

FIS 2019 ANNUAL REPORT

ABOUT FIS

FIS is a leading provider of technology solutions for merchants, banks and capital markets firms globally. Our more than 55,000 people are dedicated to advancing the way the world pays, banks and invests by applying our scale, deep expertise and data-driven insights. We help our clients use technology in innovative ways to solve business-critical challenges and deliver superior experiences for their customers. Headquartered in Jacksonville, Florida, FIS is a Fortune 500° company and is a member of Standard & Poor's 500° Index. To learn more, visit www.fisglobal.com.



TO OUR VALUED SHAREHOLDERS

As we go to press with this report, the world is facing unprecedented uncertainties with the rapid spread of the novel coronavirus. While FIS has moved swiftly to ensure the health and safety of our employees and mitigate disruption to our operations, the situation is fluid and it is unknown what impact the COVID-19 pandemic will have on the marketplace. Our business model is resilient, and I am confident in our strategy, our future, and our prospects.

With that as a backdrop, I would like to give you a sense for all the outstanding things going on within our great company, FIS. A year ago, I wrote of an exciting milestone in the ongoing evolution of FIS as we celebrated our 50th anniversary as a company.

This year, I bring news of a new chapter in the FIS growth story. With our \$43 billion acquisition of Worldpay in 2019, the largest ever in the financial technology industry, FIS is now a global financial technology powerhouse with more than 55,000 employees and operations in over 100 countries around the world.

The addition of Worldpay's world-class payments and eCommerce capabilities dramatically enhances our market reach and global footprint while enabling us to bring new innovations and economies of scale to our clients. As a result of the transformative combination, FIS today is truly at the center of global finance and commerce. Consider a snapshot of our transformed profile:

- We serve more than a million merchant locations around the world, 60% of the largest retailers, 90% of the largest global banks, and 90% of the top private equity firms.
- We are the global leader in payment processing and merchant acquiring, in core banking and capital market solutions.
- We offer an end-to-end portfolio of hundreds of solutions spanning the full spectrum of banking, merchant solutions and capital markets.
- Our systems support more than 350 million active accounts and annually process over 75 billion transactions worth in excess of \$9 trillion.

- Our platforms support more than 1,000 firms administering more than \$7 trillion in retirement and wealth assets.
- We operate a world-class global delivery network that includes over 1,000 technology partners.

FIS has a proven record of successful execution with past acquisitions, and I'm happy to report that our teams are ahead of schedule in our integration of Worldpay. By year-end 2019 we had already achieved \$465 million in annualized cost synergies and more than \$80 million in annualized revenue synergies through cross-selling additional solutions to our joint clients. Overall, we now expect to realize a total of \$675 million in annualized cost synergies and \$550 million in annualized revenue synergies through this acquisition by the end of 2022.

Accelerating our Growth Trajectory

The acquisition of Worldpay accelerates our growth trajectory by making FIS a major player in the fast-growing merchant payments markets. We are already seeing the benefits of this enhanced growth profile in our financial results, which were very strong in 2019:

- Our organic revenue growth accelerated to 6% for the full year and we surpassed \$10 billion in revenue for the first time in our history.
- We also recorded the highest year of new sales in our history and closed 2019 with record levels of installation backlog and sales pipeline.
- Our profit margins continued to expand as we benefited from the cost synergies of the acquisition as well as ongoing cost efficiency initiatives.
- We grew our adjusted net earnings per share to \$5.61, exceeding our stated targets for the year.
- We generated exceptional free cash flow of \$2.1 billion, which we used to pay down \$1.4 billion in debt since closing the Worldpay acquisition, while continuing significant investments in solution innovations and in our global delivery operations.

This strong performance in 2019 enabled us to deliver on our No. 1 priority of increasing shareholder value. Including dividends, we delivered total shareholder return of 37% in 2019, once again outpacing the S&P Index.

These results are a credit to the hard work and efforts of our employees around the world. But for all the progress we've made as a company, I believe we have only just begun to tap the growth potential of our business model at FIS.

Our core tenets that drive our long-term growth strategy at FIS have not changed: bold thinking, tightly managed investments, a strong M&A strategy, disciplined resource allocation and, finally, continual productivity and margin enhancements. These are driving accelerated revenue growth, higher earnings per share, improved free cash flow and a strong balance sheet. It's a formula that has enabled us to deliver consistent, predictable financial results while outperforming the market in terms of delivering shareholder value.

Leading the Journey of Technology Modernization

As we enter a new decade, our growth prospects are bright. The financial services industry is in the beginning stages of a long-term technological revolution. Rapid advancements in technology are transforming the way people pay, bank and invest. Consumers are expecting – and demanding – fast, seamless, frictionless experiences across all areas of their financial lives, and they're willing to go to alternative sources to get those experiences.

