2018, respectively, and was 17.9% and 24.5% in the first nine months of 2019 and 2018, respectively. The decrease in the effective tax rate for the third quarter compared to the prior year period is primarily related to equity compensation related tax benefits. The effective tax rate in the first nine months of 2019 includes discrete benefits due to a loss from subsidiary restructuring. The effective tax rate in the first nine months of 2018 includes \$77 million of income tax expense associated with the \$227 million gain on the sale of a 55% interest of our Lending Solutions business.

Income from Investments in Unconsolidated Affiliates

Our share of net income from affiliates accounted for using the equity method of accounting, including the Lending Joint Ventures and affiliates under the merchant bank alliance program from the acquisition of First Data, 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 \$22 million and \$1 million in the third quarter of 2019 and 2018, respectively, and was \$12 million and \$8 million in the first nine months of 2019 and 2018, respectively.

Net Income Attributable to Noncontrolling Interests

Net income attributable to noncontrolling interests relates to the ownership interest of our alliance partners in our consolidated results, obtained through the acquisition of First Data. For both the three and nine months ended September 30, 2019, net income attributable to noncontrolling interests was \$27 million.

Net Income Per Share – Diluted

Net income attributable to Fiserv, Inc. per share-diluted was \$0.33 and \$0.55 in the third quarter of 2019 and 2018, respectively, and was \$1.39 and \$2.16 in the first nine months of 2019 and 2018, respectively. Net income attributable to Fiserv, Inc. per share-diluted in the three and nine months of 2019 included the results of operations of First Data from the date of the acquisition, along with transaction costs associated with the acquisition and acquired intangible asset amortization from the application of purchase accounting. Net income per share-diluted was favorably impacted in the first nine months of 2018 by a gain of \$0.36 per share on the sale of a 55% interest of our Lending Solutions business.

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; and (iii) fund capital expenditures and operating lease payments. We believe these needs will be satisfied using cash flow generated by our operations, along with our cash and cash equivalents of \$1.0 billion and available borrowings under our revolving credit facility of \$3.1 billion at September 30, 2019. The following table summarizes our operating cash flow and capital expenditure amounts for the nine months ended September 30, 2019 and 2018, respectively.

(In millions)	Nine Months Ended September 30,		Increase (Decrease)	
	2019	2018	\$	%
Net income	\$ 673	\$ 901	\$ (228)	
Depreciation and amortization	978	406	572	
Net foreign currency gain on financing activities	(50)	—	(50)	
Share-based compensation	121	54	67	
Deferred income taxes	26	105	(79)	
Gain on sale of business	(10)	(227)	217	
Income from investments in unconsolidated affiliates	(12)	(8)	(4)	
Distributions from unconsolidated affiliates	6	1	5	
Settlement of interest rate hedge contracts	(183)	—	(183)	
Net changes in working capital and other	68	(251)	319	
Operating cash flow	\$ 1,617	\$ 981	\$ 636	65%
Capital expenditures	\$ 431	\$ 263	\$ 168	64%

Our net cash provided by operating activities, or operating cash flow, was \$1.6 billion in the first nine months of 2019, an increase of 65% compared with \$981 million in the first nine months of 2018. This increase was primarily attributable to improved operating results, the acquisition of First Data and favorable working capital fluctuations, including favorable timing of payables and receivable collections. Net cash provided by operating activities in the first nine months of 2019 also included a payment of \$183 million associated with the settlement of treasury lock agreements related to First Data financing activities (see discussion below).

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 7% and 6% of our total revenue in the first nine months of 2019 and 2018, respectively.

Share Repurchases

We purchased \$156 million and \$1.23 billion of our common stock during the first nine months of 2019 and 2018, respectively. As of September 30, 2019, we had approximately 24.0 million shares remaining under our current repurchase authorizations. Shares repurchased are generally held for issuance in connection with our equity plans.

Acquisitions and Dispositions

On July 29, 2019, we completed the acquisition of First Data Corporation for a total purchase price of approximately \$46.5 billion by acquiring 100% of the First Data stock that was issued and outstanding as of the date of acquisition. As a result of the acquisition, First Data stockholders received 286 million shares of common stock of Fiserv, Inc., using an exchange ratio of 0.303 shares of Fiserv, Inc. for each share of First Data common stock, with cash paid in lieu of fractional shares. We also converted approximately 15 million outstanding First Data equity awards into corresponding equity awards relating to common stock of Fiserv, Inc. in accordance with the exchange ratio. In addition, concurrent with the closing of the acquisition, we made a cash payment of approximately \$16.4 billion to repay existing First Data debt. We funded the transaction-related expenses and repayment of First Data debt through a combination of available cash on-hand, proceeds from the issuance of senior notes and term loan and revolving credit facility borrowings.

On October 31, 2018, we acquired the debit card processing, ATM Managed Services, and Money Pass[®] surcharge-free network of Elan Financial Services, a unit of U.S. Bancorp, for approximately \$659 million including post-closing working capital adjustments, estimated contingent consideration related to earn-out provisions and future payments under a transition services agreement in excess of fair value. We funded this acquisition by utilizing existing availability under our revolving credit facility.

In March 2018, we sold a 55% interest of our Lending Solutions business, retaining 45% ownership interests in two joint ventures. We received gross sale proceeds of \$419 million from the transactions. In August 2019, the Sagent Auto, LLC, formerly known as Fiserv Automotive Solutions, LLC, joint venture completed a merger with a third-party, resulting in a dilution of our ownership interest to 31% in the new, combined entity. In connection with the merger, Sagent Auto, LLC borrowed, in the aggregate, an additional \$50 million on its variable-rate term loan facility and increased the notional amount of its variable-rate revolving credit facility by \$10 million. We have guaranteed this incremental debt and do not anticipate that the joint venture will fail to fulfill its debt obligations. We recorded a \$4 million liability for the estimated fair value of our obligations to stand ready to perform over term of the guarantees. Such guarantees will be amortized in future periods over the contractual term, based upon amounts to be received by us for the respective guarantees. We have guaranteed a total of \$400 million and \$45 million on the joint venture's variable-rate term loan and revolving credit facilities, respectively. We have not made any payments under the guarantees, nor have we been called upon to do so.

In January 2018, we completed the sale of the retail voucher business acquired in our 2017 acquisition of Monitise plc for proceeds of £37 million (\$50 million).

Indebtedness

(In millions)	September 30, 2019	December 31, 2018
Short-term debt and current maturities of long-term debt:		
Lines of credit	\$ 248	\$ —
Finance lease and other financing obligations	120	4
Total short-term and current maturities of long-term debt	<u>\$ 368</u>	<u>\$ 4</u>
Long-term debt:		
2.7% senior notes due 2020	\$ 850	\$ 850
4.75% senior notes due 2021	400	400
3.5% senior notes due 2022	700	700
3.8% senior notes due 2023	1,000	1,000
0.375% senior notes due 2023	547	—
2.75% senior notes due 2024	2,000	—
3.85% senior notes due 2025	900	900
2.25% senior notes due 2025	645	—
3.2% senior notes due 2026	2,000	—
1.125% senior notes due 2027	547	—
4.2% senior notes due 2028	1,000	1,000
3.5% senior notes due 2029	3,000	—
1.625% senior notes due 2030	547	—
3.0% senior notes due 2031	645	—
4.4% senior notes due 2049	2,000	—
Receivable securitized loan	500	—
Term loan facility	4,400	—
Unamortized discount and unamortized deferred financing costs	(167)	(29)
Revolving credit facility	406	1,129
Finance lease and other financing obligations	203	5
Total long-term debt	<u>\$ 22,123</u>	<u>\$ 5,955</u>

At September 30, 2019, our debt consisted primarily of \$16.8 billion of fixed-rate senior notes and \$4.4 billion of variable rate term loans. Interest on our U.S. dollar-denominated senior notes is paid semi-annually, while interest on our foreign currency-denominated senior notes is paid annually. Interest on our term loans is paid monthly. During the first nine months of September 30, 2019, we were in compliance with all financial debt covenants.

Variable Rate Debt

At September 30, 2019 we had \$5.6 billion of variable rate debt, which included \$4.4 billion of outstanding term loan borrowings and \$500 million under our accounts receivable securitization facility, as described below. In addition, we maintain a \$3.5 billion revolving credit agreement with a syndicate of banks. Outstanding borrowings under the revolving credit facility bear interest at a variable rate based on LIBOR or on a base rate, plus a specified margin based on our long-term debt rating in effect from time to time. There were \$406 million of outstanding borrowings on the revolving credit facility at September 30, 2019. There are no significant commitment fees and no compensating balance requirements on the revolving credit facility, which matures in September 2023.

On February 6, 2019, we entered into an amendment to our amended and restated revolving credit facility to (i) amend the maximum leverage ratio covenant to permit us to elect to increase the permitted maximum leverage ratio from three and one-half times our consolidated net earnings before interest, taxes, depreciation, amortization, non-cash charges and expenses and certain other adjustments (“EBITDA”) to either four times or four and one-half times our EBITDA for a specified period following certain acquisitions and (ii) permit us to make drawings under the revolving credit facility on the closing date of our acquisition of First Data subject to only limited conditions. In addition, on February 15, 2019, we entered into a second

amendment to our existing revolving credit agreement in order to increase the aggregate commitments available thereunder by \$1.5 billion to \$3.5 billion of total capacity, and to make certain additional amendments to facilitate the operation of the combined business following the acquisition of First Data. Further, on July 26, 2019, we entered into a third amendment to our existing revolving credit agreement to (i) remove as a condition precedent to borrowings on the closing date of the acquisition of First Data the requirement that amounts under the Receivables Financing Agreement, as defined below, be repaid, and (ii) amend the debt and liens covenants to increase our flexibility to enter into receivables financing arrangements in the future. The increased commitments and amendments contemplated by the second and third amendments to the revolving credit facility became effective upon the closing of the acquisition of First Data. Borrowings under the amended and restated revolving credit facility continue to bear interest at a variable rate based on LIBOR or on a base rate, plus in each case a specified margin based on our long-term debt rating in effect from time to time. The variable interest rate on the revolving credit facility borrowings was 2.92% at September 30, 2019.

First Data Acquisition Financing

On January 16, 2019, in connection with the definitive merger agreement to acquire First Data, we entered into a bridge facility commitment letter pursuant to which a group of financial institutions committed to provide a 364-day senior unsecured bridge term loan facility in an aggregate principal amount of \$17.0 billion for the purpose of funding the repayment of certain indebtedness of First Data and its subsidiaries on the closing date of the merger, making cash payments in lieu of fractional shares as part of the merger consideration, and paying fees and expenses related to the merger, the refinancing and the related transactions. We recorded \$2 million and \$98 million of expenses related to the bridge term loan facility during the three and nine months ended September 30, 2019, respectively. The aggregate commitments of \$17.0 billion under the bridge facility commitment letter were replaced with a corresponding amount of permanent financing through the term loan credit agreement and issuance of senior notes, as described below, resulting in the termination of the bridge term loan facility effective July 1, 2019.

On February 15, 2019, we entered into a new term loan credit agreement with a syndicate of financial institutions pursuant to which such financial institutions committed to provide us with a senior unsecured term loan facility in an aggregate principal amount of \$5.0 billion, consisting of \$1.5 billion in commitments to provide loans with a three-year maturity and \$3.5 billion in commitments to provide loans with a five-year maturity. On July 26, 2019, we entered into an amendment to our term loan credit facility to (i) remove as a condition precedent to borrowings on the closing date of the acquisition of First Data the requirement that amounts under the Receivables Financing Agreement, as defined below, be repaid and the related liens and guarantees be terminated in order to allow First Data's accounts receivable securitization program, as described below, to remain in place following consummation of the acquisition and (ii) amend the debt and liens covenants to increase our flexibility to enter into receivables financing arrangements in the future. On July 29, 2019, concurrent with the closing of the acquisition of First Data, the term loan credit agreement was funded. Loans drawn under the term loan facility are subject to amortization at a quarterly rate of 1.25% for the first eight quarters and 1.875% each quarter thereafter (with loans outstanding under the five-year tranche subject to amortization at a quarterly rate of 2.5% after the fourth anniversary of the commencement of amortization), with accrued and unpaid amortization amounts required to be paid on the last business day in December of each year. Borrowings under the term loan facility bear interest at variable rates based on LIBOR or on a base rate plus, in each case, a specified margin based on our long-term debt rating in effect from time to time. The variable interest rate on the term loan facility borrowings was 3.30% at September 30, 2019. We were also required to pay a ticking fee that accrued on the aggregate undrawn commitments under the term loan facility at a per annum rate based upon our long-term debt rating in effect from time to time. The term loan credit agreement contains affirmative, negative and financial covenants, and events of default, that are substantially the same as those set forth in our existing revolving credit facility, as amended as described above.

On June 24, 2019, we completed an offering of \$9.0 billion aggregate principal amount of senior notes comprised of \$2.0 billion aggregate principal amount of 2.75% senior notes due in July 2024, \$2.0 billion aggregate principal amount of 3.2% senior notes due in July 2026, \$3.0 billion aggregate principal amount of 3.5% senior notes due in July 2029 and \$2.0 billion aggregate principal amount of 4.4% senior notes due in July 2049. The senior notes pay interest semi-annually on January 1 and July 1, commencing on January 1, 2020. The indentures governing the 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) ours and certain of our subsidiaries' ability to create or assume liens, and (iii) ours 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 par call date.

In March 2019, we entered into Treasury Locks, designated as cash flow hedges, in the aggregate notional amount of \$5 billion to manage exposure to fluctuations in benchmark interest rates in anticipation of the issuance of fixed rate debt in connection with the refinancing of certain indebtedness of First Data and its subsidiaries. On June 24, 2019, concurrent with the issuance of the senior notes described above, the Treasury Locks were settled resulting in a payment of \$183 million that will be amortized to earnings over the terms of the originally forecasted interest payments.

On July 1, 2019, we completed an offering of €1.5 billion aggregate principal amount and £1.05 billion aggregate principal amount of senior notes comprised of €500 million aggregate principal amount of 0.375% senior notes due in July 2023, €500 million aggregate principal amount of 1.125% senior notes due in July 2027, €500 million aggregate principal amount of 1.625% senior notes due in July 2030, £525 million aggregate principal amount of 2.25% senior notes due in July 2025, and £525 million aggregate principal amount of 3.0% senior notes due in July 2031. The senior notes pay interest annually on July 1, commencing on July 1, 2020. The indentures governing the senior notes contain covenants that are substantially the same as those set forth in our \$9.0 billion aggregate principal amount senior notes described above.

In connection with the anticipated issuance of the foreign currency-denominated senior notes described above, we entered into foreign exchange forward contracts in June 2019 to minimize foreign currency exposure to the Euro and British Pound upon settlement of the proceeds from the foreign currency-denominated senior notes. The foreign exchange forward contracts matured on July 1, 2019, concurrent with the closing of the offering of the foreign currency-denominated senior notes. We realized foreign currency transaction gains of \$1 million and \$3 million, recorded within debt financing activities in the consolidated statements of income, during the three and nine months ended September 30, 2019, respectively, from these foreign exchange forward contracts. In addition, we held a portion of the proceeds from the issuance of these foreign currency-denominated senior notes in Euro- and British Pound-denominated cash and cash equivalents. We realized foreign currency transaction losses of \$19 million, recorded within debt financing activities in the consolidated statements of income, during the three and nine months ended September 30, 2019, as a result of changes in the U.S. dollar equivalent of the Euro- and British Pound-denominated cash due to fluctuations in foreign currency exchange rates.

A portion of the net proceeds from the senior note offerings described above was used in June 2019 to repay outstanding borrowings totaling \$790 million under our amended and restated revolving credit facility. On July 29, 2019, concurrent with the acquisition of First Data, we used the remaining net proceeds from the senior notes offerings described above, as well as the net proceeds of the term loan facility described above and a drawing on our revolving credit facility described above, to repay approximately \$16.4 billion of existing First Data debt and to pay fees and expenses related to such repayment, the First Data acquisition and related transactions.

Foreign Lines of Credit and Other Arrangements

In connection with the acquisition of First Data, we assumed certain short-term lines of credit with foreign banks and alliance partners primarily to fund settlement activity. These arrangements are primarily associated with international operations and are in various functional currencies, the most significant of which are the Australian dollar, Polish zloty, Euro and Argentine peso. We had amounts outstanding on these lines of credit totaling \$248 million as of September 30, 2019. As of September 30, 2019, the weighted average interest rate associated with foreign lines of credit was 17.0%.

Receivable Securitization Agreement

In connection with the acquisition of First Data, we acquired a consolidated wholly-owned subsidiary, First Data Receivables, LLC (“FDR”). FDR is a party to certain receivables financing arrangements, including an agreement (“Receivables Financing Agreement”) with certain financial institutions, and other persons from time to time party thereto as lenders and group agents, pursuant to which certain of our wholly-owned subsidiaries have agreed to transfer and contribute receivables to FDR, and FDR in turn may obtain borrowings from the financial institutions and other lender parties to the Receivables Financing Agreement secured by liens on those receivables. FDR’s assets are not available to satisfy the obligations of any other entities or our affiliates, and FDR’s creditors would be entitled, upon its liquidation, to be satisfied out of FDR’s assets prior to any assets or value in FDR becoming available to us. The receivables held by FDR are recorded within trade accounts receivable, net in our consolidated balance sheet. As of September 30, 2019, FDR held \$757 million in receivables as part of the securitization program. The maximum borrowing capacity, subject to collateral availability, under the Receivables Financing Agreement at September 30, 2019, was \$500 million. FDR utilized the receivables as collateral in borrowings of \$500 million, at an average interest rate of 2.87%, as of September 30, 2019. The term of the Receivables Financing Agreement is through July 2022.

Cash and Cash Equivalents

Investments (other than those included in settlement assets) with original maturities of three months or less that are readily convertible to cash are considered to be cash equivalents. As of September 30, 2019 and December 31, 2018, we held \$1.0 billion and \$415 million in cash and cash equivalents, respectively.

The table below details the cash and cash equivalents as of September 30, 2019 and December 31, 2018:

(In millions)	September 30, 2019			December 31, 2018		
	Domestic	International	Total	Domestic	International	Total
Available	\$ 419	\$ 282	\$ 701	\$ 356	\$ 59	\$ 415
Unavailable	145 ⁽¹⁾	182 ⁽²⁾	327	—	—	—
Total	\$ 564	\$ 464	\$ 1,028	\$ 356	\$ 59	\$ 415

⁽¹⁾ Represents cash held by certain domestic entities that are not available to fund operations outside of these entities unless the Board of Directors for said entities declares a dividend. In addition, one of these entities is subject to regulatory capital requirements that must be satisfied before a dividend may be declared.

⁽²⁾ Distributions of these funds are subject to certain of our joint ventures' Board of Directors authorization.

Contractual Obligations

We do not participate in, nor have we created, any off-balance sheet variable interest entities or other off-balance sheet financing. As of September 30, 2019, we had approximately \$22 billion in outstanding borrowings and \$782 million in minimum operating lease payments. Additional information about our outstanding borrowings and minimum operating lease payments is included within Notes 14 and 15 to the consolidated financial statements, respectively. The following table details our other contractual obligations as of September 30, 2019:

(In millions)	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Purchase obligations ⁽¹⁾	\$ 1,101	\$ 380	\$ 488	\$ 113	\$ 120
Income tax obligations	145	36	59	25	25
Total	\$ 1,246	\$ 416	\$ 547	\$ 138	\$ 145

⁽¹⁾ Purchase obligations are reported on a pre-tax basis.

ITEM 3. 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. We are exposed primarily to interest rate risk and market price risk on outstanding debt, investments of subscriber funds and foreign currency. Our senior management actively monitors these risks.

Interest Rate Risk

We manage our debt structure and interest rate risk through the use of fixed- and floating-rate debt. Based on our outstanding debt balances and interest rates as of September 30, 2019, a 1% increase in variable interest rates would increase interest expense by approximately \$56 million over the next twelve months.

In connection with processing electronic payments transactions, the funds we receive from subscribers are invested in short-term, highly liquid investments from the time we collect the funds until payments are made to the applicable recipients. A 1% decrease in variable interest rates would decrease interest-related income related to settlement assets by approximately \$45 million over the next twelve months. There have been no other material changes to the quantitative and qualitative disclosures about interest rate risk previously disclosed in Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2018.

Foreign Currency Risk

We conduct business in the United States and in foreign countries 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. During the nine months ended September 30, 2019, approximately 10% of our total revenue was from clients outside the United States. We have entered into foreign currency forward exchange contracts with total notional values of approximately \$216 million as of September 30, 2019 to hedge currency exposure to our operating costs in India. In addition, we designated our foreign currency-denominated senior notes as net investment hedges to reduce exposure to changes in fair value of our net investments in certain foreign denominated subsidiaries due to changes in foreign currency exchange rates. Risk can be estimated by measuring the impact of a near-term adverse movement of 10% in relevant foreign currency rates against the U.S. dollar. A movement of 10% in foreign currency rates against the U.S. dollar relative to the currencies in which our revenues and profits are denominated at September 30, 2019, would result in an increase or decrease in pretax income of approximately \$23 million. There have been no other material changes to the quantitative and qualitative disclosures about foreign currency risk previously disclosed in Item 7A of our Annual Report on Form 10-K for the year ended December 31, 2018.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934 (the “Exchange Act”), 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 Exchange Act). Based on this evaluation, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures were effective as of September 30, 2019.

Changes in Internal Control Over Financial Reporting

During the quarter ended September 30, 2019, we acquired First Data. As part of our ongoing integration activities, we are incorporating our controls and procedures into this recently acquired business concurrent with the augmentation of our Company-wide controls. There were no other changes in internal control over financial reporting that occurred during the quarter ended September 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. 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 1A. RISK FACTORS

The risk factors presented below amend and restate the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the SEC on February 21, 2019. You should carefully consider each of the risks described below, together with all of the other information contained in our Annual Report on Form 10-K and this Quarterly Report on Form 10-Q, 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.

Risks Relating to Our Business

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

The markets for our services are highly competitive from new and existing competitors. Our principal competitors include other vendors of financial services technology and payment systems, data processing affiliates of large companies, and processing centers owned and operated as user cooperatives. 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 often 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, 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 form other business combinations that may strengthen their existing business services or create new payment services that compete with our services. 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 changes, frequent introductions of new products and services, and increasing client expectations. Our ability to enhance our current products and services and to develop and introduce innovative products and services will significantly affect our future success. We may not be successful in developing, marketing or selling new products and services that meet these demands or achieve market acceptance. We must anticipate and respond to these changes in order to remain competitive within our relevant markets. For example, our ability to provide innovative point-of-sale technology to our merchant clients could have an impact on our merchant acquiring business, and new services and technologies that we develop may be impacted by industry-wide solutions and standards related to migration to EMV chip technology, tokenization or other safety and security technologies. If we are unable to anticipate or respond to technological changes or evolving industry standards on a timely basis, our ability to remain competitive could be materially adversely affected. In addition, the success of certain of our products and services rely, in part, on financial institutions, billers and other third parties to promote the use of our products and services by their customers. If we are unsuccessful in offering products or services that gain market acceptance and compete effectively, or if third parties insufficiently promote 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 client contracts at favorable terms, 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 fees 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 in-house. Further, our small merchant business clients may exert pricing pressure due to pricing competition or other economic needs or pressures such clients experience from their customers. On some occasions, these factors result in lower revenue from a client than we had anticipated based on our previous agreement with that client. If we are not successful in achieving high renewal rates and favorable contract terms, our results of operations and financial condition may be materially and adversely affected.

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 greater leverage in negotiating 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.

Our business depends, in part, on our merchant and financial institution 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. In addition, we rely on various financial institutions to provide clearing services in connection with our settlement activities. If such financial institutions stop providing clearing services or limit our volumes we would need to find other financial institutions to provide those services. The loss of merchant relationships or alliance and financial institution partners could negatively impact our business and have a material adverse effect on our results of operations and financial condition.

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, independent sales organizations (“ISOs”), third-party service providers and others. The confidentiality of such sensitive business information and personal consumer information residing on our systems is critical to our business. Any unauthorized access, intrusion, infiltration, network disruption, 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. 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 technological 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 implementation or availability of our products or services could harm our business and reputation.

Our business depends heavily on the reliability of our processing and other systems. An operational failure and the resulting implementation delays or service interruption 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, computer denial-of-service and other cyberattacks, human error, earthquakes, hurricanes, floods, fires, natural disasters, power losses, disruptions in telecommunications services, fraud, military or political conflicts, terrorist attacks, computer viruses or other malware, or other events. 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 implementation delay, 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. 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 accurately 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 lost 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.

Because we rely on third-party vendors to provide products and services, we could be adversely impacted if they fail to fulfill their obligations.

Our business depends on third-party vendors to provide us with certain products and services. The failure of these vendors to properly perform their obligations in a timely manner could expose us and our clients to information security, financial, compliance and reputational risks, among others, and adversely affect our business and results of operations. In addition, if we are unable to renew our existing contracts with our most significant vendors, we might not be able to replace the related product or service at the same cost, which would negatively impact our results of operations.

Our merchants may be unable to satisfy obligations for which we may also be liable.

We are subject to the risk of our merchants being unable to satisfy obligations for which we may also be liable. 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. If we or the alliance is unable to collect this amount from the merchant because of the merchant'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 could have a material adverse effect on our business and results of operations.

Fraud by merchants or others could have a material adverse effect on our business, results of operations and financial condition.

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, exposure 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.

Our business may be adversely affected by geopolitical and other risks associated with operations outside of the United States 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 United States, including in the United Kingdom (the "U.K."), Germany, Argentina, India and Brazil, where our principal non-U.S. operations are located. Our revenues derived from these and other operations outside of the U.S. are subject to additional risks, including those resulting from social, economic and geopolitical instability and unfavorable political or diplomatic developments, all of which could negatively impact our financial results.

As we 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 lack of experience in such non-U.S. markets, and we may also incur higher than anticipated costs. If we are unable to successfully manage expenses relating to the international expansion of our business, our results of operations and financial condition could be negatively impacted.

A disruptive implementation of the United Kingdom's exit from the European Union could adversely affect our results of operations.

We are monitoring developments related to the implementation of the decision of the U.K. to exit the European Union (the "E.U."), referred to as "Brexit", which could, among other outcomes, disrupt the free movement of goods, services, data and people between the U.K. and the E.U., undermine bilateral cooperation in key policy areas, and significantly disrupt trade between the U.K. and the E.U. The effects of Brexit will depend in part on any agreements the U.K. makes to retain access to E.U. markets. These agreements could potentially disrupt the markets we serve and the tax jurisdictions in which we operate and adversely change tax benefits or liabilities in these or other jurisdictions. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the U.K. determines which E.U. laws to replace or replicate. Given

the lack of comparable precedent, it is unclear what financial, trade and legal implications the withdrawal of the U.K. from the E.U. will have and how such withdrawal will affect us.

In addition, Brexit may create additional uncertainty in currency exchange rate fluctuations that may result in the strengthening of the U.S. dollar against foreign currencies in which we conduct business. We translate revenue denominated in foreign currency into U.S. dollars for our financial statements. During periods of a strengthening U.S. dollar, our reported international revenue and profit is reduced because foreign currencies translate into fewer U.S. dollars.

Any of these effects of Brexit, among others, could materially adversely affect our relationships with our existing and future clients and vendors, which could have an adverse effect on our business, results of operations and business opportunities.

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 known as “interchange fees”) that they charge. It is possible that competitive pressures will result in us absorbing a portion of such increases in the future, or result in us 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.

Our failure to comply with applicable complex laws and regulations could harm our businesses and subject us to liability.

If we fail to comply with laws and regulations applicable to our business, including payments industry, cybersecurity and data privacy regulations, we could be exposed to litigation or regulatory proceedings, our client relationships and reputation could be harmed, and we could be inhibited in our ability to obtain new clients, 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 United States and abroad, and, consequently, we are at times affected by these federal, state, local and foreign laws and regulations. Furthermore, these laws and regulations are constantly changing with new laws and regulations and interpretations thereof being implemented.

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 United States Foreign Corrupt Practices Act and the U.K. Bribery Act. These laws prohibit improper payments or offers of payments to foreign governments and their officials and political parties for the purpose of obtaining or retaining business. We have implemented policies and training programs to discourage such practices; however, there can be no assurance that all of our employees, consultants and agents will comply with our policies and all applicable laws.

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, their governments, and in certain circumstances, their nationals, and with individuals and entities that are specially-designated nationals of those countries, narcotics traffickers, and terrorists or terrorist organizations. Similar anti-money laundering and 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.

Further, certain of our subsidiaries are licensed as money transmitters in those jurisdictions where such licensure is required. In connection with such licensure, we are required to demonstrate and maintain certain levels of net worth and liquidity and to file periodic reports. In addition, our direct-to-consumer payments businesses, including our walk-in bill payment, online bill payment, digital disbursements, and Popmoney person-to-person payment services, are subject to federal regulation in the United States, including anti-money laundering regulations and certain restrictions on transactions to or from certain individuals or entities. Our subsidiary Money Network Financial LLC 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. Certain of our businesses are also subject to anti-money laundering regulations outside the United States. The complexity of these regulations will continue to increase our cost of doing business. In addition, any violations of law may result in civil or criminal penalties against us and our officers, or the prohibition against us providing merchant acquiring, money transmitter services or prepaid programs in particular jurisdictions.

Failure to comply with any of these laws and regulations or changes in this 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, or change the manner in which we currently conduct some aspects of 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. As such, we and many of our clients 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, and merchants. In addition, we are subject to rules of the National Automated Clearing House Association (“NACHA”) 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 United States 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. Additionally, the CFPB regulates consumer financial products and services (including many offered by our clients), restricts debit card fees paid by merchants to certain issuer banks and allows merchants to offer discounts for different payment methods. 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.

In addition, federal and state governments and governmental authorities outside the U.S. have adopted or are pursuing numerous additional regulations impacting the financial services industry, including regulations related to cybersecurity and data privacy. Such regulations increase our compliance and administrative burden significantly. In addition, E.U. laws and regulations are typically subject to different and potentially inconsistent interpretations by the countries that are members of the E.U., which can make compliance more costly and operationally difficult to manage.

To the extent 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. Additional regulation, examination and oversight of us 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; or limit our ability to update our existing products and services, or require us to develop new ones. 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. For example, the General Data Protection Regulation (“GDPR”), which became effective in 2018, extends the scope of the E.U. data protection law to all companies processing data of E.U. residents, regardless of the company’s location, subject to certain limitations. The law

requires companies to meet stringent requirements regarding the handling of personal data. Our efforts to comply with GDPR and other privacy and data protection laws (such as the new California Consumer Privacy Act effective as of January 2020 and the Brazilian General Data Protection Law effective as of February 2020) could involve substantial expenses, divert resources from other initiatives and projects and limit the services we are able to offer. Further, failure to comply with applicable laws in this area could also result in fines, penalties, and reputational damage. U.S. banking agencies have 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 cybersecurity laws targeting these issues. Legislation and regulations on cybersecurity and data privacy 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 may expose ourselves to additional liability if we agree to 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 United States. 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.

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. In addition, we may 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.

Acquisitions subject us to risks, including increased debt, 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 United States 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 future 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.

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.

Our business may be adversely impacted by U.S. and global market and economic conditions.

For the foreseeable future, we expect to continue to derive revenue from products and services we provide to the financial services industry and 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:

- Declining economies, foreign currency fluctuations, and the pace of economic recovery can change consumer spending behaviors, such as cross-border travel patterns, 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 United States and other countries around the world could affect the United States 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 United States 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.
- Government intervention, including the effect of laws, regulations, and /or government investments in our clients, may have potential negative effects on our business and our relationships with our clients or otherwise alter their strategic direction away from our products.

A 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 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, which could have a material adverse effect on 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.

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. For example, the U.S. Tax Cuts and Jobs Act of 2017 (the "Tax Act") significantly revised the U.S. corporate income tax code by, among other things, lowering corporate income tax rates, implementing a territorial-type tax system and imposing repatriation tax on deemed repatriated earnings of foreign subsidiaries. Further analysis of the Tax Act or future 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. 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.

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 68% of our total assets at September 30, 2019. 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 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.

Increased leverage may harm our financial condition and results of operations.

As of September 30, 2019, we had approximately \$22 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 our outstanding senior 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, 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 and term loan, are at variable rates of interest. An increase in interest rates would have a negative impact on our results of operations by causing an increase in interest expense. As of September 30, 2019, we have approximately \$5 billion in variable rate debt, which includes \$4 billion on our term loan, \$700 million drawn on our revolving credit facility and lines of credit and \$500 million on our accounts receivable securitization facility. Based on outstanding debt balances and interest rates as of September 30, 2019, a 1% increase in variable interest rates would result in a decrease to pretax income of \$56 million over the next twelve months.

Uncertainty about the future of the London Interbank Offer Rate (“LIBOR”) may adversely affect our business and financial results.

In July 2017, the Chief Executive of the U.K.’s Financial Conduct Authority, which regulates LIBOR, announced its intent to stop persuading or compelling banks to submit rates for the calculation of LIBOR to the administrator of LIBOR after 2021. It is impossible to predict whether and to what extent banks will continue to provide LIBOR submissions to the administrator of LIBOR, whether any additional reforms to LIBOR may be enacted in the U.K. or elsewhere, and whether other rate or rates may become accepted alternatives to LIBOR. This may cause LIBOR to perform differently than it did in the past and may have other consequences that cannot be predicted. No assurance can be provided that these uncertainties or their resolution will not adversely affect the use, level, and volatility of LIBOR or other interest rates. These uncertainties or their resolution also could negatively impact our borrowing costs, our hedging strategies, and other aspects of our business and results of operations.

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

We are subject to risks related to the 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 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.

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 United States recently 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 United States or other countries in connection with a global trade war, our hardware devices produced in China could also be impacted. While it is too early to predict how the recently enacted tariffs and any 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 United States 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.

Risks Relating to the First Data Merger

We may be unable to integrate the business of First Data successfully or realize the anticipated benefits of the merger.

The combination of two independent businesses is complex, costly and time consuming, and we will be required to devote significant management attention and resources to integrating our business practices and operations. Potential difficulties that we may encounter as part of the integration process include the following:

- the inability to successfully combine the business of First Data in a manner that permits us to achieve, on a timely basis, or at all, the enhanced revenue opportunities and cost savings and other benefits anticipated to result from the merger;
- complexities associated with managing the combined businesses, including difficulty addressing possible differences in corporate cultures and management philosophies and the challenge of integrating complex systems, technology, networks and other assets of each of the companies in a seamless manner that minimizes any adverse impact on customers, suppliers, employees and other constituencies; and
- potential unknown liabilities and unforeseen increased expenses or delays associated with the merger.

Any of these issues could adversely affect our ability to maintain relationships with customers, suppliers, employees and other constituencies or achieve the anticipated benefits of the merger, or could reduce our earnings or otherwise adversely affect our business and financial results.

The synergies attributable to the merger may vary from expectations.

We may fail to realize the anticipated benefits and synergies expected from the merger, which could adversely affect our business, results of operations and financial condition. The success of the merger will depend, in significant part, on our ability to successfully integrate the acquired business, grow the revenue of the combined company and realize the anticipated strategic benefits and synergies from the combination. We believe that the addition of First Data will complement our strategy by providing scale and revenue diversity, accelerate our growth strategy and enable us to have a strong global footprint. However, achieving these goals requires growth of the revenue of the combined company and realization of the targeted cost synergies expected from the merger. This growth and the anticipated benefits of the transaction may not be realized fully or at all, or may take longer to realize than expected. Actual operating, technological, strategic, synergy and revenue opportunities, if achieved at all, may be less significant than expected or may take longer to achieve than anticipated. If we are not able to achieve these objectives and realize the anticipated benefits and synergies expected from the merger within the anticipated timing or at all, our business, results of operations and financial condition may be adversely affected.

We expect to incur substantial expenses related to the integration.

We expect to incur substantial expenses in connection with the merger integration. There are a large number of processes, policies, procedures, operations, technologies and systems that may need to be integrated, including purchasing, accounting and finance, sales, payroll, pricing and benefits. While we have assumed that a certain level of expenses will be incurred, there are many factors beyond our control that could affect the total amount or the timing of the integration expenses. Moreover, many of the expenses that will be incurred are, by their nature, difficult to estimate accurately. These expenses could, particularly in the near term, exceed the savings that we expect to achieve from the elimination of duplicative expenses and the realization of economies of scale and cost savings. These integration expenses may result in us taking significant charges against earnings following the completion of the merger, and the amount and timing of such charges are uncertain at present.

Our future results will suffer if we do not effectively manage our expanded operations.

As a result of the merger, the size of our business has increased significantly. Our future success will depend, in part, upon our ability to manage this expanded business, which will pose substantial challenges for management, including challenges related to the management and monitoring of new operations and associated increased costs and complexity. We may also face

increased scrutiny from governmental authorities as a result of the significant increase in the size of our business. There can be no assurances that we will be successful or that we will realize the expected operating efficiencies, cost savings, revenue enhancements or other benefits currently anticipated from the merger.

The merger may result in a loss of customers, distributors, suppliers, vendors, landlords, joint venture partners or other business partners and may result in the termination of existing contracts.

Some of our customers, distributors, suppliers, vendors, landlords, joint venture partners and other business partners may terminate or scale back their current or prospective business relationships with us as a result of the merger. Some customers may not wish to source a larger percentage of their needs from a single company or may feel that we are too closely allied with one of their competitors. If relationships with customers, distributors, suppliers, vendors, landlords, joint venture partners and other business partners are adversely affected by the merger, or if we lose the benefits of our contracts, our business and financial performance could suffer.

New Omaha Holdings L.P. may sell a substantial amount of our common stock as certain restrictions on sales expire, and these sales could cause the price of our common stock to fall.