Financial institutions, merchants and corporations are racing to adjust their business models and technology infrastructures to respond to these changing needs. It's a journey of modernization: from the closed, proprietary, on-premises technology models of the past to open, flexible, on-demand platforms that speed the delivery of innovative new services to customers. No organization is exempt from making this journey, because their competitive positions are at stake. The choice is to disrupt or be disrupted by new market entrants and challengers.

FIS has been on a journey too – a multiyear journey to transform our portfolio and capabilities to enable us, and our clients, to capitalize on growth opportunities at a time of rapid marketplace change. In addition to the acquisitions we have made, we have invested billions of dollars transforming our solutions while embracing leading-edge technologies, such as the cloud, artificial intelligence, robotics process automation and open application programming interfaces. Complementing our internal investments, we have invested in promising fintech startups through our annual Accelerator program and through direct investments and partnerships with early stage firms.

Our internal investments have yielded a range of breakthrough innovations, such as our new Modern Banking Platform, built from the ground up to be cloud-native and modular; our next-generation global trading system, which links buy-side and sell-side firms in a broker-neutral platform; our Premium Payback redemption network, being used by a growing number of institutions for powering their loyalty programs; and our Access Worldpay gateway, which provides merchants a single point of entry for routing payments securely through the most cost-efficient method.









We have invested significantly in client service and delivery, as well. We are nearing completion of a multiyear program to consolidate our data centers and create a modern, powerful network for deploying solutions through a secure cloud environment. Today, more than 65% of our North American applications are being delivered through the FIS Secure Cloud. These advancements have enabled us to make industry-leading commitments to our clients who use these cloud-based solutions. Additionally, we are piloting an industry-first program that dramatically streamlines and simplifies the contracting process for our smaller U.S. banking clients.

Lastly, we continue to make investments in our people – in training, skills development, talent management and diversity – to ensure our workforce has the skills FIS needs to succeed in this rapidly changing market. I firmly believe that we have the most talented, best-trained workforce in the industry, and they demonstrate that every day in the work they do in bringing new innovations to the market and supporting our clients.

Advancing the Way the World Pays, Banks and Invests

Because of this work and these investments, FIS is well-positioned not only to participate in the technological revolution that is reshaping this marketplace, but to lead it. Our global scale and integrated, end-to-end portfolio make us uniquely able to anticipate and solve pressing client challenges across the full ecosystem of merchant services, banking and capital markets.

Our recent wins and record installation backlog are the surest indicators that this strategy is working:



Three of the world's largest banks –MUFG Union Bank, First Republic Bank and a Top 10 U.S. commercial bank – recently chose FIS to modernize their legacy core banking systems on the Modern Banking Platform and our other modern platforms.



A leading global retailer chose Worldpay to consolidate multiple payment acquirer relationships and deploy omnichannel payment technology across Europe for both its in-store and online payments.



Another top U.S. retailer chose the FIS Premium Payback customer loyalty solution to deepen its relationships with millions of consumers across some 3,000 locations.



PayPal chose FIS as the first nonbank payments processor to join PayPal's Pay for Rewards, enabling millions of U.S. cardholders to pay for purchases using the rewards points from their bank loyalty programs.



One of the world's largest asset management firms chose FIS to power its future with a next-generation investment management platform featuring advanced digital and data visualization capabilities.

These are just a few of the forward-looking projects that we are winning in the marketplace. Our goal with our clients is no less than it is for ourselves – to help them use technology in innovative ways to become leaders in their respective industries. Together, we advance the way the world pays, banks and invests.

I look forward to reporting on our continued growth and progress in the future.

Sincerely,

Gary Norcross

Chairman, President and Chief Executive Officer





UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

	Form 10-K
✓ ANNUAL REPORT PURSUA For the fiscal year ended December 31, 2019	ANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
for the fiscal year ended December 31, 2015	Or
☐ TRANSITION REPORT PURSU.	ANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from	to
	Commission File No. 001-16427

Fidelity National Information Services, Inc.

(Exact name of registrant as specified in its charter)

Georgia

(State or other jurisdiction of incorporation or organization)

601 Riverside Avenue

Jacksonville, Florida (Address of principal executive offices)

37-1490331

(I.R.S. Employer Identification No.)

32204

(Zip Code)

(904) 438-6000

(Registrant's telephone number, including area code)

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

	Trading	Name of each exchange
Title of each class	Symbol(s)	on which registered
Common Stock, par value \$0.01 per share	FIS	New York Stock Exchange
0.400% Senior Notes due 2021	FIS21A	New York Stock Exchange
Floating Rate Senior Notes due 2021	FIS21B	New York Stock Exchange
0.125% Senior Notes due 2021	FIS21C	New York Stock Exchange
1.700% Senior Notes due 2022	FIS22B	New York Stock Exchange
0.125% Senior Notes due 2022	FIS22C	New York Stock Exchange
0.750% Senior Notes due 2023	FIS23A	New York Stock Exchange
1.100% Senior Notes due 2024	FIS24A	New York Stock Exchange
2.602% Senior Notes due 2025	FIS25A	New York Stock Exchange
0.625% Senior Notes due 2025	FIS25B	New York Stock Exchange
1.500% Senior Notes due 2027	FIS27	New York Stock Exchange
1.000% Senior Notes due 2028	FIS28	New York Stock Exchange
2.250% Senior Notes due 2029	FIS29	New York Stock Exchange
2.000% Senior Notes due 2030	FIS30	New York Stock Exchange
3.360% Senior Notes due 2031	FIS31	New York Stock Exchange
2.950% Senior Notes due 2039	FIS39	New York Stock Exchange
1.500% Senior Notes due 2027 1.000% Senior Notes due 2028 2.250% Senior Notes due 2029 2.000% Senior Notes due 2030 3.360% Senior Notes due 2031	FIS27 FIS28 FIS29 FIS30 FIS31	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes 🗵 No 🗆	
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes 🗆 No	\boxtimes
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 Exc 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 \boxtimes No \square	
Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursual Rule 405 of Regulation S-T (\S 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was reto submit such files). Yes \boxtimes No \square	
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reportion company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):	_
Large accelerated filer Accelerated Non-accelerated filer Smaller reporting Emerging growth reporting company growth company	
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for company	olying
with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \square	
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 June 30, 2019, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value the registrant's common stock held by nonaffiliates was \$39,616,487,459 based on the closing sale price of \$122.68 on that date as reported the New York Stock Exchange. For the purposes of the foregoing sentence only, all directors and executive officers of the registrant were assumed to be affiliates. The number of shares outstanding of the registrant's common stock, \$0.01 par value per share, was 616,321,624 as February 19, 2020.	by
The information in Part III hereof is incorporated herein by reference to the registrant's Proxy Statement on Schedule 14A for the fisc ended December 31, 2019, to be filed within 120 days after the close of the fiscal year that is the subject of this Report.	al year

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Unless stated otherwise or the context otherwise requires, all references to "FIS," "we," the "Company" or the "registrant" are to Fidelity National Information Services, Inc., a Georgia corporation, and its subsidiaries.

PART I

Item 1. Business

Overview

FIS is a leading provider of technology solutions for merchants, banks, and capital markets firms globally. Our over 55,000 employees are dedicated to advancing the way the world pays, banks and invests by applying our scale, deep domain expertise and data-driven insights. We help our clients use technology in innovative ways to solve business-critical challenges and improve the experience for their customers. Headquartered in Jacksonville, Florida, FIS is a Fortune 500® company and is a member of the Standard & Poor's 500® Index.

FIS is incorporated under the laws of the State of Georgia as Fidelity National Information Services, Inc. and our stock is traded under the trading symbol "FIS" on the New York Stock Exchange.

We have grown organically as well as through acquisitions, which have contributed critical applications and services that complement or enhance our existing offerings, diversifying our revenue by customer, geography and service offering. We also develop new solutions which enhance our client offerings. We evaluate possible acquisitions that might contribute to our growth or performance on an ongoing basis. Our solutions include merchant acquiring solutions; integrated payment solutions; global eCommerce solutions; core processing and ancillary applications solutions; digital solutions, including internet, mobile and eBanking; fraud, risk management and compliance solutions; electronic funds transfer and network services solutions; card and retail payment solutions; wealth and retirement solutions; item processing and output services solutions; securities processing and finance solutions; global trading solutions; asset management and insurance solutions; and corporate liquidity solutions. We sell these solutions to financial institutions, as well as merchants, companies and governmental entities. We sell certain of these solutions to domestic financial institutions and companies as well as to global financial institutions and companies domiciled both within and outside of North America, where our solutions are able to be deployed across multiple regions. Our strategic acquisitions have enabled us to broaden our available solution sets, scale our operations, expand and diversify our customer base and strengthen our competitive position.

On July 31, 2019, FIS completed the acquisition of Worldpay. Through its acquisition of Worldpay, FIS is now a global leader in financial technology, solutions and services for merchants as well as banks and capital markets. The Worldpay acquisition brings an integrated technology platform with a comprehensive suite of products and services serving merchants and financial institutions. Through the Worldpay transaction, FIS has enhanced its global payment capabilities, scale, robust risk and fraud solutions and advanced data analytics. See Note 3 of the Notes to Consolidated Financial Statements for additional discussion.