New Omaha Holdings L.P. (“New Omaha”), which owns approximately 16% of our outstanding shares, was prohibited from selling shares of our common stock for the first three months following the completion of the merger pursuant to a shareholder agreement we entered into with New Omaha in connection with the merger. New Omaha may now sell such shares, subject to certain limitations contained in the shareholder agreement. Additionally, under a registration rights agreement entered into in connection with the merger, we have granted New Omaha registration rights, which permit, among others, underwritten offerings. The registration rights agreement will terminate when the aggregate ownership percentage of the issued and outstanding shares of our common stock held by New Omaha and its affiliate transferees falls below 2% and such shares may be freely sold without restrictions.

New Omaha may have influence over us and its interests may conflict with other shareholders.

New Omaha owns approximately 16% of our issued and outstanding shares and is our largest shareholder. Under the shareholder agreement, New Omaha may designate a director to serve on our board of directors in accordance with the terms thereof until the aggregate ownership percentage of our issued and outstanding shares of common stock held by New Omaha and its affiliate transferees first falls below 5%. The shareholder agreement will terminate when the aggregate ownership percentage of our outstanding shares held by New Omaha and certain of its affiliates falls below 3%. Although there are various restrictions on New Omaha’s ability to take certain actions with respect to us and our shareholders (including certain standstill provisions for so long as New Omaha’s aggregate ownership percentage of the issued and outstanding shares of our common stock remains at or above 5%), New Omaha may seek to influence, and may be able to influence, us through its appointment of a director to our board of directors and its share ownership.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

The table below sets forth information with respect to purchases made by or on behalf of the Company or any “affiliated purchaser” (as defined in Rule 10b-18(a)(3) under the Exchange Act) of shares of our common stock during the quarter ended September 30, 2019:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of 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⁾
July 1-31, 2019	—	\$ —	—	24,320,000
August 1-31, 2019	—	—	—	24,320,000
September 1-30, 2019	341,000	104.17	341,000	23,979,000
Total	<u>341,000</u>		<u>341,000</u>	

- ⁽¹⁾ On each of November 16, 2016 and August 8, 2018, our board of directors authorized the purchase of up to 30.0 million shares of our common stock. These authorizations do not expire. The Company repurchased 0.3 million and 2.0 million shares of common stock in the three and nine months ended September 30, 2019 for \$35 million and \$156 million, respectively. The Company had 24.0 million remaining shares authorized for repurchase as of September 30, 2019.

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 quarter ended September 30, 2019:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
July 1-31, 2019	82,284 ⁽¹⁾	\$ 104.64	—	—
August 1-31, 2019	—	—	—	—
September 1-30, 2019	121,232 ⁽¹⁾	106.68	—	—
Total	<u>203,516</u>		<u>—</u>	

- ⁽¹⁾ Shares surrendered to us to satisfy tax withholding obligations in connection with the vesting of restricted stock awards issued to employees.

ITEM 6. EXHIBITS

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

Exhibit Index

Exhibit Number	Exhibit Description
3.1	Amended and Restated By-laws, dated July 29, 2019 (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K of Fiserv, Inc. filed July 29, 2019).
4.1	Amendment No. 1 to Term Loan Credit Agreement, dated as of July 26, 2019 (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of Fiserv, Inc. filed July 29, 2019).
4.2	Amendment No. 3 to Revolving Credit Agreement, dated as of July 26, 2019 (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K of Fiserv, Inc. filed July 29, 2019).
4.3	Amendment to the Shareholder Agreement and Registration Rights Agreement, dated as of September 9, 2019, by and between New Omaha Holdings L.P. and Fiserv, Inc. (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of Fiserv, Inc. filed September 9, 2019).
10.1	Employment Agreement, dated January 16, 2019, between Fiserv, Inc. and Frank J. Bisignano (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Fiserv, Inc. filed July 29, 2019).
10.2	Key Executive Employment and Severance Agreement, dated January 16, 2019, between Fiserv, Inc. and Frank J. Bisignano (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of Fiserv, Inc. filed July 29, 2019).
10.3	2007 Stock Incentive Plan for Key Employees of First Data Corporation and its Affiliates (incorporated by reference to Exhibit 99.1 to the Post-Effective Amendment No. 1 on Form S-8 to the Form S-4 Registration Statement of Fiserv, Inc. filed July 29, 2019).
	2007 Stock Incentive Plan for Key Employees of First Data Corporation and its Affiliates Forms of Award Agreements
10.4	- Form of Stock Option Agreement for Executive Committee Members
10.5	- Form of Stock Option Agreement for U.S. Employees effective for grants in or after January 2014
10.6	First Data Corporation 2015 Omnibus Incentive Plan (incorporated by reference to Exhibit 99.2 to the Post-Effective Amendment No. 1 on Form S-8 to the Form S-4 Registration Statement of Fiserv, Inc. filed July 29, 2019).
	First Data Corporation 2015 Omnibus Incentive Plan Forms of Award Agreements
10.7	- Form of Option Agreement for Management Committee and Directors
10.8	- Form of Option Grant Notice and Option Grant Agreement
10.9	- Form of Restricted Stock Grant Notice and Restricted Stock Grant Agreement
10.10	- Form of Restricted Stock Award Agreement for Management Committee and Directors
10.11	- Form of Restricted Stock Award Agreement
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 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)

* Filed with this quarterly report on Form 10-Q are the following documents formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Consolidated Statements of Income for the three and nine months ended September 30, 2019 and 2018, (ii) the Consolidated Statements of Comprehensive Income for the three and nine months ended September 30, 2019 and 2018, (iii) the Consolidated Balance Sheets at September 30, 2019 and December 31, 2018, (iv) the Consolidated Statements of Cash Flows for the nine months ended September 30, 2019 and 2018, and (v) Notes to Consolidated Financial Statements.

SIGNATURES

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

FISERV, INC.

Date: November 7, 2019

By: /s/ Robert W. Hau

Robert W. Hau

Chief Financial Officer and Treasurer

Date: November 7, 2019

By: /s/ Kenneth F. Best

Kenneth F. Best

Chief Accounting Officer

FORM OF STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of _____ (the “Grant Date”) is made by and between New Omaha Holdings Corporation, a Delaware corporation (hereinafter referred to as the “Company”), and the individual whose name is set forth on the signature page hereof, who is an employee of the Company or a Subsidiary or Affiliate of the Company (hereinafter referred to as the “Optionee”). Any capitalized terms herein not otherwise defined in Article I shall have the meaning set forth in the 2007 Stock Incentive Plan for Key Employees of First Data Corporation and its Affiliates (the “Plan”).

WHEREAS, the Company wishes to carry out the Plan, the terms of which are hereby incorporated by reference and made a part of this Agreement; and

WHEREAS, the Compensation Committee of the Board of the Company (or, if no such committee is appointed, the Board) (the “Committee”) has determined that it would be to the advantage and best interest of the Company and its shareholders to grant the Option provided for herein to the Optionee as an incentive for increased efforts during his term of office with the Company or its Subsidiaries or Affiliates, and has advised the Company thereof and instructed the undersigned officers to issue said Option;

NOW, THEREFORE, in consideration of the mutual covenants herein contained and other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto do hereby agree as follows:

ARTICLE 1

DEFINITIONS

Whenever the following terms are used in this Agreement, they shall have the meaning specified below unless the context clearly indicates to the contrary.

Section 1.1. Base Price

“Base Price” shall mean \$ _____.

Section 1.2. Cause

“Cause” shall have the meaning ascribed to it in any employment, severance or change in control agreement between the Optionee and the Company or any of its Affiliates, or, if there is no such agreement, “Cause” shall mean (a) the Optionee’s continued failure substantially to perform the Optionee’s duties with the Company or any Subsidiary or Affiliate thereof (other than as a result of total or partial incapacity due to physical or mental illness) for a period of 10 days following written notice by the Company to the Optionee of such failure, (b) the Optionee’s conviction of, or plea of nolo contendere to a crime constituting (x) a felony under the laws of the United States or any state thereof or (y) a misdemeanor involving moral turpitude, (c) the Optionee’s willful malfeasance or willful misconduct in connection with the Optionee’s duties with the Company or any of its Subsidiaries or Affiliates or any willful misrepresentation, willful

act or willful omission which is injurious to the financial condition or business reputation of the Company or its Affiliates or (d) the Optionee's material breach of the provisions of Section 23 of the Management Stockholder's Agreement. For purposes hereof, no act, or failure to act, by the Optionee will be deemed "willful" unless done, or omitted to be done, by the Optionee not in good faith and without reasonable belief the Optionee's act, or failure to act, was in the best interest of the Company, and under no circumstances will the failure to meet performance targets, after a good faith attempt to do so, in and of itself constitute Cause.

Section 1.3. Closing Date

"Closing Date" shall have the same meaning as that term is defined in the Merger Agreement.

Section 1.4. Time Option

"Time Option" shall mean the right and option to purchase, on the terms and conditions set forth herein, all or any part of an aggregate of the number of shares of Common Stock set forth on the signature page hereof opposite the term Time Option, having a per share exercise price equal to the Base Price.

Section 1.5. Disability

"Disability" shall have the meaning ascribed to it in any employment agreement between Optionee and the Company or any of its Subsidiaries, or, if there is no such employment agreement, "Disability" as defined in the long-term disability plan of the Company.

Section 1.6. Family Transferees

"Family Transferees" shall mean (i) an Optionee's spouse or children (collectively, "relatives") and (ii) a trust of which there are no beneficiaries other than such Optionee and the relatives of such Optionee.

Section 1.7. Fiscal Year

"Fiscal Year" shall mean each of the 2008, 2009, 2010, 2011 and 2012 fiscal years of the Company.

Section 1.8. Good Reason

"Good Reason" shall have the meaning ascribed to it any employment agreement between the Optionee and the Company or any of its subsidiaries or Affiliates, or, if there is no such employment agreement, "Good Reason" shall mean (i) a reduction in the Optionee's base salary or the Optionee's annual incentive compensation opportunity (other than a general reduction in base salary or annual incentive compensation opportunities that affects all members of senior management of the Company and its subsidiaries equally); (ii) a relocation of Optionee's primary workplace by more than fifty (50) miles from the current workplace; or (iii) a substantial reduction in or demotion of Optionee's duties, responsibilities or title (other than a

change in title that is the result of a broad restructuring of the Company's titling of officers), in each case other than any isolated, insubstantial and inadvertent failure by the Company that is not in bad faith and is cured within ten (10) business days after the Optionee gives the Company notice of such event; provided that "Good Reason" shall cease to exist for an event on the 60th day following the later of its occurrence or the Optionee's knowledge thereof, unless the Optionee has given the Company written notice thereof prior to such date.

Section 1.9. Liquidity Event

"Liquidity Event" shall mean, in one or a series of transactions, a merger, recapitalization or other sale by the Sponsor or its Affiliates (including through a Public Offering) of Common Stock or other voting securities of the Company that results in the Sponsor no longer owning 90% of the number of shares of Common Stock or other voting securities of the Company (or any resulting company after a merger) owned, directly or indirectly, by the Sponsor, determined by measuring such number of shares as of that point in time that the Sponsor held its largest number of shares of Common Stock or other voting securities of the Company (or such resulting company after a merger).

Section 1.10. Management Stockholder's Agreement

"Management Stockholder's Agreement" shall mean that certain Management Stockholder's Agreement between the Optionee and the Company.

Section 1.11. Measurement Date

"Measurement Date" shall mean any date upon which a Change in Control or a Liquidity Event occurs.

Section 1.12. Merger Agreement

"Merger Agreement" shall mean the Agreement and Plan of Merger by and among New Omaha Holdings L.P., Omaha Acquisition Corporation and First Data Corporation, dated April 1, 2007, as the same may be amended from time to time.

Section 1.13. Option

"Option" shall mean the aggregate of the Time Option and the Performance Option granted under Section 2.1 of this Agreement.

Section 1.14. Performance Option

"Performance Option" shall mean the right and option to purchase, on the terms and conditions set forth herein, all or any part of an aggregate of the number of shares of Common Stock set forth on the signature page hereof opposite the term Performance Option, having a per share exercise price equal to the Base Price.

Section 1.15. Secretary

“Secretary” shall mean the Secretary of the Company.

Section 1.16. Sponsor

“Sponsor” shall mean the investment funds affiliated with Kohlberg Kravis Roberts & Co. L.P.

Section 1.17. Sponsor IRR

“Sponsor IRR” shall mean, on any given date, a pretax compounded annual internal rate of return, based on the passage of time from the Closing Date, of at least 25% realized, directly or indirectly, by the Sponsor after the Closing Date on any Shares held by the Sponsor, on a per Share, fully diluted basis, based on the amount invested by the Sponsor in the equity securities of the Company. For the avoidance of doubt, (a) any calculation of Sponsor IRR will for purposes of Section 3.1(d) be calculated solely with respect to Sponsor Shares actually sold or otherwise disposed of in the applicable transaction (but including cash dividends or other cash distributions paid on Sponsor Shares), and (b) Sponsor IRR will not be calculated taking into account the receipt by the Sponsor or any of its affiliates of any management, monitoring, transaction or other fees payable to such parties by the Company or any of its Subsidiaries; provided that any management fees received by such parties in excess of those contemplated in the management agreement between the Sponsor and the Company (including any stipulated or specified increases increase mechanisms) shall be included in Sponsor Return.

Section 1.18. Sponsor Return

“Sponsor Return” shall mean, on any given date, all cash proceeds actually received, directly or indirectly, by the Sponsor after the Closing Date, including the receipt of any cash dividends or other cash distributions thereon, on a per Share, fully diluted basis, in an amount that equals or exceeds the product of 2.5 and the Base Price. For the avoidance of doubt, (a) any calculation of Sponsor Return will for purposes of Section 3.1(d) be calculated solely with respect to Sponsor Shares actually sold or otherwise disposed of in the applicable transaction, and (b) Sponsor Return will not be calculated taking into account the receipt by the Sponsor or any of its affiliates of any management, monitoring, transaction or other fees payable to such parties by the Company or any of its Subsidiaries; provided that any management fees received by such parties in excess of those contemplated in the management agreement between the Sponsor and the Company (including any stipulated or specified increases increase mechanisms) shall be included in Sponsor Return.

ARTICLE II

GRANT OF OPTIONS

Section 2.1. Grant of Options

For good and valuable consideration, on and as of the date hereof the Company irrevocably grants to the Optionee the following Stock Options: (a) the Time Option and (b) the Performance Option, in each case on the terms and conditions set forth in this Agreement.

Section 2.2. Exercise Price

Subject to Section 2.4, the exercise price of the shares of Common Stock covered by the Option (the "Exercise Price") shall be equal to the Base Price.

Section 2.3. No Guarantee of Employment

Nothing in this Agreement or in the Plan shall confer upon the Optionee any right to continue in the employ of the Company or any Subsidiary or Affiliate or shall interfere with or restrict in any way the rights of the Company and its Subsidiaries or Affiliates, which are hereby expressly reserved, to terminate the employment of the Optionee at any time for any reason whatsoever, with or without cause, subject to the applicable provisions of, if any, the Optionee's employment agreement with the Company or offer letter provided by the Company to the Optionee.

Section 2.4. Adjustments to Option

The Options shall be subject to the adjustment provisions of Sections 8 and 9 of the Plan, provided, however, that in the event of the payment of an extraordinary dividend by the Company to its stockholders, then: the Exercise Prices of the Options shall be reduced by the amount of the dividend paid, but only to the extent the Committee determines it to be permitted under applicable tax laws and not have adverse tax consequences to the Optionee under Section 409A of the Code; and, if such reduction cannot be fully effected due to such tax laws and it will not have adverse tax consequences to the Optionee, then the Company shall pay to the Optionee a cash payment, on a per Share basis, equal to the balance of the amount of the dividend not permitted to be applied to reduce the Exercise Price of the applicable Option as follows: (a) for each Share subject to a vested Option, immediately upon the date of such dividend payment; and (b), for each Share subject to an unvested Option, on the date on which such Option becomes vested and exercisable with respect to such Share.

ARTICLE III

PERIOD OF EXERCISABILITY

Section 3.1. Commencement of Exercisability

(a) So long as the Optionee continues to be employed by the Company or any other Service Recipients, the Options shall become exercisable pursuant to the following schedules:

(i) *Time Options*. Each of the Time Options shall become vested and exercisable with respect to 20% of the Shares subject to each such Option on each of the first five anniversaries of the Closing Date.

(ii) *Performance Option*. The Performance Option shall be eligible to become vested and exercisable as to 20% of the Shares subject to such Option at the end of each of the five Fiscal Years if the Company, on a consolidated basis, achieves its annual EBITDA targets as set forth in Schedule A attached hereto (each an “EBITDA Target”) for the given Fiscal Year. Notwithstanding the foregoing, in the event that an EBITDA Target is not achieved in a particular Fiscal Year, then that portion of the Performance Option that was eligible to vest but failed to vest due to the Company’s failure to achieve its EBITDA Target shall nevertheless vest and become exercisable at the end of any subsequent Fiscal Year if the cumulative EBITDA Target (each a “Cumulative EBITDA Target”) set forth on Schedule A attached hereto is achieved on a cumulative basis at the end of such Fiscal Year with respect to all then completed Fiscal Years;

(b) Notwithstanding any of Section 3.1(a) above, upon the earlier occurrence of a Measurement Date:

(i) the Time Options shall become immediately exercisable as to 100% of the shares of Common Stock subject to such Option immediately prior to a Measurement Date (but only to the extent such Option has not otherwise terminated or become exercisable); and

(ii) the Performance Option shall (1) become immediately exercisable as to 100% of the shares of Common Stock subject to such Option immediately prior to a Measurement Date (but only to the extent such Option has not otherwise terminated or become exercisable) if as a result of the event constituting the Measurement Date, (x) the Sponsor IRR is achieved on 100% of the Sponsors’ aggregate investment, directly or indirectly, in the equity securities of the Company (the “Sponsor Shares”) or (y) the Sponsor Return is earned on 100% of the Sponsor Shares and (2) become vested as to the percentage of the Shares of Common Stock subject to such Option immediately prior to a Measurement Date (but only to the extent such Option has not otherwise terminated or become exercisable) that will result in, as a result of the Measurement Date, (x) the achievement of the Sponsor IRR on 100% of the Sponsors’ aggregate investment, directly or indirectly, in the equity securities of the Company (the “Sponsor Shares”) or (y) the achievement of the Sponsor Return on 100% of the Sponsor Shares, in each case taking into account the vesting of such Shares of Common Stock subject to Option that so vest.

(iii) In the event that the Sponsors receive marketable securities in an event constituting a Measurement Date (including, in the case of a Liquidity Event following a Public Offering, shares of Common Stock), (1) Sponsor IRR and Sponsor Return shall be initially calculated at the time of the Measurement Date without regard to the value of the marketable securities so received and such resulting Sponsor Return and Sponsor IRR shall be used to determine vesting of Shares of Common Stock subject to Performance Options in accordance with Section 3.1(b)(ii) above; and (2) if the Sponsor Return and/or Sponsor IRR as calculated in (1) above do not result in 100% vesting of the outstanding exercisable Shares of Common Stock subject to such Option immediately prior to the Measurement Date, Sponsor Return and Sponsor IRR shall be recalculated upon each direct or indirect disposition of such

marketable securities by the Sponsor for cash, discounting the cash received to determine its present value at the time of the Measurement Date. If such recalculated Sponsor IRR and/or Sponsor Return would have resulted in 100% vesting of all Shares of Common Stock subject to Performance Options at the time of the Measurement Date, then all such Options shall immediately vest; provided, however, that any Optionee whose Performance Options have been forfeited or cancelled between the occurrence of the Measurement Date and the subsequent vesting of such Performance Options, in accordance with this Section 3.1(b)(iii), shall be entitled to the difference between the price per Share paid in the Measurement Date and the strike price of the Performance Options that were so cancelled or forfeited.

(c) Notwithstanding the foregoing, no Option shall become exercisable as to any additional shares of Common Stock following the termination of employment of the Optionee for any reason and any Option, which is unexercisable as of the Optionee's termination of employment, shall immediately expire without payment therefor; provided that following a termination of employment of the Optionee by reason of the Optionee's death or Disability, or as result of a termination by the Company without Cause or a resignation by the Optionee with Good Reason, (i) the unvested Time Options that would have vested on the next anniversary of the Closing Date shall vest pro rata as determined by multiplying the number of Shares of Common Stock subject to Option that would have so vested by a fraction, the numerator of which corresponds to the number of completed months of employment since the anniversary of the Closing Date immediately preceding the date of the Optionee's termination of employment and the denominator of which is 12 (the "Time Pro Rata Fraction") and (ii) the unvested Performance Options that would have vested had the Optionee remained employed through the end of the Fiscal Year in which the termination of employment occurs shall vest pro rata to the extent that the Company actually achieves either (x) the Annual Performance Targets or (y) the Cumulative Performance Targets for such Fiscal Year, each as set forth on Schedule A, as determined by the multiplying the number of Shares of Common Stock subject to Option that would have so vested by a fraction, the numerator of which corresponds to the number of completed months of employment in the Fiscal Year in which the termination of employment occurs and the denominator of which is 12 (the "Performance Pro Rata Fraction"). For the avoidance of doubt, the numerator of the Time Pro Rata Fraction and the Performance Pro Rata Fraction shall in all cases be a whole number.

Section 3.2. Expiration of Option

Except as otherwise provided in Section 5 or 6 of the Management Stockholder's Agreement, the Optionee may not exercise the Options to any extent after the first to occur of the following events:

- (a) The tenth anniversary of the Closing Date so long as the Optionee remains employed with the Company or any Service Recipient through such date;
- (b) The first anniversary of the date of the Optionee's termination of employment with the Company and all Service Recipients, if the Optionee's employment is terminated by reason of death or Disability (unless earlier terminated as provided in Section 3.2(h) below);

(c) Immediately upon the date of the Optionee's termination of employment by the Company and all Service Recipients for Cause;

(d) Immediately upon the date of the Optionee's termination of employment by the Company and all Service Recipients by the Optionee without Good Reason (except due to death or Disability);

(e) One hundred and eighty (180) days after the date of an Optionee's termination of employment by the Company and all Service Recipients without Cause (for any reason other than as set forth in Section 3.2(b));

(f) One hundred and eighty (180) days after the date of an Optionee's termination of employment with the Company and all Service Recipients by the Optionee for Good Reason;

(g) The date the Options are terminated pursuant to Section 5 or 6 of the Management Stockholder's Agreement; or

(h) At the discretion of the Company, if the Committee so determines pursuant to Section 9 of the Plan.

Notwithstanding the foregoing, the time periods set forth in this Section 3.2 shall not begin to run with respect to Performance Options that vest in accordance with Section 3.1(a)(ii) or Section 3.1(c)(ii) above until the time at which the Board certifies the financial statements for the Company for the Fiscal Year immediately preceding the Fiscal Year in which, or for the Fiscal Year in which, termination of employment occurs.

ARTICLE IV

EXERCISE OF OPTION

Section 4.1. Person Eligible to Exercise

During the lifetime of the Optionee, only the Optionee (or his or her duly authorized legal representative) may exercise an Option or any portion thereof. After the death of the Optionee, any exercisable portion of an Option may, prior to the time when an Option becomes unexercisable under Section 3.2, be exercised by his personal representative or by any person empowered to do so under the Optionee's will or under the then applicable laws of descent and distribution.

Section 4.2. Partial Exercise

Any exercisable portion of an Option or the entire Option, if then wholly exercisable, may be exercised in whole or in part at any time prior to the time when the Option or portion thereof becomes unexercisable under Section 3.2; provided, however, that any partial exercise shall be for whole shares of Common Stock only.

Section 4.3. Manner of Exercise

An Option, or any exercisable portion thereof, may be exercised solely by delivering to the Secretary or his office all of the following prior to the time when the Option or such portion becomes unexercisable under Section 3.2:

- (a) Notice in writing signed by the Optionee or the other person then entitled to exercise an Option or portion thereof, stating that the Option or portion thereof is thereby exercised, such notice complying with all applicable rules established by the Committee;
- (b) (i) Full payment (in cash or by check or by a combination thereof) for the shares with respect to which such Option or portion thereof is exercised or (ii) indication that the Optionee elects to have the number of Shares that would otherwise be issued to the Optionee reduced by a number of Shares having an equivalent Fair Market Value to the payment that would otherwise be made by Optionee to the Company pursuant to clause (i) of this subsection (b);
- (c) Full payment (in cash or by check or by a combination thereof) to satisfy the minimum withholding tax obligation with respect to which such Option or portion thereof is exercised, unless the Committee permits the Optionee to elect to have the number of Shares that would otherwise be issued to the Optionee reduced by a number of Shares having an equivalent Fair Market Value to the payment that would otherwise be made by Optionee to the Company in respect of such tax obligation, such permission not to be unreasonably withheld by the Committee;
- (d) A bona fide written representation and agreement, in a form satisfactory to the Committee, signed by the Optionee or other person then entitled to exercise such Option or portion thereof, stating that the shares of Common Stock are being acquired for his own account, for investment and without any present intention of distributing or reselling said shares or any of them except as may be permitted under the Securities Act of 1933, as amended (the "Act"), and then applicable rules and regulations thereunder, and that the Optionee or other person then entitled to exercise such Option or portion thereof will indemnify the Company against and hold it free and harmless from any loss, damage, expense or liability resulting to the Company if any sale or distribution of the shares by such person is contrary to the representation and agreement referred to above; provided, however, that the Committee may, in its reasonable discretion, take whatever additional actions it deems reasonably necessary to ensure the observance and performance of such representation and agreement and to effect compliance with the Act and any other federal or state securities laws or regulations; and
- (e) In the event the Option or portion thereof shall be exercised pursuant to Section 4.1 by any person or persons other than the Optionee, appropriate proof of the right of such person or persons to exercise the option.

Without limiting the generality of the foregoing, the Committee may require an opinion of counsel acceptable to it to the effect that any subsequent transfer of shares acquired on exercise of an Option does not violate the Act, and may issue stop-transfer orders covering such

shares. Share certificates evidencing stock issued on exercise of this Option shall bear an appropriate legend referring to the provisions of subsection (d) above and the agreements herein. The written representation and agreement referred to in subsection (d) above shall, however, not be required if the shares to be issued pursuant to such exercise have been registered under the Act, and such registration is then effective in respect of such shares.

Section 4.4. Conditions to Issuance of Stock Certificates

The shares of stock deliverable upon the exercise of an Option, or any portion thereof, may be either previously authorized but unissued shares or issued shares, which have then been reacquired by the Company. Such shares shall be fully paid and nonassessable. The Company shall not be required to issue or deliver any certificate or certificates for shares of stock purchased (if certified, or if not certified, register the issuance of such shares on its books and records) upon the exercise of an Option or portion thereof prior to fulfillment of all of the following conditions:

(a) The obtaining of approval or other clearance from any state or federal governmental agency which the Committee shall, in its reasonable and good faith discretion, determine to be necessary or advisable;

(b) The execution by the Optionee of the Management Stockholder's Agreement and a Sale Participation Agreement; and

(c) The lapse of such reasonable period of time following the exercise of the Option as the Committee may from time to time establish for reasons of administrative convenience or as may otherwise be required by applicable law.

Section 4.5. Rights as Stockholder

Except as otherwise provided in Section 2.4 of this Agreement, the holder of an Option shall not be, nor have any of the rights or privileges of, a stockholder of the Company in respect of any shares purchasable upon the exercise of the Options or any portion thereof unless and until certificates representing such shares shall have been issued by the Company to such holder or the Shares have otherwise been recorded in the records of the Company as owned by such holder.

ARTICLE V

MISCELLANEOUS

Section 5.1. Option Not Transferable

Other than to Family Transferees, neither the Options nor any interest or right therein or part thereof shall be liable for the debts, contracts or engagements of the Optionee or his successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal

or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect; provided, however, that this Section 5.1 shall not prevent transfers by will or by the applicable laws of descent and distribution.

Section 5.2. Notices

Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of its Secretary, and any notice to be given to the Optionee shall be addressed to him at the address given beneath his signature hereto. By a notice given pursuant to this Section 5.2, either party may hereafter designate a different address for notices to be given to him. Any notice, which is required to be given to the Optionee, shall, if the Optionee is then deceased, be given to the Optionee's personal representative if such representative has previously informed the Company of his status and address by written notice under this Section 5.2. Any notice shall have been deemed duly given when (i) delivered in person, (ii) enclosed in a properly sealed envelope or wrapper addressed as aforesaid, deposited (with postage prepaid) in a post office or branch post office regularly maintained by the United States Postal Service, or (iii) enclosed in a properly sealed envelope or wrapper addressed as aforesaid, deposited (with fees prepaid) in an office regularly maintained by FedEx, UPS, or comparable non-public mail carrier.

Section 5.3. Titles; Pronouns

Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement. The masculine pronoun shall include the feminine and neuter, and the singular shall include the plural, where the context so indicates.

Section 5.4. Applicability of Plan, Management Stockholder's Agreement and Sale Participation Agreement

The Options and the shares of Common Stock issued to the Optionee upon exercise of the Options shall be subject to all of the terms and provisions of the Plan, the Management Stockholder's Agreement and a Sale Participation Agreement, to the extent applicable to the Options and such Shares.

Section 5.5. Amendment

Subject to Section 10 of the Plan, this Agreement may be amended only by a writing executed by the parties hereto, which specifically states that it is amending this Agreement.

Section 5.6. Governing Law

The laws of the State of Delaware shall govern the interpretation, validity and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

Section 5.7. Arbitration

In the event of any controversy among the parties hereto arising out of, or relating to, this Agreement which cannot be settled amicably by the parties, such controversy shall be finally, exclusively and conclusively settled by mandatory arbitration conducted expeditiously in accordance with the American Arbitration Association rules, by a single independent arbitrator. Such arbitration process shall take place within the New York, New York metropolitan area. The decision of the arbitrator shall be final and binding upon all parties hereto and shall be rendered pursuant to a written decision, which contains a detailed recital of the arbitrator's reasoning. Judgment upon the award rendered may be entered in any court having jurisdiction thereof. Each party shall bear its own legal fees and expenses, unless otherwise determined by the arbitrator.

IN WITNESS WHEREOF, this Agreement has been executed and delivered by the parties hereto.

NEW OMAHA HOLDINGS
CORPORATION

By:

Its:

Option Grants:

Aggregate number of shares of Common Stock for which the **Time Option** granted hereunder is exercisable:

Aggregate number of shares of Common Stock for which the **Performance Option** granted hereunder is exercisable:

Grant Date:

OPTIONEE:

Name:

Address

**STOCK OPTION AGREEMENT
FOR U.S. EMPLOYEES
EFFECTIVE FOR GRANTS IN OR AFTER JANUARY 2014**

Time Option Only Grant

THIS AGREEMENT, is made by and between First Data Holdings Inc., a Delaware corporation (hereinafter referred to as the "Company"), and the individual whose name is set forth on the Award Notice, who is an employee of the Company or a Subsidiary or Affiliate of the Company (hereinafter referred to as the "Optionee"). Any capitalized terms herein not otherwise defined in Article I shall have the meaning set forth in the 2007 Stock Incentive Plan for Employees of First Data Corporation and its Affiliates (the "Plan").

WHEREAS, the Company wishes to carry out the Plan, the terms of which are hereby incorporated by reference and made a part of this Agreement; and

WHEREAS, the Compensation Committee of the Board of the Company (or, if no such committee is appointed, the Board) (the "Committee") has determined that it would be to the advantage and best interest of the Company and its stockholders to grant the Option provided for herein to the Optionee as an incentive for increased efforts during the Optionee's term of employment with the Company or its Subsidiaries or Affiliates, and has advised the Company thereof and instructed the undersigned officers to issue said Option;

NOW, THEREFORE, in consideration of the mutual covenants herein contained and other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto do hereby agree as follows:

ARTICLE I

DEFINITIONS

Whenever the following terms are used in this Agreement, they shall have the meaning specified below unless the context clearly indicates to the contrary.

Section 1.1. Base Price. "Base Price" shall mean the Fair Market Value as of the Grant Date, as specified in the Award Notice.

Section 1.2. Cause. "Cause" shall have the meaning ascribed to it in any employment, severance or change in control agreement between the Optionee and the Company or any of its Affiliates, or, if there is no such agreement, "Cause" shall mean (a) the Optionee's continued failure substantially to perform the Optionee's duties with the Company or any Subsidiary or Affiliate thereof (other than as a result of total or partial incapacity due to physical or mental illness) for a period of 10 days following written notice by the Company to the Optionee of such failure, (b) the Optionee's conviction of, or plea of nolo contendere to a crime constituting (x) a felony under the laws of the United States or any state thereof or (y) a misdemeanor involving moral turpitude, (c) the Optionee's willful malfeasance or willful misconduct in connection with th

e Optionee's duties with the Company or any of its Subsidiaries or Affiliates or any willful misrepresentation, willful act or willful omission which is injurious to the financial condition or business reputation of the Company or its Affiliates or (d) the Optionee's material breach of the provisions of Section 23 of the Management Stockholder's Agreement. For purposes hereof, no act, or failure to act, by the Optionee will be deemed "willful" unless done, or omitted to be done, by the Optionee not in good faith and without reasonable belief the Optionee's act, or failure to act, was in the best interest of the Company, and under no circumstances will the failure to meet performance targets, after a good faith attempt to do so, in and of itself constitute Cause.

Section 1.3. Disability. "Disability" shall have the meaning ascribed to it in any employment agreement between Optionee and the Company or any of its Subsidiaries, or, if there is no such employment agreement, "Disability" as defined in the long-term disability plan of the Company.

Section 1.4. Family Transferees. "Family Transferees" shall mean (i) an Optionee's spouse or children (collectively, "relatives") and (ii) a trust of which there are no beneficiaries other than such Optionee and the relatives of such Optionee.

Section 1.5. Good Reason. "Good Reason" shall have the meaning ascribed to it any employment agreement between the Optionee and the Company or any of its subsidiaries or Affiliates, or, if there is no such employment agreement, "Good Reason" shall mean (i) a reduction in the Optionee's base salary or the Optionee's annual incentive compensation opportunity (other than a general reduction in base salary or annual incentive compensation opportunities that affects all members of senior management of the Company and its subsidiaries equally); (ii) a relocation of Optionee's primary workplace by more than fifty (50) miles from the current workplace; or (iii) a substantial reduction in or demotion of Optionee's duties, responsibilities or title (other than a change in title that is the result of a broad restructuring of the Company's titling of officers), in each case other than any isolated, insubstantial and inadvertent failure by the Company that is not in bad faith and is cured within ten (10) business days after the Optionee gives the Company notice of such event; provided that "Good Reason" shall cease to exist for an event on the 60th day following the later of its occurrence or the Optionee's knowledge thereof, unless the Optionee has given the Company written notice thereof prior to such date.

Section 1.6. Grant Date. "Grant Date" shall mean the grant date reflected on the Award Notice.

Section 1.7. Liquidity Event. "Liquidity Event" shall mean a merger, recapitalization or sale or disposition by the Sponsor and its Affiliates (including through a Public Offering) of Common Stock or other voting securities of the Company, in one or more transactions (whether related or unrelated), that results in Kohlberg Kravis Roberts and Co. L.P. and the Sponsor disposing of at least 90% of the maximum number of shares of Common Stock or other voting securities of the Company (or any resulting company after a merger) owned, directly or indirectly, by Kohlberg Kravis Roberts and Co. L.P. and the Sponsor from time to time.

Section 1.8. Management Stockholder's Agreement. "Management Stockholder's Agreement" shall mean that certain Management Stockholder's Agreement between the Optionee and the Company.

Section 1.9. Measurement Date. "Measurement Date" shall mean any date upon which a Change in Control or a Liquidity Event occurs.

Section 1.10. Merger Agreement. "Merger Agreement" shall mean the Agreement and Plan of Merger by and among New Omaha Holdings L.P., Omaha Acquisition Corporation and First Data Corporation, dated April 1, 2007, as the same may be amended from time to time.

Section 1.11. Option. "Option" shall mean the Time Option granted under Section 2.1 of this Agreement.

Section 1.12. Secretary. "Secretary" shall mean the Secretary of the Company.

Section 1.13. Sponsor. "Sponsor" shall mean the investment funds affiliated with Kohlberg Kravis Roberts & Co. L.P.

Section 1.14. Time Option. "Time Option" shall mean the right and option to purchase, on the terms and conditions set forth herein, all or any part of an aggregate of the number of shares of Common Stock set forth on the Award Notice, having a per share exercise price equal to the Base Price.

ARTICLE II

GRANT OF OPTIONS

Section 2.1. Grant of Options. For good and valuable consideration, on and as of the date hereof the Company irrevocably grants to the Optionee the Time Option on the terms and conditions set forth in this Agreement.

Section 2.2. Exercise Price. Subject to Section 2.4, the exercise price of the shares of Common Stock covered by the Option (the "Exercise Price") shall be equal to the Base Price.

Section 2.3. No Guarantee of Employment. Nothing in this Agreement or in the Plan shall confer upon the Optionee any right to continue in the employ of the Company or any Subsidiary or Affiliate or shall interfere with or restrict in any way the rights of the Company and its Subsidiaries or Affiliates, which are hereby expressly reserved, to terminate the employment of the Optionee at any time for any reason whatsoever, with or without Cause, subject to the applicable provisions of, if any, the Optionee's employment agreement with the Company or offer letter provided by the Company to the Optionee.

Section 2.4. Adjustments to Option. The Options shall be subject to the adjustment provisions of Sections 8 and 9 of the Plan, provided, however, that in the event of the payment of an extraordinary dividend by the Company to its stockholders, then: the Exercise Prices of the Options shall be reduced by the amount of the dividend paid, but only to the extent th

e Committee determines it to be permitted under applicable tax laws and not have adverse tax consequences to the Optionee under Section 409A of the Code; and, if such reduction cannot be fully effected due to such tax laws and it will not have adverse tax consequences to the Optionee, then the Company shall pay to the Optionee a cash payment, on a per Share basis, equal to the balance of the amount of the dividend not permitted to be applied to reduce the Exercise Price of the applicable Option as follows: (a) for each Share subject to a vested Option, immediately upon the date of such dividend payment; and (b), for each Share subject to an unvested Option, on the date on which such Option becomes vested and exercisable with respect to such Share.