Financial Information About Operating Segments and Geographic Areas

As a result of the Company's acquisition of Worldpay, the Company reorganized its reportable segments and recast all prior-period segment information presented to align with the new reportable segments. The new segments are Merchant Solutions ("Merchant"), Banking Solutions ("Banking"), and Capital Market Solutions ("Capital Markets"), which are organized based on the markets and clients served aligned with the solutions they provide, as well as the Corporate and Other segment. For information about our revenue see Notes 2, 4 and 22 of the Notes to Consolidated Financial Statements.

Competitive Strengths

We believe our competitive strengths include the following:

- Brand FIS has built a global brand known for innovation and thought leadership in the financial services sector.
- Global Distribution and Scale Our worldwide presence, array of solution offerings, customer breadth, established infrastructure and employee depth enable us to leverage our client relationships and global scale to drive revenue growth and operating efficiency. We are a global leader in many of the markets we serve, supported by a large, knowledgeable talent pool of employees around the world.
- Extensive Domain Expertise and Extended Portfolio Depth FIS has a significant number and wide range of high-quality software applications and service offerings that have been developed over many years with substantial input from our customers. Our broad portfolio of solutions includes a wide range of flexible service arrangements for the deployment and support of our software, from managed processing arrangements, either at the customer's site or at an FIS location, including data centers or our private cloud, to traditional license and maintenance fee approaches. This broad solution set allows us to bundle tailored or integrated services to compete effectively. In addition, FIS is able to use the modular nature of our software applications and our ability to integrate many of our services with the services of others to provide customized solutions that respond to individualized customer needs. We understand the needs of our customers and have developed and acquired innovative solutions that we believe can give them a competitive advantage and reduce their operating costs. We have made significant investment in modernizing our platforms and solutions and in moving our server compute into our private cloud located in our strategic data centers to increase our competitiveness in the global marketplace.
- Excellent and Long-Term Relationships with Customers A significant percentage of FIS' business with our customers relates to applications and services provided under multi-year, recurring contracts. The nature of these relationships allows us to develop close partnerships with these customers, resulting in high client retention rates. As the breadth of FIS' service offerings has expanded, we have found that our access to key customer personnel is increasing, presenting greater opportunities for cross-selling and providing integrated, total solutions to our customers.

Strategy

Our mission is to deliver superior solutions and services to our clients and to expand our client base, which will result in sustained revenue and earnings growth for our shareholders. Our strategy to achieve this goal has been and continues to be built on the following pillars:

- Build, Buy, or Partner to Add Solutions to Cross-Sell Existing Clients and Win New Clients We continue to invest in growth through internal software development as well as through acquisitions and equity investments that complement and extend our existing solutions and capabilities, providing us with additional solutions to cross-sell existing clients and capture the interest of new clients. We also partner from time to time with other entities to provide comprehensive offerings to our prospects and customers. By investing in solution innovation and integration, we continue to expand our value proposition to our prospects and clients. Through our acquisition of Worldpay, we are a global leader in merchant acquiring and global eCommerce solutions.
- Support Our Clients Through Innovation Changing market dynamics, particularly in the areas of information security, regulation and innovation, are transforming the way our clients operate, which is driving incremental demand for our integrated solutions and services around our intellectual property. As prospects and customers evaluate technology, business process changes and vendor risks, our depth of services capabilities enables us to become involved earlier in their planning and design process and assist them as they manage through these changes.

- *Continually Improve to Drive Margin Expansion* We strive to optimize our performance through investments in infrastructure enhancements, our workforce and other measures that are designed to drive margin expansion.
- Expand Client Relationships The overall market we serve continues to gravitate beyond single-application purchases to multi-solution partnerships. As the market dynamics shift, we expect our clients and prospects to rely more on our multidimensional service offerings. Our leveraged solutions and processing expertise can produce meaningful value and cost savings for our clients through more efficient operating processes, improved service quality and convenience for our clients' customers.
- *Build Global Diversification* We continue to deploy resources in strategic global markets where we expect to achieve meaningful scale.

Revenue by Segment

The table below summarizes our revenue by reporting segment (in millions):

	 2019	2018	 2017
Merchant Solutions	\$ 2,013	\$ 276	\$ 261
Banking Solutions	5,873	5,712	5,552
Capital Market Solutions	2,447	2,391	2,749
Corporate and Other	 	 44	 106
Total Consolidated Revenue	\$ 10,333	\$ 8,423	\$ 8,668

Merchant Solutions ("Merchant")

The Merchant segment is focused on serving merchants of all sizes globally, enabling them to accept electronic payments, including credit, debit and prepaid payments originated at a physical point of sale as well as in card-not-present environments such as eCommerce and mobile. Merchant services include all aspects of payment processing, including authorization and settlement, customer service, chargeback and retrieval processing, reporting for electronic payment transactions and network fee and interchange management. Merchant also includes value-added services, such as security and fraud prevention solutions, advanced data analytics and information management solutions, foreign currency management and numerous funding options. Merchant serves clients in over 140 countries. Our Merchant clients are highly-diversified, including non-discretionary everyday spend categories, such as grocery and pharmacy, and include 15 of the U.S. top 25 national retailers in 2019 ranked by sales, as well as global enterprises and small- to medium-sized businesses. The Merchant segment utilizes broad and varied distribution channels, including direct sales forces and multiple referral partner relationships that provide us with a growing and diverse client base.

Our solutions in this segment include the following:

- Merchant Acquiring Solutions. Our merchant acquiring solutions primarily provide traditional point-of-sale payment
 processing for merchants of all sizes with a focus on large multi-national enterprises. Our solutions provide payment
 acceptance from various payment types, including but not limited to debit, credit, EMV, contactless and loyalty point
 redemption. We also provide various value-added services for merchants including fraud, settlement, chargeback and
 onboarding services.
- Integrated Payment Solutions. Our integrated payment solutions primarily leverage an independent software vendor ("ISV") partnership model where FIS provides the merchant acquiring capabilities for the ISV partner across several industry verticals and sub-verticals. This partnership model allows FIS to avoid conflict of interest amongst the ISV providers and also reduces risk of maintaining and updating the software itself. These solutions also include merchant acquiring for payment facilitators ("PayFacs"), which consolidates multiple sub-merchant accounts under a master merchant identification number ("MID") account. Across all clients our integrated payment solutions also provide value-added services.
- Global eCommerce Solutions. Our global eCommerce solutions provide card-not-present merchant acquiring capabilities to merchants of all sizes looking to sell their goods and services digitally. Our platforms enable both domestic and international capabilities and can provide a customizable and scalable solution to our merchants. We believe our solutions are differentiated by the authorization rates we provide to our clients in addition to our global scale.

Banking Solutions ("Banking")

The Banking segment is focused on serving all sizes of financial institutions for core processing and ancillary applications solutions; digital solutions; fraud, risk management and compliance solutions; electronic funds transfer and network services solutions; payment solutions; wealth and retirement solutions; item processing and output services solutions; and services capitalizing on the continuing trend to outsource these solutions. Clients in this segment include global financial institutions, U.S. regional and community banks, credit unions and commercial lenders, as well as government institutions, and other commercial organizations. Banking serves clients in more than 130 countries. Our applications include core processing software, which clients use to maintain the primary records of their customer accounts, and complementary applications and services that interact directly with the core processing applications. We provide our clients integrated solutions characterized by multi-year processing contracts that generate highly recurring revenue. The predictable nature of cash flows generated from the Banking segment provides opportunities for further investments in innovation, integration, information and security, and compliance in a cost-effective manner. The results in this segment included the Reliance Trust Company of Delaware business through its divestiture on December 31, 2018; the Company's Brazilian Venture business through its divestiture as part of the joint venture unwinding transaction on December 31, 2018; and the Capco risk and compliance consulting business through its divestiture on July 31, 2017 (see Note 19 of the Notes to Consolidated Financial Statements).

Our solutions in this segment include the following:

- Core Processing and Ancillary Applications Solutions. Our core processing software applications are designed to run
 banking processes for our financial institution clients, including deposit and lending systems, customer management,
 and other central management systems, serving as the system of record for processed activity. Our diverse selection of
 market-focused core systems enables FIS to compete effectively in a wide range of markets. We continue to invest in
 our core modernization efforts to further differentiate our offerings for the long term. We also offer a number of
 services that are ancillary to the primary applications listed above, including branch automation, back-office support
 systems and compliance support.
- Digital Solutions, including Internet, Mobile and eBanking. Our comprehensive suite of retail delivery applications enables financial institutions to integrate and streamline customer-facing operations and back-office processes, thereby improving customer interaction across all channels (e.g., branch offices, internet, ATM, mobile, and call centers). FIS' focus on consumer access has driven significant market innovation in this area, with multi-channel and multi-host solutions and a strategy that provides tight integration of services and a seamless customer experience. We have been providing our large regional banking customers in the U.S. with Digital One, an integrated digital banking platform, and are now adding functionality and offering Digital One to our community bank clients to provide a consistent, omnichannel experience for consumers of banking services across self-service channels like mobile banking and online banking, as well as supporting channels for bank staff operating in bank branches and contact centers. The uniform customer experience will extend to support a broad range of financial services including opening new accounts; servicing of existing accounts; providing money movement services; and personal financial management; as well as a broad range of other consumer, small business and commercial banking capabilities. Digital One is integrated into several of the core banking platforms offered by FIS and is also offered to customers of non-FIS core banking systems.
- Fraud, Risk Management and Compliance Solutions. Our decision solutions offer a spectrum of options that cover the account lifecycle from helping to identify qualified account applicants to managing existing customer accounts and fraud. Our applications include know-your-customer, new account decisioning and opening, account and transaction management, fraud management and collections. Our risk management services use our proprietary risk management models and data sources to assist in detecting fraud and assessing the risk of opening a new account. Our systems use a combination of advanced authentication procedures, predictive analytics, artificial intelligence modeling and proprietary and shared databases to assess and detect fraud risk for deposit transactions for financial institutions.