ARTICLE III

PERIOD OF EXERCISABILITY

Section 3.1. Commencement of Exercisability

(a) So long as the Optionee continues to be employed by the Company or any other Service Recipients, the Option shall become exercisable pursuant to the schedule specified in the Optionee's Award Notice:

(b) Notwithstanding any of Section 3.1(a) above, upon the earlier occurrence of a Measurement Date:

Time Options shall become immediately exercisable as to 100% of the shares of Common Stock subject to such Option immediately prior to a Measurement Date (but only to the extent such Option has not otherwise terminated or become exercisable).

(c) Notwithstanding the foregoing, no Option shall become exercisable as to any additional shares of Common Stock following the termination of employment of the Optionee for any reason and any Option, which is unexercisable as of the Optionee's termination of employment, shall immediately expire without payment therefor; provided that following a termination of employment of the Optionee by reason of the Optionee's death or Disability, or as result of a termination by the Company without Cause or a resignation by the Optionee with Good Reason, the unvested Time Options that would have vested on the next anniversary of the Grant Date shall vest pro rata as determined by multiplying the number of Shares of Common Stock subject to the Option that would have so vested by a fraction, the numerator of which corresponds to the number of completed months of employment since the anniversary of the Grant Date immediately preceding the date of the Optionee's termination of employment and the denominator of which is 12 (the "Time Pro Rata Fraction"). For the avoidance of doubt, the numerator of the Time Pro Rata Fraction shall in all cases be a whole number.

Section 3.2. Expiration of Option. Except as otherwise provided in Section 5 or 6 of the Management Stockholder's Agreement, the Optionee may not exercise the Options to any extent after the first to occur of the following events:

(a) The tenth anniversary of the Grant Date;

- (b) The first anniversary of the date of the Optionee's termination of employment with the Company and all Service Recipients, if the Optionee's employment is terminated by reason of death or Disability (unless earlier terminated as provided in Section 3.2(h) below);
- (c) Immediately upon the date of the Optionee's termination of employment by the Company and all Service Recipients for Cause;
- (d) Immediately upon the date of the Optionee's termination of employment by the Company and all Service Recipients by the Optionee without Good Reason (except due to death or Disability);
- (e) One hundred and eighty (180) days after the date of an Optionee's termination of employment by the Company and all Service Recipients without Cause (for any reason other than as set forth in Section 3.2(b));
- (f) One hundred and eighty (180) days after the date of an Optionee's termination of employment with the Company and all Service Recipients by the Optionee for Good Reason;
- (g) The date the Options are terminated pursuant to Section 5 or 6 of the Management Stockholder's Agreement; or
- (h) At the discretion of the Company, if the Committee so determines pursuant to Section 9 of the Plan.

ARTICLE IV

EXERCISE OF OPTION

Section 4.1. Person Eligible to Exercise. During the lifetime of the Optionee, only the Optionee (or his or her duly authorized legal representative) may exercise an Option or any portion thereof. After the death of the Optionee, any exercisable portion of an Option may, prior to the time when an Option becomes unexercisable under Section 3.2, be exercised by his personal representative or by any person empowered to do so under the Optionee's will or under the then applicable laws of descent and distribution.

Section 4.2. Partial Exercise. Any exercisable portion of an Option or the entire Option, if then wholly exercisable, may be exercised in whole or in part at any time prior to the time when the Option or portion thereof becomes unexercisable under Section 3.2; provided, however, that any partial exercise shall be for whole shares of Common Stock only.

Section 4.3. Manner of Exercise. An Option, or any exercisable portion thereof, may be exercised solely by delivering to the Secretary or the Secretary's office all of the following prior to the time when the Option or such portion becomes unexercisable under Section 3.2:

- (a) Notice in writing signed by the Optionee or the other person then entitled to exercise an Option or portion thereof, stating that the Option or portion thereof is thereby exercised, such notice complying with all applicable rules established by the Committee;

(b) (i) Full payment (in cash or by check or by a combination thereof) for the shares with respect to which such Option or portion thereof is exercised or (ii) indication that the Optionee elects to have the number of Shares that would otherwise be issued to the Optionee reduced by a number of Shares having an equivalent Fair Market Value to the payment that would otherwise be made by Optionee to the Company pursuant to clause (i) of this subsection (b);

(c) Full payment (in cash or by check or by a combination thereof) to satisfy the minimum withholding tax obligation with respect to which such Option or portion thereof is exercised, unless the Committee permits the Optionee to elect to have the number of Shares that would otherwise be issued to the Optionee reduced by a number of Shares having an equivalent Fair Market Value to the payment that would otherwise be made by Optionee to the Company in respect of such tax obligation, such permission not to be unreasonably withheld by the Committee;

(d) A bona fide written representation and agreement, in a form satisfactory to the Committee, signed by the Optionee or other person then entitled to exercise such Option or portion thereof, stating that the shares of Common Stock are being acquired for his own account, for investment and without any present intention of distributing or reselling said shares or any of them except as may be permitted under the Securities Act of 1933, as amended (the "Act"), and then applicable rules and regulations thereunder, and that the Optionee or other person then entitled to exercise such Option or portion thereof will indemnify the Company against and hold it free and harmless from any loss, damage, expense or liability resulting to the Company if any sale or distribution of the shares by such person is contrary to the representation and agreement referred to above; provided, however, that the Committee may, in its reasonable discretion, take whatever additional actions it deems reasonably necessary to ensure the observance and performance of such representation and agreement and to effect compliance with the Act and any other federal or state securities laws or regulations; and

(e) In the event the Option or portion thereof shall be exercised pursuant to Section 4.1 by any person or persons other than the Optionee, appropriate proof of the right of such person or persons to exercise the Option.

Without limiting the generality of the foregoing, the Committee may require an opinion of counsel acceptable to it to the effect that any subsequent transfer of shares acquired on exercise of an Option does not violate the Act, and may issue stop-transfer orders covering such shares. Share certificates evidencing stock issued on exercise of this Option shall bear an appropriate legend referring to the provisions of subsection (d) above and the agreements herein. The written representation and agreement referred to in subsection (d) above shall, however, not be required if the shares to be issued pursuant to such exercise have been registered under the Act, and such registration is then effective in respect of such shares.

Section 4.4. Conditions to Issuance of Stock Certificates. The shares of stock deliverable upon the exercise of an Option, or any portion thereof, may be either previously authorized but unissued shares or issued shares, which have then been reacquired by the Company. Such shares shall be fully paid and nonassessable. The Company shall not be required to issue or deliver any certificate or certificates for shares of stock purchased (if certified, or if not certified, register th

e issuance of such shares on its books and records) upon the exercise of an Option or portion thereof prior to fulfillment of all of the following conditions:

- (a) The obtaining of approval or other clearance from any state or federal governmental agency which the Committee shall, in its reasonable and good faith discretion, determine to be necessary or advisable;
- (b) The execution by the Optionee of the Management Stockholder's Agreement and a Sale Participation Agreement; and
- (c) The lapse of such reasonable period of time following the exercise of the Option as the Committee may from time to time establish for reasons of administrative convenience or as may otherwise be required by applicable law.

Section 4.5. Rights as Stockholder. Except as otherwise provided in Section 2.4 of this Agreement, the holder of an Option shall not be, nor have any of the rights or privileges of, a stockholder of the Company in respect of any shares purchasable upon the exercise of the Options or any portion thereof unless and until certificates representing such shares shall have been issued by the Company to such holder or the Shares have otherwise been recorded in the records of the Company as owned by such holder.

ARTICLE V

MISCELLANEOUS

Section 5.1. Option Not Transferable. Other than to Family Transferees, neither the Options nor any interest or right therein or part thereof shall be liable for the debts, contracts or engagements of the Optionee or the Optionee's successors in interest or shall be subject to disposition by transfer, alienation, anticipation, pledge, encumbrance, assignment or any other means whether such disposition be voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy), and any attempted disposition thereof shall be null and void and of no effect; provided, however, that this Section 5.1 shall not prevent transfers by will or by the applicable laws of descent and distribution.

Section 5.2. Notices. Any notice to be given under the terms of this Agreement to the Company shall be addressed to the Company in care of its Secretary, and any notice to be given to the Optionee shall be addressed to the Optionee at the address listed in the Company's records. By a notice given pursuant to this Section 5.2, either party may hereafter designate a different address for notices to be given to such party. Any notice, which is required to be given to the Optionee, shall, if the Optionee is then deceased, be given to the Optionee's personal representative if such representative has previously informed the Company of his or her status and address by written notice under this Section 5.2. Any notice shall have been deemed duly given when (i) delivered in person, (ii) enclosed in a properly sealed envelope or wrapper addressed as aforesaid, deposited (with postage prepaid) in a post office or branch post office regularly maintained by the United States Postal Service, or (iii) enclosed in a properly sealed envelope or wrapper

r addressed as aforesaid, deposited (with fees prepaid) in an office regularly maintained by FedEx, UPS, or comparable non-public mail carrier.

Section 5.3. Titles; Pronouns. Titles are provided herein for convenience only and are not to serve as a basis for interpretation or construction of this Agreement. The masculine pronoun shall include the feminine and neuter, and the singular shall include the plural, where the context so indicates.

Section 5.4. Applicability of Plan, Management Stockholder's Agreement and Sale Participation Agreement. The Options and the shares of Common Stock issued to the Optionee upon exercise of the Options shall be subject to all of the terms and provisions of the Plan, the Management Stockholder's Agreement and a Sale Participation Agreement, to the extent applicable to the Options and such Shares.

Section 5.5. Amendment. Subject to Section 10 of the Plan, this Agreement may be amended only by a writing executed by the parties hereto, which specifically states that it is amending this Agreement.

Section 5.6. Governing Law. The laws of the State of Delaware shall govern the interpretation, validity and performance of the terms of this Agreement regardless of the law that might be applied under principles of conflicts of laws.

Section 5.7. Arbitration. In the event of any controversy among the parties hereto arising out of, or relating to, this Agreement which cannot be settled amicably by the parties, such controversy shall be finally, exclusively and conclusively settled by mandatory arbitration conducted expeditiously in accordance with the American Arbitration Association rules, by a single independent arbitrator. Such arbitration process shall take place within the New York, New York metropolitan area. The decision of the arbitrator shall be final and binding upon all parties hereto and shall be rendered pursuant to a written decision, which contains a detailed recital of the arbitrator's reasoning. Judgment upon the award rendered may be entered in any court having jurisdiction thereof. Each party shall bear its own legal fees and expenses, unless otherwise determined by the arbitrator.

**OPTION AGREEMENT
FIRST DATA CORPORATION
2015 OMNIBUS INCENTIVE PLAN**

Subject to the terms of the First Data Corporation 2015 Omnibus Incentive Plan (Plan), First Data Corporation (First Data) and the Participant (you) agree as follows:

1. **Definitions.** Whenever the following terms are used in this Option Agreement (Agreement), they have the meanings below. Capitalized terms that are not defined in this Agreement have the meanings defined in the Plan.

1.1 **Exercise Price.** The term Exercise Price means the exercise price on your Grant Notice.

1.2 **Grant Date.** The term Grant Date means the date on your Grant Notice.

1.3 **Option Period.** The term "Option Period" means the period beginning on the Grant Date and ending on the 10th anniversary of the Grant Date.

1.4 **Grant Notice.** The term "Grant Notice" means the document attached as Exhibit A to this Agreement.

2. **Grant of Options.** First Data grants to you the right and option to purchase all or any part of the aggregate number of shares of Common Stock subject to the options on your Grant Notice (the Options, with each Option representing the right to purchase one share of Common Stock), at an Exercise Price per share on your Grant Notice.

3. **Vesting.** The Options will vest as follows:

3.1 **Continuous Employment.** As long as you have not experienced a Termination before each applicable vesting date, one-third of the Options will vest and become exercisable on the first anniversary of the Grant Date, one-third of the Options will vest and become exercisable on the second anniversary of the Grant Date and the remaining one-third of the Options will vest and become exercisable on the third anniversary of the Grant Date (each anniversary, a Vesting Date). Upon vesting, the Options will be rounded down to the nearest whole Option.

3.2 **Termination.** In the event of your Termination before the last Vesting Date, you will forfeit any unvested Options for no consideration.

4. **Exercise of Options after Termination.** The terms of Section 7(c)(2) of the Plan are incorporated into this Agreement by this reference and made a part of this Agreement.

5. **Method of Exercising Options.** You may exercise all or any portion of the vested Options by delivering notice of the number of shares that are being exercised together with full payment of the Exercise Price for the portion of the Options being exercised. The notice must be in writing to either First Data or a third-party administrator engaged by First Data. Payment of

the Exercise Price may be made using the methods described in Section 7(d)(1) or Section 7(d)(2)(C) of the Plan.

6. **Issuance of Shares.** Following the exercise of all or any portion of the Options, as promptly as practical after receipt of full payment of the Exercise Price and any required taxes, First Data will issue or transfer to you the number of shares of Common Stock for which the Option has been exercised, and either (1) deliver to you a certificate or certificates for the shares registered in your name, (2) cause the shares to be registered in book-entry form on First Data's stock register, or (3) cause the shares to be credited to your account at a third-party administrator.

7. **Non-Transferability.** You may not transfer the Options except as permitted under Section 14(b) of the Plan.

8. **Confidential Information; Non-Compete; Non-Solicit; Clawback/Forfeiture.**

8.1 In consideration of First Data granting you the Options, you agree that you will not directly or indirectly:

8.1.1 at any time during or after your Termination, use, disclose or disseminate any Confidential Information or Trade Secrets about the business of First Data or any Affiliate. These obligations do not apply to any Confidential Information or Trade Secret that has become generally known to competitors of First Data or any Affiliate through no act or omission of yours. Nothing in this Agreement prohibits or impedes you from communicating, cooperating or filing a complaint with any U.S. federal, state or local governmental or law enforcement branch, agency or entity (collectively, a Governmental Entity) concerning possible violations of any U.S. federal, state or local law or regulation, or otherwise making disclosures to any Governmental Entity, in each case, that are protected under the whistleblower provisions of any such law or regulation, as long as in each case the communications and disclosures are consistent with applicable law. You are not authorized to disclose any information covered by First Data's or any Affiliate's attorney-client privilege or attorney work product or Trade Secrets without the written consent of the Board or its designee;

8.1.2 at any time during your service with First Data or any Affiliate and for a period of two years following Termination, act as a proprietor, investor, director, officer, employee, stockholder, consultant or partner in any business that directly or indirectly competes, at the relevant determination date, with First Data's business or any Affiliate's business in any geographic area where First Data or any Affiliate manufactures, produces, sells, leases, rents, licenses or otherwise provides products or services. This section does not restrict you from investing in publicly-available mutual funds or exchange-traded funds; and

8.1.3 at any time during your service with First Data or any Affiliate and for a period of two years following Termination, (A) solicit customers or clients of First Data or any Affiliate to terminate their relationship with First Data or any Affiliate or solicit those customers or clients to compete with any business of First Data or any Affiliate or (B) solicit or offer employment to any person who is, or has been at any time during the 12 months before the Termination, employed by First Data or any Affiliate.

8.2 If you are bound by any other agreement with First Data or any Affiliate regarding the use, dissemination or disclosure of Confidential Information or Trade Secrets, the terms of this Agreement will be read in such a way as to further restrict and not to permit any more extensive use, dissemination or disclosure of Confidential Information or Trade Secrets.

8.3 If a court holds that the restrictions stated in Section 8 are unreasonable or otherwise unenforceable, the maximum period, scope or geographic area determined to be reasonable by the court will be substituted for the stated period, scope or area. Because your services are unique and because you have had access to Confidential Information and/or Trade Secrets, money damages will be an inadequate remedy for any breach of this Agreement. In the event of a breach or threatened breach of this Agreement, First Data may, in addition to other rights and remedies existing in its favor, apply to any court of competent jurisdiction for specific performance and/or injunctive relief in order to enforce or prevent any violations of this Agreement.

8.4 If you have engaged in or engage in any Detrimental Activity, then the Committee may take any action permitted under the Plan, including: (1) canceling the Options; or (2) requiring that you forfeit any gain realized on the exercise of the Options or the sale of any shares received upon exercise of the Options and repay that gain to First Data. In addition, if you receive any amount greater than what you should have received under the terms of this Agreement for any reason, then you must repay any excess amount to First Data. The Options will be subject to reduction, cancellation, forfeiture or recoupment to the extent necessary to comply with applicable law.

9. No Rights as Stockholder. Neither you nor any Permitted Transferee of the Options will have any rights as a stockholder with respect to any share of Common Stock underlying an Option until you have become the holder of record or the beneficial owner of the share. Further, no adjustment will be made for dividends or distributions or other rights for any share of Common Stock for which the record date is before the date that you become the holder of record or the beneficial owner of the share.

10. Tax Withholding. This Award will be subject to all applicable taxes as provided in Section 14(d) of the Plan.

11. Notice. Every notice or other communication relating to this Agreement between First Data and you must be in writing. All notices and communications between you and any third-party plan administrator must be mailed, delivered, transmitted or sent according to that third-party plan administrator's procedures.

12. Binding Effect. This Agreement will be binding upon and inure to the benefit of the heirs, executors, administrators and successors of the parties to this Agreement.

13. Waiver and Amendments. The Committee may waive any conditions or rights under, amend any terms of, or alter, suspend, discontinue, cancel or terminate, this Agreement, prospectively or retroactively, except that your consent will be required for any waiver, amendment, alteration, suspension, discontinuance, cancellation or termination that would

materially and adversely affect your rights. No waiver by either of the parties to this Agreement of their rights will constitute a waiver of any subsequent occurrences or transactions unless the waiver specifically states that it is to be construed as a continuing waiver. The Committee's rights under this Section 13 may be subject to stockholder approval as required under Section 13(b) of the Plan.

14. **Governing Law; Forum.** This Agreement will be construed and interpreted under the State of Delaware, without regard to the principles of conflicts of law. If any controversy among the parties arises out of, or relates to, this Agreement, you and First Data agree and consent to the exclusive jurisdiction and venue of the state and federal courts of New Castle County in the State of Delaware.

15. **Plan.** The terms of the Plan are incorporated into this Agreement and made a part of this Agreement. In the event of a conflict or inconsistency between the terms of the Plan and this Agreement, the Plan will control. You acknowledge that a copy of the Plan (which is publicly-filed) has been made available to you, as well as a prospectus describing the terms of the Plan.

16. **Imposition of Other Requirements.** First Data may impose any other requirements on your participation in the Plan, on the Options granted under this Agreement and on any shares acquired under the Plan, if First Data determines it is necessary or advisable for legal or administrative reasons. First Data may also require you to sign any additional agreements that may be necessary to accomplish the foregoing.

17. **Entire Agreement.** The information on your Grant Notice, this Agreement and the Plan constitute the entire understanding between you and First Data regarding the Options granted under this Agreement.