- Electronic Funds Transfer and Network Services Solutions. Our electronic funds transfer and debit card processing businesses offer settlement and card management solutions for financial institution card issuers. We provide traditional ATM-based debit network access through NYCE, other branded networks, and emerging real-time payment alternatives. Our networks connect millions of cards and point-of-sale locations nationwide, providing consumers with secure, real-time access to their money. Also through our networks, clients such as financial institutions, retailers and independent ATM operators can capitalize on the efficiency, consumer convenience and security of electronic real-time payments, real-time account-to-account transfers, and strategic alliances such as surcharge-free ATM network arrangements.
- Card and Retail Payment Solutions. Our card and retail payment technology and services allow financial institutions to issue VISA®, MasterCard® or American Express® branded credit and debit cards or other electronic payment cards for use by both consumer and business accounts. Card transactions continue to increase as a percentage of total point-of-sale payments, which fuels continuing demand for card-related services. We offer Europay, MasterCard and VISA ("EMV") integrated circuit cards, often referred to as smart cards or chip cards, as well as a variety of stored-value card types and loyalty/reward programs. Our integrated services range from card production and activation to processing to an extensive range of fraud management services and value-added loyalty programs designed to increase card usage and fee-based revenue for financial institutions and merchants. The majority of our programs are full service, including most of the operations and support necessary for an issuer to operate a credit card program. We do not make credit decisions for our card issuing clients. We are also a leading provider of prepaid card services, which include gift cards and reloadable cards, with end-to-end solutions for development, processing and administration of stored-value programs. Our closed-loop gift card solutions and loyalty programs provide merchants compelling solutions to drive consumer loyalty.
- Wealth and Retirement Solutions. We provide wealth and retirement solutions that help banks, trust companies, brokerage firms, insurance firms, retirement plan professionals, benefit administrators and independent advisors acquire, service and grow their client relationships. We provide solutions for client acquisition, transaction management, trust accounting and recordkeeping that can be deployed stand-alone or as part of an integrated wealth or retirement platform, or on an outsourced basis.
- Item Processing and Output Services Solutions. Our item processing services furnish financial institutions with the technology needed to capture data from checks, transaction tickets and other items; image and sort items; process exceptions through keying; and perform balancing, archiving and the production of statements. Our item processing services are performed at one of our multiple item processing centers located throughout the U.S. or on-site at client locations. Our extensive solutions include distributed (i.e., non-centralized) data capture, mobile deposit capture, check and remittance processing, fraud detection, and document and report management. Clients encompass banks and corporations of all sizes, from de novo banks to the largest financial institutions and corporations. We offer a number of output services that are ancillary to the primary solutions we provide, including print and mail capabilities, document composition software and solutions, and card personalization fulfillment services. Our print and fulfillment needs. We provide our card personalization fulfillment services for branded credit cards and branded and non-branded debit and prepaid cards.

Capital Market Solutions ("Capital Markets")

The Capital Markets segment is focused on serving global financial services clients with a broad array of buy- and sell-side solutions. Clients in this segment operate in more than 100 countries and include asset managers, buy-and sell-side securities, brokerage and trading firms, insurers, private equity firms, and other commercial organizations. Our buy- and sell-side solutions include a variety of mission-critical applications for record keeping, data and analytics, trading, financing and risk management. Capital Markets clients purchase our solutions and services in various ways including licensing and managing technology "in-house," using consulting and third-party service providers, as well as fully outsourcing end-to-end solutions.

We have long-established relationships with many of these financial and commercial institutions that generate significant recurring revenue. We have made, and continue to make, investments in modern platforms; advanced technologies, such as cloud delivery, open APIs, machine learning and artificial intelligence; and regulatory technology to support our Capital Markets clients.