**EXHIBIT A - GRANT NOTICE
FOR OPTION AGREEMENT**

Name: [Name] (you)

ID: [Employment ID]

Grant Date: [Date]

Number of Options: [Amount]

Exercise Price: [Price]

Acknowledgement and Acceptance

By signing below, you acknowledge that the Award reflected in this Grant Notice is governed by the Plan and the Option Agreement terms and conditions, which you have received with this notice. You also accept the grant of the above award under its terms and conditions.

ACCEPTED BY:

Signature

Date

**OPTION GRANT NOTICE
UNDER THE
FIRST DATA CORPORATION
2015 OMNIBUS INCENTIVE PLAN**

First Data Corporation (the "Company"), pursuant to its 2015 Omnibus Incentive Plan, as it may be amended from time to time (the "Plan"), hereby grants to the Participant set forth below the number of Options (each Option representing the right to purchase one share of Common Stock) set forth below, at an Exercise Price per share as set forth below. The Options granted hereunder are subject to all of the terms and conditions as set forth herein, in the Option Agreement (attached hereto or previously provided to the Participant in connection with a prior grant), and in the Plan, all of which are incorporated herein in their entirety. Capitalized terms not otherwise defined herein or in the Option Agreement shall have the meaning set forth in the Plan.

Participant: *[Insert Participant Name]*

Date of Grant: *[Insert Date of Grant]*

Number of Time Options: *[Insert No. of Time Options Granted]*, subject to adjustment as set forth in the Plan (the "Time Options").

Number of Performance Options: *[Insert No. of Performance Options Granted]*, subject to adjustment as set forth in the Plan (the "Performance Options").

Exercise Price: *[Insert Exercise Price per Share]*, subject to adjustment as set forth in the Plan.

Option Period Expiration Date: *[Insert Expiration Date]*

Type of Option: Nonqualified Stock Option

Vesting Schedule:

Provided that the Participant has not undergone a Termination at the time of each applicable vesting date, twenty-five percent (25%) of the Time Options (rounded down to the nearest whole share underlying such Option) shall vest and become exercisable on each of December 31, 2017, December 31, 2018, December 31, 2019 and December 31, 2020 (each such date, a "Time-Vesting Vesting Date"). In the event of a Termination prior to a Time-Vesting Vesting Date, unvested Time Options shall be forfeited to the Company by the Participant for no consideration as of the date of such Termination; provided, however that, in the event of a Termination due to death or Disability, by the Participant for Good Reason or by the Service Recipient without Cause, in each case, prior to the date on which the Time Options are fully vested, the unvested Time Options that would have vested on the next Time-Vesting Vesting Date shall vest pro-rata and become exercisable as of such date of Termination as determined by multiplying the number of Time Options that would have vested on such next Time-Vesting Vesting Date by a fraction, the numerator of which corresponds to the number of completed months of employment since the Time-Vesting Vesting Date immediately preceding the date of the Participant's Termination and the denominator of which is 12 (the "Time Pro Rata Fraction"). For the avoidance of doubt, the numerator of the Time Pro Rata Fraction shall in all cases be a whole number.

Provided that the Participant has not undergone a Termination at the time of the applicable vesting event, one hundred percent (100%) of the Performance Options shall vest and become exercisable on the date immediately following the date on which the closing trading price of a share of Common Stock on the NYSE or other such primary exchange on which the Common Stock is listed and traded has equaled or exceeded \$[] for ten (10) consecutive trading days (such date, the "Performance-Vesting Vesting Date"). In the event of a Termination prior to the Performance-Vesting Vesting Date, unvested Performance Options shall be forfeited to the Company by the Participant for no consideration as of the date of such Termination.

Notwithstanding the foregoing, in the event of a Change in Control that occurs prior to the Participant's Termination:

- (1) the Time Options, to the extent not then vested or previously forfeited or cancelled, shall become fully vested; and
- (2) the Performance Options, to the extent not then vested or previously forfeited or cancelled, shall become fully vested if the consideration received by holders of Common Stock in cash or marketable securities (which shall be valued on the date of such Change in Control) in such Change in Control transaction equals or exceeds [●]. To the extent the Performance Options do not vest as a result of a Change in Control, such unvested Performance Options shall be forfeited to the Company by the Participant for no consideration as of the date of such Change in Control.

THE UNDERSIGNED PARTICIPANT ACKNOWLEDGES RECEIPT OF THIS OPTION GRANT NOTICE, THE OPTION AGREEMENT AND THE PLAN, AND, AS AN EXPRESS CONDITION TO THE GRANT OF OPTIONS HEREUNDER, AGREES TO BE BOUND BY THE TERMS OF THIS OPTION GRANT NOTICE, THE OPTION AGREEMENT AND THE PLAN.

This Option Grant Notice may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

FIRST DATA CORPORATION

PARTICIPANT

By:

Title:

[Signature Page to Option Award]

**OPTION AGREEMENT
UNDER THE
FIRST DATA CORPORATION
2015 OMNIBUS INCENTIVE PLAN**

Pursuant to the Option Grant Notice (the “Grant Notice”) delivered to the Participant (as defined in the Grant Notice), and subject to the terms of this Option Agreement (this “Option Agreement”) and the First Data Corporation 2015 Omnibus Incentive Plan, as it may be amended from time to time (the “Plan”), First Data Corporation (the “Company”) and the Participant agree as follows.

1. **Definitions.** Whenever the following terms are used in this Option Agreement or the Grant Notice, they shall have the meanings set forth below. Capitalized terms not otherwise defined herein shall have the meanings as set forth in the Plan or in the Grant Notice, as applicable.

(a) **Cause.** The term “Cause” shall have the meaning ascribed to it in any employment, severance or change in control agreement between the Participant and the Service Recipient, or, in the absence of any such agreement (or the absence of any definition of “Cause” therein), “Cause” shall mean (1) the Participant’s continued failure to substantially perform the Participant’s duties with the Company or any other Service Recipient (other than as a result of total or partial incapacity due to physical or mental illness) for a period of ten (10) days following written notice by the Company to the Participant of such failure, (2) the Participant’s conviction of, or plea of nolo contendere to, a crime constituting (x) a felony under the laws of the United States or any state thereof or (y) a misdemeanor involving moral turpitude, (3) the Participant’s willful malfeasance or willful misconduct in connection with the Participant’s duties with the Company or any other Service Recipient or any willful misrepresentation, willful act or willful omission which is injurious to the financial condition or business reputation of the Company or any of its Affiliates, or (4) the Participant’s material breach of Section 8 hereof. For purposes hereof, no act, or failure to act, by the Participant will be deemed “willful” unless done, or omitted to be done, by the Participant not in good faith and without reasonable belief the Participant’s act, or failure to act, was in the best interest of the Company, and under no circumstances will the failure to meet performance targets, after a good faith attempt to do so, in and of itself constitute Cause.

(b) **Confidential Information.** The term “Confidential Information” shall mean any data or information and documentation (including such that is received by third parties) which is competitively sensitive or commercially valuable and not generally known to the public, including, but not limited to: (1) financial, supply and service; (2) data or information on customers/customers, suppliers, consumers or employees, including personnel data and customer lists, relationships, profiles; (3) marketing and product information, including products planning, marketing strategies, marketing results, forecasts or strategies, plans, finance, operations, reports, data, sales estimates, business plans, and internal performance results relating to the past, present or future business activities, clients and suppliers; and (4) any scientific or technical information, design, process, procedure, formula, or improvement, computer software, object code, source

e code, specifications, inventions, systems information, whether or not patentable or copyrightable and that is not otherwise a Trade Secret.

(c) **Good Reason.** The term “Good Reason” shall have the meaning ascribed to it in any employment, agreement between the Participant and the Service Recipient, or, in the absence of any such agreement (or the absence of any definition of “Good Reason” therein), “Good Reason” shall mean (1) a material reduction in the Participant’s base salary or the Participant’s annual incentive compensation opportunity that results in a material reduction in the Participant’s total compensation opportunity (other than a general reduction in base salary or annual incentive compensation opportunities that affects all members of senior management of the Company and its Subsidiaries equally); (2) a relocation of the Participant’s primary workplace by more than fifty (50) miles from the current workplace; or (3) a substantial reduction in or demotion of the Participant’s duties, responsibilities or title (other than (x) a change in title that is the result of a broad restructuring of the Company’s or the applicable Service Recipient’s titling of officers, or (y) a change in reporting relationship); in each case other than any isolated, insubstantial and inadvertent failure by the Company or the applicable Service Recipient that is not in bad faith and is cured within thirty (30) business days after the Participant gives the Company notice of such event; provided that “Good Reason” shall cease to exist for an event on the 60th day following the later of its occurrence or the Participant’s knowledge thereof, unless the Participant has given the Company written notice thereof prior to such date.

2. **Grant of Options.** Subject to the terms and conditions set forth herein, in the Grant Notice and in the Plan, for good and valuable consideration, the Company hereby grants to the Participant the right and option to purchase, all or any part of the aggregate number of shares of Common Stock subject to the Options provided in the Grant Notice (with each such Option representing the right to purchase one share of Common Stock), at an Exercise Price per share as provided in the Grant Notice. The Company may make one or more additional grants of Options to the Participant under this Option Agreement by providing the Participant with a new Grant Notice, which may also include any terms and conditions differing from this Option Agreement to the extent provided therein. The Company reserves all rights with respect to the granting of additional Options hereunder and makes no implied promise to grant additional Options.

3. **Vesting.** Subject to the conditions contained herein and in the Plan, the Options granted hereunder shall vest as provided for in the Grant Notice.

4. **Exercise of Options Following Termination.** Except as otherwise provided for in the Grant Notice, the provisions of Section 7(c)(2) of the Plan are incorporated herein by reference and made a part hereof.

5. **Method of Exercising Options.** All or any portion of the vested Options may be exercised by the delivery of notice of the number of shares subject to the Options that are being exercised accompanied by payment in full of the Exercise Price applicable to the portion of the Options so exercised. Such notice shall be delivered either (x) in writing to the Company at its principal office or at such other address as may be established by the Committee, to the attention of the Company’s General Counsel or another officer designated by the Company; or (y) to a third-party administrator as may be arranged for by the Company or the Committee from time to time.

e for purposes of the administration of outstanding Options under the Plan, in the case of either (x) or (y), as communicated to the Participant by the Company from time to time. Payment of the aggregate Exercise Price may be made using the methods described in Section 7(d)(1) or Section 7(d)(2)(C) of the Plan.

6. **Issuance of Shares.** Following the exercise of all or any portion of the Options hereunder, as promptly as practicable after receipt of such notification and full payment of the Exercise Price and any required withholding or any other applicable taxes (as provided in Section 10 hereof), the Company shall issue or transfer, or cause such issue or transfer, to the Participant the number of shares of Common Stock with respect to which the Option has been so exercised, and shall either (a) deliver, or cause to be delivered, to the Participant a certificate or certificates therefor, registered in the Participant's name or (b) cause such shares to be credited to the Participant's account at the third-party administrator.

7. **Non-Transferability.** The Options are not transferable by the Participant except to Permitted Transferees in accordance with Section 14(b) of the Plan. Whenever the word "Participant" is used in any provision of this Option Agreement under circumstances where the provision should logically be construed to apply to the executors, the administrators or the person or persons to whom the Options may be transferred by will or by the laws of descent and distribution in accordance with Section 14 of the Plan, the word "Participant" shall be deemed to include such person or persons. Except as otherwise provided herein, no assignment or transfer of the Options, or of the rights represented thereby, whether voluntary or involuntary, by operation of law or otherwise, shall vest in the assignee or transferee any interest or right herein whatsoever, but immediately upon such assignment or transfer the Options shall terminate and become of no further effect.

8. **Confidential Information; Covenant Not to Compete; Covenant Not to Solicit; Clawback/Forfeiture.**

(a) In consideration of the Company granting the Participant the Options set forth on the Grant Notice and entering into this Option Agreement with the Participant, the Participant shall not, directly or indirectly:

(1) at any time during or after the Participant undergoes a Termination, use, disclose, or disseminate any Confidential Information or Trade Secrets pertaining to the business of the Company or any of its Affiliates. The obligations set forth herein shall not apply to any Confidential Information or Trade Secret which has become generally known to competitors of the Company or any of its Affiliates through no act or omission of the Participant and nothing in this Option Agreement shall prohibit or impede the Participant from communicating, cooperating or filing a complaint with any U.S. federal, state or local governmental or law enforcement branch, agency or entity (collectively, a "Governmental Entity") with respect to possible violations of any U.S. federal, state or local law or regulation, or otherwise making disclosures to any Governmental Entity, in each case, that are protected under the whistleblower provisions of any such law or regulation, provided that in each case such communications and disclosures are consistent with applicable law, and provided further that under no circumstance is the Participant authorized to disclose any information covered by the Company's or its Affiliates' attorney-client

t privilege or attorney work product or Trade Secrets without prior written consent of the Board or its designee;

(2) at any time during the Participant's employment with the Company or any other Service Recipient and for a period of two (2) years following Termination, directly or indirectly, act as a proprietor, investor, director, officer, employee, substantial stockholder, consultant, or partner in any business that directly or indirectly competes, at the relevant determination date, with the business of the Company or any its Affiliates in any geographic area where the Company or any of its Affiliates manufactures, produces, sells, leases, rents, licenses or otherwise provides products or services;

(3) at any time during the Participant's employment with the Company or any other Service Recipient and for a period of two years following Termination, directly or indirectly (A) solicit customers or clients of the Company or any of its Subsidiaries or Affiliates to terminate their relationship with the Company or any of its Affiliates or otherwise solicit such customers or clients to compete with any business of the Company or any of its Affiliates or (B) solicit or offer employment to any person who is, or has been at any time during the twelve (12) months immediately preceding the Termination employed by the Company or any of its Affiliates;

provided that in each of (2) and (3) above, such restrictions shall not apply with respect to any Affiliate that is not engaged in any business that competes, directly or indirectly, with the Company or any of its Affiliates. If the Participant is bound by any other agreement with the Company or any other Service Provider regarding the use, dissemination or disclosure of Confidential Information or Trade Secrets, the provisions of this Option Agreement shall be read in such a way as to further restrict and not to permit any more extensive use, dissemination or disclosure of Confidential Information or Trade Secrets. Notwithstanding the foregoing, for the purposes of Section 8(a)(2), the Participant may, directly or indirectly own, solely as an investment, securities of any Person engaged in the business of the Company or any of its Affiliates which are publicly traded on a national or regional stock exchange or quotation system or on the over-the-counter market if the Participant (I) is not a controlling Person of, or a member of a group which controls, such Person and (II) does not, directly or indirectly, own 5% or more of any class of securities of such Person.

(b) Notwithstanding Section 8(a) above, if at any time a court holds that the restrictions stated in such section are unreasonable or otherwise unenforceable under circumstances then existing, the parties hereto agree that the maximum period, scope or geographic area determined to be reasonable under such circumstances by such court will be substituted for the stated period, scope or area. Because the Participant's services are unique and because the Participant has had access to Confidential Information and/or Trade Secrets, the parties hereto agree that money damages will be an inadequate remedy for any breach of this Option Agreement. In the event of a breach or threatened breach of this Option Agreement, the Company or its successors or assigns may, in addition to other rights and remedies existing in their favor, apply to any court of competent jurisdiction for specific performance and/or injunctive relief in order to enforce, or prevent any violations of, the provisions hereof (without the posting of a bond or other security).

(c) Notwithstanding anything to the contrary contained herein or in the Plan, if the Participant has engaged in or engages in any Detrimental Activity, then the Committee may, in its sole discretion, take any action permitted under the Plan, including: (1) cancel the Options; or (2) require that the Participant forfeit any gain realized on the exercise of the Options or the disposition of any shares of Common Stock received upon exercise of the Options and repay such gain to the Company. In addition, if the Participant receives any amount in excess of what the Participant should have received under the terms of this Option Agreement for any reason (including, without limitation, by reason of a financial restatement, mistake in calculations or other administrative error), then the Participant shall be required to repay any such excess amount to the Company. Without limiting the foregoing, all Options shall be subject to reduction, cancellation, forfeiture or recoupment to the extent necessary to comply with applicable law.

9. **Rights as Stockholder.** The Participant or a Permitted Transferee of the Options shall have no rights as a stockholder with respect to any share of Common Stock underlying an Option unless and until the Participant shall have become the holder of record or the beneficial owner of such Common Stock, and no adjustment shall be made for dividends or distributions or other rights in respect of such share of Common Stock for which the record date is prior to the date upon which the Participant shall become the holder of record or the beneficial owner thereof.

10. **Tax Withholding.** The provisions of Section 14(d)(1) of the Plan are incorporated herein by reference and made a part hereof. To the extent permitted by the Committee or its designee, in its sole discretion, the Participant shall be permitted to satisfy the Participant's withholding obligations as provided for in Section 14(d)(2) of the Plan.

11. **Notice.** Every notice or other communication relating to this Option Agreement between the Company and the Participant shall be in writing, and shall be mailed to or delivered to the party for whom it is intended at such address as may from time to time be designated by such party in a notice mailed or delivered to the other party as herein provided; *provided* that, unless and until some other address be so designated, all notices or communications by the Participant to the Company shall be mailed or delivered to the Company at its principal executive office, to the attention of the Company's General Counsel, and all notices or communications by the Company to the Participant may be given to the Participant personally or may be mailed to the Participant at the Participant's last known address, as reflected in the Company's records. Notwithstanding the above, all notices and communications between the Participant and any third-party plan administrator shall be mailed, delivered, transmitted or sent in accordance with the procedures established by such third-party plan administrator and communicated to the Participant from time to time.

12. **No Right to Continued Service.** Neither the Plan nor this Option Agreement nor the granting of the Options evidenced hereby shall be construed as giving the Participant the right to be retained in the employ of, or in any consulting relationship to, the Company or any other Service Recipient. Further, the Company or the applicable Service Recipient may at any time dismiss the Participant or discontinue any consulting relationship, free from any liability or any claim under the Plan or this Option Agreement, except as otherwise expressly provided herein.

13. **Binding Effect**. This Option Agreement shall be binding upon the heirs, executors, administrators and successors of the parties hereto.

14. **Waiver and Amendments**. Subject to Section 13(b) of the Plan, the Committee may waive any conditions or rights under, amend any terms of, or alter, suspend, discontinue, cancel or terminate, this Option Agreement, prospectively or retroactively (including after the Participant's Termination); provided that any such waiver, amendment, alteration, suspension, discontinuance, cancellation or termination that would materially and adversely affect the rights of the Participant hereunder shall not to that extent be effective without the consent of the Participant. No waiver by either of the parties hereto of their rights hereunder shall be deemed to constitute a waiver with respect to any subsequent occurrences or transactions hereunder unless such waiver specifically states that it is to be construed as a continuing waiver.