Our solutions in this segment include the following:

- Securities Processing and Finance Solutions. Our offerings help financial institutions to increase the efficiency, transparency and control of their back-office trading operations, post-trade processing and settlement including derivative solutions, risk management, securities lending, syndicated lending, tax processing, and regulatory compliance. The breadth of our offerings also facilitates advanced business intelligence and market data distribution based on our extensive market data access.
- Global Trading Solutions. Our trading solutions provide trade execution, data and network solutions to financial institutions, corporations and municipalities in North America, Europe and other global markets across a variety of asset classes. Our trade execution and network solutions help both buy- and sell-side firms improve execution quality, decrease overall execution costs and address today's trade connectivity challenges.
- Asset Management and Insurance Solutions. We offer solutions that help institutional investors, insurance companies, hedge funds, private equity firms, fund administrators and securities transfer agents improve both investment decision-making and operational efficiency, while managing risk and increasing transparency. Our asset management solutions support every stage of the investment process, from research and portfolio management, to valuation, risk management, compliance, investment accounting, transfer agency and client reporting. Our insurance solutions help support front-office and back-office functions including actuarial risk calculations, policy administration and financial and investment accounting and reporting for a variety of insurance lines, including life and health, annuities and pensions, property and casualty, reinsurance, and asset management.
- Corporate Liquidity Solutions. Our corporate liquidity solutions help chief financial officers and treasurers manage
 working capital by reducing risk and improving communication and response time between a company's buyers,
 suppliers, banks and other stakeholders. Our end-to-end collaborative financial management framework helps bring
 together receivables, treasury and payments for a single view of cash and risk, which helps our clients optimize
 business processes for enhanced liquidity management.

Corporate and Other Segment

The Corporate and Other segment consists of corporate overhead expense, certain leveraged functions and miscellaneous expenses that are not included in the operating segments, as well as certain non-strategic businesses. The overhead and leveraged costs relate to corporate marketing, corporate finance and accounting, human resources, legal, and amortization of acquisition-related intangibles and other costs, such as acquisition and integration expenses, that are not considered when management evaluates revenue-generating segment performance. The Corporate and Other segment also includes the impact on revenue for 2018 and 2017 of adjusting deferred revenue to fair value from the acquisition of SunGard and its subsidiaries on November 30, 2015 (the "SunGard acquisition").

The non-strategic business solutions in this segment have been divested as follows:

- *Retail Check Processing*. Effective August 31, 2018, FIS sold substantially all the assets of the Certegy Check Services business unit in North America (see Note 6 of the Notes to Consolidated Financial Statements).
- *Public Sector and Education*. We completed the sale of our Public Sector and Education business on February 1, 2017 (see Note 19 of the Notes to Consolidated Financial Statements).

Sales and Marketing

We have experienced sales personnel with expertise in particular services and markets, as well as across our various customer segments. We believe that focusing our expertise in specific markets (e.g., global financial institutions, North American financial institutions, North American merchants, etc.) and tailoring integrated solution sets of particular value to participants in those markets enables us to leverage opportunities to cross-sell and up-sell. We continue to realign our sales teams to better match our solution expertise with the market opportunity and customer demand. We target the majority of our potential customers via direct and/or indirect field sales, as well as inbound and outbound lead generation and telesales efforts.

Our global marketing strategy is to develop and lead the execution of the Merchant, Banking and Capital Markets strategic marketing plans in support of their revenue and profitability goals and the FIS brand. Key components include thought leadership, integrated go-to-market programs, internal communications and readiness, media relations, client events, trade shows, high-touch client programs, demand generation campaigns and collateral development and management across digital and online channels.

Patents, Copyrights, Trademarks and Other Intellectual Property

In general, we own the intellectual property and proprietary rights that are necessary for the conduct of our business and important to our future success, including trademarks, trade names, trade secrets, copyrights and patents. We license certain items from third parties under arms-length agreements for varying terms, including some "open source" licenses. Although we acquired the trademarks and trade names used by SunGard, we note that following the split-off of the Availability Services ("AS") business by SunGard in 2014, AS has the right to use the Sungard Availability Services name, which does not include the right to use the SunGard name or its derivatives.

We rely on a combination of contractual restrictions, internal security practices, patents, trade secrets, copyrights and applicable law to establish and protect our software, technology and expertise worldwide. We rely on trademark law to protect our rights in our brands. We intend to continue taking appropriate measures to protect our intellectual property rights, including by legal action when necessary and appropriate.

Competition

The markets for our solutions and services are intensely competitive. Depending on the business line, in our Merchant, Banking and Capital Markets segments, our primary competitors include internal technology or software development departments within financial institutions or other large companies, merchant acquirers, global eCommerce providers, global and regional companies providing payment services, third-party payment processors, securities exchanges, asset managers, card associations, clearing networks or associations, trust companies, independent computer services firms, companies that develop and deploy software applications, companies owned by global banks selling new competitive solutions, companies that provide customized development, implementation and support services, emerging technology innovators, and business process outsourcing companies. Many of these companies compete with us across multiple solutions, markets and geographies. Some of these competitors possess greater financial, sales and marketing resources than we do. Competitive factors impacting the success of our services across our segments include the quality of the technology-based application or service, application features and functions, ease of delivery and integration, the ability to maintain, enhance and support the applications or services, price and overall relationship management. We believe we compete favorably in each of these categories. In addition, we believe our domain expertise, combined with our ability to offer multiple applications, services and integrated solutions to individual clients, enhances our competitiveness against companies with more limited offerings.

Research and Development

Our research and development activities primarily relate to the modernization of our proprietary core systems and the design and development of next generation digital solutions, processing systems, software applications and risk management platforms. We expect to continue our practice of investing an appropriate level of resources to maintain, enhance and extend the functionality of our proprietary systems and software applications, to develop new and innovative software applications and systems to address emerging technology trends in response to the needs of our clients and to enhance the capabilities of our outsourcing infrastructure. In addition, we intend to offer services compatible with new and emerging delivery channels.

As part of our research and development process, we evaluate current and emerging technology for compatibility with our existing and future software platforms. To this end, we engage with various hardware and software vendors in the evaluation of various infrastructure components. Where appropriate, we use third-party technology components in the development of our software applications and service offerings. In the case of nearly all of our third-party software, enterprise license agreements exist for the third-party component and either alternative suppliers exist or transfer rights exist to ensure the continuity of supply. As a result, we are not materially dependent upon any third-party technology components. Third-party software may be used for highly specialized business functions, which we may not be able to develop internally within time and budget constraints. Additionally, third-party software may be used for commodity-type functions within a technology platform environment. We work with our clients to determine the appropriate timing and approach to introducing technology or infrastructure changes to our applications and services. During the years ended December 31, 2019, 2018 and 2017 we incurred research and development costs that were non-capitalizable of approximately 3% to 4% of revenue.

Government Regulation

Our services are subject to a broad range of complex federal, state, and international regulations and requirements, as well as requirements under the rules of self-regulatory organizations including, without limitation, federal truth-in-lending and truth-in-savings rules, state money transmission laws, state cybersecurity protection laws, data protection and privacy laws, usury laws, laws governing state trust charters, the Equal Credit Opportunity Act, the Electronic Funds Transfer Act, the Fair Credit Reporting Act, the Fair Debt Collection Practices Act, the Bank Service Company Act, the Bank Secrecy Act, the USA Patriot Act, the Internal Revenue Code, the Employee Retirement Income Security Act, the Health Insurance Portability and Accountability Act, the Community Reinvestment Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), the Securities Exchange Act of 1934, the Investment Advisors Act of 1940 (the "1940 Act"), anti-corruption laws including the U.S. Foreign Corrupt Practices Act and U.K. Bribery Act, the rules and regulations of the Financial Industry Regulatory Authority ("FINRA"), the Securities and Exchange Commission ("SEC"), the Federal Financial

Institutions Examination Council ("FFIEC"), the Consumer Financial Protection Bureau ("CFPB"), the Financial Conduct Authority in the U.K. ("FCA") and the Payment Systems Regulator in the U.K. ("PSR"), De Nederlandsche Bank ("DNB") in the Netherlands, the Ministry of Economy, Trade and Industry in Japan ("METI") and state financial services regulators (including enforcement of state cybersecurity laws). The compliance of our services and applications with these and other applicable laws and regulations depends on a variety of factors, including the manner in which our clients use them. In some cases, we are directly subject to regulatory oversight and examination. In other cases, our clients are contractually responsible for determining what is required of them under applicable laws and regulations and utilize our products and services to achieve compliance with those laws and regulations. In either case, the failure of our services to comply with applicable laws and regulations may result in suspension or revocation of the permission-based regulatory licenses and/or restrictions on our ability to provide those services and/or the imposition of civil fines and/or criminal penalties, and/or reputational damage. Further, regulatory authorities have the power to, among other things, enjoin "unsafe or unsound" practices, require affirmative actions to correct any violation or practice, issue administrative orders that can be judicially enforced and direct the sale of subsidiaries or other assets. We may be adversely affected by increased regulatory scrutiny or related negative publicity.

The principal areas of regulation impacting our business are the following:

• Oversight by Banking