15. **Governing Law; Arbitration**. This Option Agreement shall be construed and interpreted in accordance with the laws of the State of Delaware, without regard to the principles of conflicts of law thereof. In the event of any controversy among the parties hereto arising out of, or relating to, this Option Agreement which cannot be settled amicably by the parties, such controversy shall be finally, exclusively and conclusively settled by mandatory arbitration conducted expeditiously in accordance with the American Arbitration Association rules by a single independent arbitrator. Such arbitration process shall take place in New York, New York. The decision of the arbitrator shall be final and binding upon all parties hereto and shall be rendered pursuant to a written decision, which contains a detailed recital of the arbitrator's reasoning. Judgment upon the award rendered may be entered in any court having jurisdiction thereof. Notwithstanding the foregoing, the Participant acknowledges and agrees that the Company and its Affiliates shall be entitled to seek and receive injunctive or other relief from a court of competent jurisdiction in order to enforce the covenant not to compete, covenant not to solicit and/or confidentiality covenants as set forth in Section 8(a) of this Option Agreement. In the event of any arbitration or other disputes with regard to this Option Agreement or any other document or agreement referred to herein, each party shall pay its own legal fees and expenses, unless otherwise determined by the arbitrator.

16. **Plan**. The terms and provisions of the Plan are incorporated herein by reference. In the event of a conflict or inconsistency between the terms and provisions of the Plan and the provisions of this Option Agreement, the Plan shall govern and control.

17. **Imposition of Other Requirements**. The Company reserves the right to impose any other requirements on the Participant's participation in the Plan, on the Options granted hereunder and on any shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

18. **Entire Agreement**. This Option Agreement, the Grant Notice and the Plan constitute the entire understanding between the Participant and the Company regarding the Options granted hereunder. This Option Agreement, the Grant Notice and the Plan supersede any prior agreements, commitments or negotiations concerning the Options granted hereunder.

**RESTRICTED STOCK GRANT NOTICE
UNDER THE
FIRST DATA CORPORATION
2015 OMNIBUS INCENTIVE PLAN**

First Data Corporation (the "Company"), pursuant to its 2015 Omnibus Incentive Plan, as it may be amended from time to time (the "Plan"), hereby grants to the Participant set forth below the number of shares of Restricted Stock set forth below. The shares of Restricted Stock granted hereunder are subject to all of the terms and conditions as set forth herein, in the Restricted Stock Agreement (attached hereto or previously provided to the Participant in connection with a prior grant), and in the Plan, all of which are incorporated herein in their entirety. Capitalized terms not otherwise defined herein or in the Restricted Stock Agreement shall have the meaning set forth in the Plan.

Participant:	<i>[Insert Participant Name]</i>
Date of Grant:	<i>[Insert Date of Grant]</i>
Number of Shares of Time-Vesting Restricted Stock:	<i>[Insert No. of Shares of Time-Vesting Restricted Stock Granted]</i> , subject to adjustment as set forth in the Plan (the " <u>Time-Vesting Restricted Stock</u> ").
Number of Shares of Performance-Vesting Restricted Stock:	<i>[Insert No. of Shares of Performance-Vesting Restricted Stock Granted]</i> , subject to adjustment as set forth in the Plan (the " <u>Performance-Vesting Restricted Stock</u> ").

Vesting Schedule:

Provided that the Participant has not undergone a Termination at the time of each applicable vesting date, twenty-five percent (25%) of the shares of Time-Vesting Restricted Stock (rounded down to the nearest whole share) shall vest on each of December 31, 2017, December 31, 2018, December 31, 2019 and December 31, 2020 (each such date, a "Time-Vesting Vesting Date") and the Restricted Period shall expire with respect to a corresponding number of shares of Time-Vesting Restricted Stock.

In the event of a Termination prior to a Time-Vesting Vesting Date, unvested Time-Vesting Restricted Stock shall be forfeited to the Company by the Participant for no consideration as of the date of such Termination; provided, however that, in the event of a Termination due to death or Disability, by the Participant for Good Reason or by the Service Recipient without Cause, in each case, prior to the date on which the Time-Vesting Restricted Stock is fully vested, the unvested Time-Vesting Restricted Stock that would have vested on the next Time-Vesting Vesting Date shall vest pro-rata as of such date of Termination as determined by multiplying the number of shares of Time-Vesting Restricted Stock that would have vested on such next Time-Vesting Vesting Date by a fraction, the numerator of which corresponds to the number of completed months of employment since the Time-Vesting Vesting Date immediately preceding the date of the Participant's Termination and the denominator of which is 12 (the "Time Pro Rata Fraction") and the Restricted Period shall expire with respect to a corresponding number of shares of Time-Vesting Restricted Stock. For the avoidance of doubt, the numerator of the Time Pro Rata Fraction shall in all cases be a whole number.

Provided that the Participant has not undergone a Termination at the time of the applicable vesting event, one hundred percent (100%) of the shares of Performance-Vesting Restricted Stock shall vest on the date immediately following the date on which the closing trading price of a share of Common Stock on the NYSE or other such primary exchange on which the Common Stock is listed and traded has equaled or exceeded \$[] for ten (10) consecutive trading days (such date, the "Performance-Vesting Vesting Date") and the Restricted Period shall expire with respect to such shares of Performance-Vesting Restricted Stock. In the event of a Termination prior to the Performance-Vesting Vesting Date, unvested Performance-Vesting Restricted Stock shall be forfeited to the Company by the Participant for no consideration as of the date of such Termination.

Notwithstanding the foregoing, in the event of a Change in Control that occurs prior to the Participant's Termination:

(1) the Time-Vesting Restricted Stock, to the extent not then vested or previously forfeited or cancelled, shall become fully vested and the Restricted Period shall expire with respect to such shares of Time-Vesting Restricted Stock; and

(2) the Performance-Vesting Restricted Stock, to the extent not then vested or previously forfeited or cancelled, shall become fully vested if the consideration received by holders of Common Stock in cash or marketable securities (which shall be valued on the date of such Change in Control) in such Change in Control transaction equals or exceeds [●] and the Restricted Period shall expire with respect to such shares of Performance-Vesting Restricted Stock. To the extent the Performance-Vesting Restricted Stock does not vest as a result of a Change in Control, such unvested Performance-Vesting Restricted Stock shall be forfeited to the Company by the Participant for no consideration as of the date of such Change in Control.

* * *

THE UNDERSIGNED PARTICIPANT ACKNOWLEDGES RECEIPT OF THIS RESTRICTED STOCK GRANT NOTICE, THE RESTRICTED STOCK AGREEMENT AND THE PLAN, AND, AS AN EXPRESS CONDITION TO THE GRANT OF SHARES OF RESTRICTED STOCK HEREUNDER, AGREES TO BE BOUND BY THE TERMS OF THIS RESTRICTED STOCK GRANT NOTICE, THE RESTRICTED STOCK AGREEMENT AND THE PLAN.

This Restricted Stock Grant Notice may be signed in counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

FIRST DATA CORPORATION

PARTICIPANT

By:

Title:

[Signature Page to Restricted Stock Award]

**RESTRICTED STOCK AGREEMENT
UNDER THE
FIRST DATA CORPORATION
2015 OMNIBUS INCENTIVE PLAN**

Pursuant to the Restricted Stock Grant Notice (the “Grant Notice”) delivered to the Participant (as defined in the Grant Notice), and subject to the terms of this Restricted Stock Agreement (this “Restricted Stock Agreement”) and the First Data Corporation 2015 Omnibus Incentive Plan, as it may be amended from time to time (the “Plan”), First Data Corporation (the “Company”) and the Participant agree as follows.

1. **Definitions.** Whenever the following terms are used in this Restricted Stock Agreement or the Grant Notice, they shall have the meanings set forth below. Capitalized terms not otherwise defined herein shall have the meanings as set forth in the Plan or in the Grant Notice, as applicable.

(a) **Cause.** The term “Cause” shall have the meaning ascribed to it in any employment, severance or change in control agreement between the Participant and the Service Recipient, or, in the absence of any such agreement (or the absence of any definition of “Cause” therein), “Cause” shall mean (1) the Participant’s continued failure to substantially perform the Participant’s duties with the Company or any other Service Recipient (other than as a result of total or partial incapacity due to physical or mental illness) for a period of ten (10) days following written notice by the Company to the Participant of such failure, (2) the Participant’s conviction of, or plea of nolo contendere to, a crime constituting (x) a felony under the laws of the United States or any state thereof or (y) a misdemeanor involving moral turpitude, (3) the Participant’s willful malfeasance or willful misconduct in connection with the Participant’s duties with the Company or any other Service Recipient or any willful misrepresentation, willful act or willful omission which is injurious to the financial condition or business reputation of the Company or any of its Affiliates, or (4) the Participant’s material breach of Section 6 hereof. For purposes hereof, no act, or failure to act, by the Participant will be deemed “willful” unless done, or omitted to be done, by the Participant not in good faith and without reasonable belief the Participant’s act, or failure to act, was in the best interest of the Company, and under no circumstances will the failure to meet performance targets, after a good faith attempt to do so, in and of itself constitute Cause.

(b) **Confidential Information.** The term “Confidential Information” shall mean any data or information and documentation (including such that is received by third parties) which is competitively sensitive or commercially valuable and not generally known to the public, including, but not limited to: (1) financial, supply and service; (2) data or information on customers/customers, suppliers, consumers or employees, including personnel data and customer lists, relationships, profiles; (3) marketing and product information, including products planning, marketing strategies, marketing results, forecasts or strategies, plans, finance, operations, reports, data, sales estimates, business plans, and internal performance results relating to the past, present or future business activities, clients and suppliers; and (4) any scientific or technical information, design, process, procedure, formula, or improvement, computer software, object code, source

code, specifications, inventions, systems information, whether or not patentable or copyrightable and that is not otherwise a Trade Secret.

(c) **Good Reason.** The term “Good Reason” shall have the meaning ascribed to it in any employment, agreement between the Participant and the Service Recipient, or, in the absence of any such agreement (or the absence of any definition of “Good Reason” therein), “Good Reason” shall mean (1) a material reduction in the Participant’s base salary or the Participant’s annual incentive compensation opportunity that results in a material reduction in the Participant’s total compensation opportunity (other than a general reduction in base salary or annual incentive compensation opportunities that affects all members of senior management of the Company and its subsidiaries equally); (2) a relocation of the Participant’s primary workplace by more than fifty (50) miles from the current workplace; or (3) a substantial reduction in or demotion of the Participant’s duties, responsibilities or title (other than (x) a change in title that is the result of a broad restructuring of the Company’s or the applicable Service Recipient’s titling of officers; or (y) a change in reporting relationship); in each case other than any isolated, insubstantial and inadvertent failure by the Company or the applicable Service Recipient that is not in bad faith and is cured within thirty (30) business days after the Participant gives the Company notice of such event; provided that “Good Reason” shall cease to exist for an event on the 60th day following the later of its occurrence or the Participant’s knowledge thereof, unless the Participant has given the Company written notice thereof prior to such date.

2. **Grant of Shares of Restricted Stock.** Subject to the terms and conditions set forth herein, in the Grant Notice and in the Plan, for good and valuable consideration, the Company hereby grants to the Participant the number of shares of Restricted Stock provided in the Grant Notice. The Company may make one or more additional grants of shares of Restricted Stock to the Participant under this Restricted Stock Agreement by providing the Participant with a new Grant Notice, which may also include any terms and conditions differing from this Restricted Stock Agreement to the extent provided therein. The Company reserves all rights with respect to the granting of additional shares of Restricted Stock hereunder and makes no implied promise to grant additional shares of Restricted Stock.

3. **Vesting.** Subject to the conditions contained herein and in the Plan, the shares of Restricted Stock granted hereunder shall vest and the restrictions on such shares of Restricted Stock shall lapse as provided for in the Grant Notice. With respect to any share of Restricted Stock, the period of time that such share of Restricted Stock remains subject to vesting shall be its Restricted Period.

4. **Stock Certificates and Book Entry; Escrow or Similar Arrangement; Issuance of Shares of Restricted Stock.** The provisions of Sections 9(b) and 9(d)(1) of the Plan are incorporated herein by reference and made a part hereof.

5. **Non-Transferability.** The shares of Restricted Stock are not transferable by the Participant except to Permitted Transferees in accordance with Section 14(b) of the Plan. Whenever the word “Participant” is used in any provision of this Restricted Stock Agreement under circumstances where the provision should logically be construed to apply to the executors

, the administrators or the person or persons to whom the shares of Restricted Stock may be transferred by will or by the laws of descent and distribution in accordance with Section 14 of the Plan, the word "Participant" shall be deemed to include such person or persons. Except as otherwise provided herein, no assignment or transfer of the shares of Restricted Stock, or of the rights represented thereby, whether voluntary or involuntary, by operation of law or otherwise, shall vest in the assignee or transferee any interest or right herein whatsoever, but immediately upon such assignment or transfer the shares of Restricted Stock shall terminate and become of no further effect.

6. **Confidential Information; Covenant Not to Compete; Covenant Not to Solicit; Clawback/Forfeiture.**

(a) In consideration of the Company granting the Participant the shares of Restricted Stock set forth on the Grant Notice and entering into this Restricted Stock Agreement with the Participant, the Participant shall not, directly or indirectly:

(1) at any time during or after the Participant undergoes a Termination, use, disclose, or disseminate any Confidential Information or Trade Secrets pertaining to the business of the Company or any of its Affiliates. The obligations set forth herein shall not apply to any Confidential Information or Trade Secret which has become generally known to competitors of the Company or any of its Affiliates through no act or omission of the Participant and nothing in this Restricted Stock Agreement shall prohibit or impede the Participant from communicating, cooperating or filing a complaint with any U.S. federal, state or local governmental or law enforcement branch, agency or entity (collectively, a "Governmental Entity") with respect to possible violations of any U.S. federal, state or local law or regulation, or otherwise making disclosures to any Governmental Entity, in each case, that are protected under the whistleblower provisions of any such law or regulation, provided that in each case such communications and disclosures are consistent with applicable law, and provided further that under no circumstance is the Participant authorized to disclose any information covered by the Company's or its Affiliates' attorney-client privilege or attorney work product or Trade Secrets without prior written consent of the Board or its designee;

(2) at any time during the Participant's employment with the Company or any other Service Recipient and for a period of two (2) years following Termination, directly or indirectly, act as a proprietor, investor, director, officer, employee, substantial stockholder, consultant, or partner in any business that directly or indirectly competes, at the relevant determination date, with the business of the Company or any its Affiliates in any geographic area where the Company or any of its Affiliates manufactures, produces, sells, leases, rents, licenses or otherwise provides products or services;

(3) at any time during the Participant's employment with the Company or any other Service Recipient and for a period of two years following Termination, directly or indirectly (A) solicit customers or clients of the Company or any of its Affiliates to terminate their relationship with the Company or any of Affiliates or otherwise solicit such customers or clients to compete with any business of the Company or any of its Affiliates or (B) solicit or offer employment to any person who is, or has been at any time during the twelve (12) month

s immediately preceding the Termination employed by the Company or any of its Affiliates; provided that in each of (2) and (3) above, such restrictions shall not apply with respect to any Affiliate that is not engaged in any business that competes, directly or indirectly, with the Company or any of its Affiliates. If the Participant is bound by any other agreement with the Company or any other Service Provider regarding the use, dissemination or disclosure of Confidential Information or Trade Secrets, the provisions of this Restricted Stock Agreement shall be read in such a way as to further restrict and not to permit any more extensive use, dissemination or disclosure of Confidential Information or Trade Secrets. Notwithstanding the foregoing, for the purposes of Section 6(a)(2), the Participant may, directly or indirectly own, solely as an investment, securities of any Person engaged in the business of the Company or any of its Affiliates which are publicly traded on a national or regional stock exchange or quotation system or on the over-the-counter market if the Participant (I) is not a controlling Person of, or a member of a group which controls, such Person and (II) does not, directly or indirectly, own 5% or more of any class of securities of such Person.

(b) Notwithstanding Section 6(a) above, if at any time a court holds that the restrictions stated in such section are unreasonable or otherwise unenforceable under circumstances then existing, the parties hereto agree that the maximum period, scope or geographic area determined to be reasonable under such circumstances by such court will be substituted for the stated period, scope or area. Because the Participant's services are unique and because the Participant has had access to Confidential Information and/or Trade Secrets, the parties hereto agree that money damages will be an inadequate remedy for any breach of this Restricted Stock Agreement. In the event of a breach or threatened breach of this Restricted Stock Agreement, the Company or its successors or assigns may, in addition to other rights and remedies existing in their favor, apply to any court of competent jurisdiction for specific performance and/or injunctive relief in order to enforce, or prevent any violations of, the provisions hereof (without the posting of a bond or other security).

(c) Notwithstanding anything to the contrary contained herein or in the Plan, if the Participant has engaged in or engages in any Detrimental Activity, then the Committee may, in its sole discretion, take any action permitted under the Plan, including: (1) cancel the unvested shares of Restricted Stock; or (2) require that the Participant forfeit any gain realized on the vesting of the Restricted Stock and repay such gain to the Company. In addition, if the Participant receives any amount in excess of what the Participant should have received under the terms of this Restricted Stock Agreement for any reason (including, without limitation, by reason of a financial restatement, mistake in calculations or other administrative error), then the Participant shall be required to repay any such excess amount to the Company. Without limiting the foregoing, all shares of Restricted Stock shall be subject to reduction, cancellation, forfeiture or recoupment to the extent necessary to comply with applicable law.

7. **Rights as Stockholder; Legend; Dividends.** The provisions of Sections 9(b) and 9(e) of the Plan are incorporated herein by reference and made a part hereof; provided, however, that, the Participant shall not be entitled to accrue or receive dividends payable in respect of shares of unvested Restricted Stock granted hereunder unless and until such shares of Restricted Stock become vested pursuant to the terms set forth in the Grant Notice.

8. **Tax Withholding**. The provisions of Section 14(d)(1) of the Plan are incorporated herein by reference and made a part hereof. To the extent permitted by the Committee or its designee, in its sole discretion, the Participant shall be permitted to satisfy the Participant's withholding obligations as provided for in Section 14(d)(2) of the Plan.

9. **Notice**. Every notice or other communication relating to this Restricted Stock Agreement between the Company and the Participant shall be in writing, and shall be mailed to or delivered to the party for whom it is intended at such address as may from time to time be designated by such party in a notice mailed or delivered to the other party as herein provided; provided that, unless and until some other address be so designated, all notices or communications by the Participant to the Company shall be mailed or delivered to the Company at its principal executive office, to the attention of the Company's General Counsel, and all notices or communications by the Company to the Participant may be given to the Participant personally or may be mailed to the Participant at the Participant's last known address, as reflected in the Company's records. Notwithstanding the above, all notices and communications between the Participant and any third-party plan administrator shall be mailed, delivered, transmitted or sent in accordance with the procedures established by such third-party plan administrator and communicated to the Participant from time to time.

10. **No Right to Continued Service**. Neither the Plan nor this Restricted Stock Agreement nor the granting of the Restricted Stock evidenced hereby shall be construed as giving the Participant the right to be retained in the employ of, or in any consulting relationship to, the Company or any other Service Recipient. Further, the Company or the applicable Service Recipient may at any time dismiss the Participant or discontinue any consulting relationship, free from any liability or any claim under the Plan or this Restricted Stock Agreement, except as otherwise expressly provided herein.

11. **Binding Effect**. This Restricted Stock Agreement shall be binding upon the heirs, executors, administrators and successors of the parties hereto.

12. **Waiver and Amendments**. Subject to Section 13(b) of the Plan, the Committee may waive any conditions or rights under, amend any terms of, or alter, suspend, discontinue, cancel or terminate, this Restricted Stock Agreement, prospectively or retroactively (including after the Participant's Termination); provided that any such waiver, amendment, alteration, suspension, discontinuance, cancellation or termination that would materially and adversely affect the rights of the Participant hereunder shall not to that extent be effective without the consent of the Participant. No waiver by either of the parties hereto of their rights hereunder shall be deemed to constitute a waiver with respect to any subsequent occurrences or transactions hereunder unless such waiver specifically states that it is to be construed as a continuing waiver.

13. **Governing Law; Arbitration**. This Restricted Stock Agreement shall be construed and interpreted in accordance with the laws of the State of Delaware, without regard to the principles of conflicts of law thereof. In the event of any controversy among the parties hereto arising out of, or relating to, this Restricted Stock Agreement which cannot be settled amicably by the parties, such controversy shall be finally, exclusively and conclusively settled by mandatory arbitration conducted expeditiously in accordance with the American Arbitration Association's Rules of Arbitration.

n Association rules by a single independent arbitrator. Such arbitration process shall take place in New York, New York. The decision of the arbitrator shall be final and binding upon all parties hereto and shall be rendered pursuant to a written decision, which contains a detailed recital of the arbitrator's reasoning. Judgment upon the award rendered may be entered in any court having jurisdiction thereof. Notwithstanding the foregoing, the Participant acknowledges and agrees that the Company and its Affiliates shall be entitled to seek and receive injunctive or other relief in a court of competent jurisdiction in order to enforce the covenant not to compete, covenant not to solicit and/or confidentiality covenants as set forth in Section 6(a) of this Restricted Stock Agreement. In the event of any arbitration or other disputes with regard to this Restricted Stock Agreement or any other document or agreement referred to herein, each party shall pay its own legal fees and expenses, unless otherwise determined by the arbitrator.

14. **Plan.** The terms and provisions of the Plan are incorporated herein by reference. In the event of a conflict or inconsistency between the terms and provisions of the Plan and the provisions of this Restricted Stock Agreement, the Plan shall govern and control.

15. **Imposition of Other Requirements.** The Company reserves the right to impose any other requirements on the Participant's participation in the Plan, on the Restricted Stock granted hereunder and on any shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

16. **Entire Agreement.** This Restricted Stock Agreement, the Grant Notice and the Plan constitute the entire understanding between the Participant and the Company regarding the Restricted Stock granted hereunder. This Restricted Stock Agreement, the Grant Notice and the Plan supersede any prior agreements, commitments or negotiations concerning the Restricted Stock granted hereunder.

**RESTRICTED STOCK AWARD AGREEMENT
FIRST DATA CORPORATION
2015 OMNIBUS INCENTIVE PLAN**

Subject to the terms of the First Data Corporation 2015 Omnibus Incentive Plan (Plan), First Data Corporation (First Data) and the Participant (you) agree as follows:

1. **Definitions.** The term “Grant Date” means the date on specified in the grant notice attached as Exhibit A (Grant Notice). Other capitalized terms that are not defined in this Agreement have the meanings defined in the Plan.

2. **Grant of Restricted Shares.** First Data grants to you the number of shares of Restricted Stock included on your Grant Notice (Restricted Shares).

3. **Vesting.** The Restricted Period for the Restricted Shares will lapse and the Restricted Shares will vest as follows:

3.1 **Continuous Employment.** As long as you have not experienced a Termination before each applicable vesting date, 20% of the Restricted Shares will vest on the first anniversary of the Grant Date, 40% of the Restricted Shares will vest on the second anniversary of the Grant Date, and the remaining 40% of the Restricted Shares will vest on the third anniversary of the Grant Date (each anniversary, a Vesting Date). Upon vesting, the Restricted Shares will be rounded down to the nearest whole share of Common Stock.

3.2 **Termination.** In the event of your Termination before the last Vesting Date, you will forfeit any unvested Restricted Shares for no consideration.

4. **Non-Transferability.** You may not transfer the Restricted Shares except as permitted under Section 14(b) of the Plan.

5. **Confidential Information; Non-Compete; Non-Solicit; Clawback/Forfeiture.**

5.1 In consideration of First Data granting you the Restricted Shares, you agree that you will not directly or indirectly:

5.1.1 at any time use, disclose, or disseminate any Confidential Information or Trade Secrets about the business of First Data or any Affiliate. These obligations do not apply to Confidential Information or Trade Secrets that have become generally known to competitors of First Data or any Affiliate through no act or omission of yours. Nothing in this Agreement prohibits or impedes you from communicating, cooperating, or filing a complaint with any U.S. federal, state, or local governmental or law enforcement branch, agency, or entity (collectively, a Governmental Entity) concerning possible violations of any U.S. federal, state, or local law or regulation, or otherwise making disclosures to any Governmental Entity, in each case, that are protected under the whistleblower provisions of any such law or regulation, as long as in each case the communications and disclosures are consistent with applicable law. You are not authorized to disclose any information covered by First Data’s or its Affiliates’ attorne

y-client privilege or attorney work product or Trade Secrets without the written consent of the Board or its designee;

5.1.2 at any time during your service with First Data or any Affiliate and for a period of two years following Termination, act as a proprietor, investor, director, officer, employee, stockholder, consultant, or partner in any business that directly or indirectly competes, at the relevant determination date, with First Data's business or any Affiliate's business in any geographic area where First Data or any Affiliate manufactures, produces, sells, leases, rents, licenses, or otherwise provides products or services, except that this section does not restrict you from investing in publicly-available mutual funds or exchange-traded funds; or

5.1.3 at any time during your service with First Data or any Affiliate and for a period of two years following Termination, (1) solicit customers or clients of First Data or any Affiliate to terminate their relationship with First Data or any Affiliate or solicit those customers or clients to compete with any business of First Data or any Affiliate or (2) solicit or offer employment to any person who is, or has been at any time during the 12 months before your Termination, employed by First Data or any Affiliate.

5.2 If you are bound by any other agreement with First Data or any Affiliate covering the use, dissemination, or disclosure of Confidential Information or Trade Secrets, the terms of this Agreement will be read in a way to further restrict and not to permit any more extensive use, dissemination, or disclosure of Confidential Information or Trade Secrets.

5.3 If a court holds that the restrictions stated in this Section 5 are unreasonable or otherwise unenforceable, the maximum period, scope, or geographic area determined to be reasonable by the court will be substituted for the stated period, scope, or area. Because your services are unique and because you have had access to Confidential Information and/or Trade Secrets, money damages will be an inadequate remedy for any breach of this Agreement. In the event of a breach or threatened breach of this Agreement, First Data may, in addition to other rights and remedies existing in its favor, apply to any court of competent jurisdiction for specific performance and/or injunctive relief in order to enforce or prevent any violations of this Agreement.

5.4 If you have engaged in or engage in any Detrimental Activity, then the Committee may take any action permitted under the Plan, including: (1) canceling the Restricted Shares; or (2) requiring you to forfeit any gain realized on the vesting and/or sale of the Restricted Shares and repay that gain to First Data. In addition, if you receive any amount greater than what you should have received under this Agreement, then you must repay any excess amount to First Data. The Restricted Shares will be subject to reduction, cancellation, forfeiture, or recoupment to the extent necessary to comply with applicable law.

6. **Stockholder Rights.** Subject to the restrictions set forth in Section 9 of the Plan, you generally will have the rights and privileges of a First Data stockholder as to the Restricted Shares on the Grant Date, including the right to vote the Restricted Shares. However, any dividends payable on the Restricted Shares will be held by First Data and delivered to you (without interest) within 15 days after the applicable Restricted Shares vest. You will forfeit th

e right to any accumulated dividends if you forfeit the Restricted Shares to which the dividends relate. To the extent you forfeit the Restricted Shares, any stock certificates issued to you evidencing the shares must be returned to First Data, and all of your rights to those shares and as a stockholder with respect to those shares will terminate without further obligation on First Data's part.

7. **Tax Withholding.** This Award will be subject to all applicable taxes as provided in Section 14(d) of the Plan.

8. **Notice.** Every notice or other communication relating to this Agreement between First Data and you must be in writing. All notices and communications between you and any third-party Plan administrator must be mailed, delivered, transmitted, or sent according to that administrator's procedures.

9. **Binding Effect.** This Agreement will be binding upon and inure to the benefit of the heirs, executors, administrators, and successors of the parties to this Agreement.

10. **Waiver and Amendments.** The Committee may waive any conditions or rights under, amend any terms of, or alter, suspend, discontinue, cancel, or terminate this Agreement, prospectively or retroactively, except that your consent will be required for any waiver, amendment, alteration, suspension, discontinuance, cancellation, or termination that would materially and adversely affect your rights. No waiver by either of the parties to this Agreement of their rights will constitute a waiver of any subsequent occurrences or transactions unless the waiver specifically states that it is to be construed as a continuing waiver. The Committee's authority under this Section 11 may be subject to stockholder approval as required under Section 13(b) of the Plan.

11. **Governing Law; Forum.** This Agreement will be construed and interpreted under the laws of the State of Delaware, without regard to the principles of conflicts of law. If any controversy among the parties arises out of, or relates to, this Agreement, you and First Data agree and consent to the exclusive jurisdiction and venue of the state and federal courts of New Castle County in the State of Delaware.

12. **Plan.** The terms of the Plan are incorporated into this Agreement. In the event of a conflict or inconsistency between the terms of the Plan and this Agreement, the Plan will control. You acknowledge that a copy of the Plan (which is publicly-filed) has been made available to you, as well as a prospectus describing the terms of the Plan.

13. **Imposition of Other Requirements.** First Data may impose any other requirements on your participation in the Plan, on the Restricted Shares, and on any shares acquired under the Plan if First Data determines it is necessary or advisable for legal or administrative reasons. First Data may also require you to sign any additional agreements that may be necessary to accomplish the foregoing.

14. **Entire Agreement.** The information on your Grant Notice, this Agreement, and the Plan constitute the entire understanding between you and First Data regarding the Restricted Shares.

**EXHIBIT A - GRANT NOTICE
FOR RESTRICTED STOCK AWARD AGREEMENT**

Name: [Name] (you)

ID: [Employment ID]

Grant Date: [Date]

Number of Shares of Restricted Stock: [Amount]

Acknowledgement and Acceptance

By signing below, you acknowledge that the Award reflected in this Grant Notice is governed by the Plan and the Restricted Stock Award Agreement terms and conditions, which you have received with this notice. You also accept the grant of the above award under its terms and conditions.

ACCEPTED BY:

Signature

Date

**RESTRICTED STOCK AWARD AGREEMENT
FIRST DATA CORPORATION
2015 OMNIBUS INCENTIVE PLAN**

Subject to the terms of the First Data Corporation 2015 Omnibus Incentive Plan (Plan), First Data Corporation (First Data) and the Participant (you) agree as follows:

1. **Definitions.** The term “Grant Date” means the date on specified in the grant notice attached as Exhibit A (Grant Notice). Other capitalized terms that are not defined in this Agreement have the meanings defined in the Plan.
2. **Grant of Restricted Shares.** First Data grants to you the number of shares of Restricted Stock included on your Grant Notice (Restricted Shares).
3. **Vesting.** The Restricted Period for the Restricted Shares will lapse and the Restricted Shares will vest as follows:
 - 3.1 **Continuous Employment.** As long as you have not experienced a Termination before each applicable vesting date, 20% of the Restricted Shares will vest on the first anniversary of the Grant Date, 40% of the Restricted Shares will vest on the second anniversary of the Grant Date, and the remaining 40% of the Restricted Shares will vest on the third anniversary of the Grant Date (each anniversary, a Vesting Date). Upon vesting, the Restricted Shares will be rounded down to the nearest whole share of Common Stock.
 - 3.2 **Termination.** In the event of your Termination before the last Vesting Date, you will forfeit any unvested Restricted Shares for no consideration. However, if your Termination occurs because of your Disability or death, any outstanding Restricted Shares will become fully vested and the Restricted Period for those Restricted Shares will lapse upon your Termination.
4. **Non-Transferability.** You may not transfer the Restricted Shares except as permitted under Section 14(b) of the Plan.
5. **Confidential Information; Non-Compete; Non-Solicit; Clawback/Forfeiture.**

5.1 In consideration of First Data granting you the Restricted Shares, you agree that you will not directly or indirectly:

5.1.1 at any time use, disclose, or disseminate any Confidential Information or Trade Secrets about the business of First Data or any Affiliate. These obligations do not apply to Confidential Information or Trade Secrets that have become generally known to competitors of First Data or any Affiliate through no act or omission of yours. Nothing in this Agreement prohibits or impedes you from communicating, cooperating, or filing a complaint with any U.S. federal, state, or local governmental or law enforcement branch, agency, or entity (collectively, a Governmental Entity) concerning possible violations of any U.S. federal, state, or local law or regulation, or otherwise making disclosures to any Governmental Entity, in eac

h case, that are protected under the whistleblower provisions of any such law or regulation, as long as in each case the communications and disclosures are consistent with applicable law. You are not authorized to disclose any information covered by First Data's or its Affiliates' attorney-client privilege or attorney work product or Trade Secrets without the written consent of the Board or its designee;

5.1.2 at any time during your service with First Data or any Affiliate and for a period of two years following Termination, act as a proprietor, investor, director, officer, employee, stockholder, consultant, or partner in any business that directly or indirectly competes, at the relevant determination date, with First Data's business or any Affiliate's business in any geographic area where First Data or any Affiliate manufactures, produces, sells, leases, rents, licenses, or otherwise provides products or services, except that this section does not restrict you from investing in publicly-available mutual funds or exchange-traded funds; or

5.1.3 at any time during your service with First Data or any Affiliate and for a period of two years following Termination, (1) solicit customers or clients of First Data or any Affiliate to terminate their relationship with First Data or any Affiliate or solicit those customers or clients to compete with any business of First Data or any Affiliate or (2) solicit or offer employment to any person who is, or has been at any time during the 12 months before your Termination, employed by First Data or any Affiliate.

5.2 If you are bound by any other agreement with First Data or any Affiliate covering the use, dissemination, or disclosure of Confidential Information or Trade Secrets, the terms of this Agreement will be read in a way to further restrict and not to permit any more extensive use, dissemination, or disclosure of Confidential Information or Trade Secrets.

5.3 If a court holds that the restrictions stated in this Section 5 are unreasonable or otherwise unenforceable, the maximum period, scope, or geographic area determined to be reasonable by the court will be substituted for the stated period, scope, or area. Because your services are unique and because you have had access to Confidential Information and/or Trade Secrets, money damages will be an inadequate remedy for any breach of this Agreement. In the event of a breach or threatened breach of this Agreement, First Data may, in addition to other rights and remedies existing in its favor, apply to any court of competent jurisdiction for specific performance and/or injunctive relief in order to enforce or prevent any violations of this Agreement.

5.4 If you have engaged in or engage in any Detrimental Activity, then the Committee may take any action permitted under the Plan, including: (1) canceling the Restricted Shares; or (2) requiring you to forfeit any gain realized on the vesting and/or sale of the Restricted Shares and repay that gain to First Data. In addition, if you receive any amount greater than what you should have received under this Agreement, then you must repay any excess amount to First Data. The Restricted Shares will be subject to reduction, cancellation, forfeiture, or recoupment to the extent necessary to comply with applicable law.

6. **Stockholder Rights.** Subject to the restrictions set forth in Section 9 of the Plan, you generally will have the rights and privileges of a First Data stockholder as to the Restrict

d Shares on the Grant Date, including the right to vote the Restricted Shares. However, any dividends payable on the Restricted Shares will be held by First Data and delivered to you (without interest) within 15 days after the applicable Restricted Shares vest. You will forfeit the right to any accumulated dividends if you forfeit the Restricted Shares to which the dividends relate. To the extent you forfeit the Restricted Shares, any stock certificates issued to you evidencing the shares must be returned to First Data, and all of your rights to those shares and as a stockholder with respect to those shares will terminate without further obligation on First Data's part.

7. **Tax Withholding.** This Award will be subject to all applicable taxes as provided in Section 14(d) of the Plan.

8. **Notice.** Every notice or other communication relating to this Agreement between First Data and you must be in writing. All notices and communications between you and any third-party Plan administrator must be mailed, delivered, transmitted, or sent according to that administrator's procedures.

9. **Binding Effect.** This Agreement will be binding upon and inure to the benefit of the heirs, executors, administrators, and successors of the parties to this Agreement.

10. **Waiver and Amendments.** The Committee may waive any conditions or rights under, amend any terms of, or alter, suspend, discontinue, cancel, or terminate this Agreement, prospectively or retroactively, except that your consent will be required for any waiver, amendment, alteration, suspension, discontinuance, cancellation, or termination that would materially and adversely affect your rights. No waiver by either of the parties to this Agreement of their rights will constitute a waiver of any subsequent occurrences or transactions unless the waiver specifically states that it is to be construed as a continuing waiver. The Committee's authority under this Section 11 may be subject to stockholder approval as required under Section 13(b) of the Plan.

11. **Governing Law; Forum.** This Agreement will be construed and interpreted under the laws of the State of Delaware, without regard to the principles of conflicts of law. If any controversy among the parties arises out of, or relates to, this Agreement, you and First Data agree and consent to the exclusive jurisdiction and venue of the state and federal courts of New Castle County in the State of Delaware.

12. **Plan.** The terms of the Plan are incorporated into this Agreement. In the event of a conflict or inconsistency between the terms of the Plan and this Agreement, the Plan will control. You acknowledge that a copy of the Plan (which is publicly-filed) has been made available to you, as well as a prospectus describing the terms of the Plan.

13. **Imposition of Other Requirements.** First Data may impose any other requirements on your participation in the Plan, on the Restricted Shares, and on any shares acquired under the Plan if First Data determines it is necessary or advisable for legal or administrative reasons. First Data may also require you to sign any additional agreements that may be necessary to accomplish the foregoing.

14. **Entire Agreement.** The information on your Grant Notice, this Agreement, and the Plan constitute the entire understanding between you and First Data regarding the Restricted Shares.

**EXHIBIT A - GRANT NOTICE
FOR RESTRICTED STOCK AWARD AGREEMENT**

Name: [Name] (you)

ID: [Employment ID]

Grant Date: [Date]

Number of Shares of Restricted Stock: [Amount]

Acknowledgement and Acceptance

By signing below, you acknowledge that the Award reflected in this Grant Notice is governed by the Plan and the Restricted Stock Award Agreement terms and conditions, which you have received with this notice. You also accept the grant of the above award under its terms and conditions.

ACCEPTED BY:

Signature

Date

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

I, Jeffery W. Yabuki, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Fiserv, 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: November 7, 2019

By: /s/ Jeffery W. Yabuki

Jeffery W. Yabuki

Chairman 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 Quarterly Report on Form 10-Q of Fiserv, 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: November 7, 2019

By: /s/ Robert W. Hau

Robert W. Hau

Chief Financial Officer and Treasurer

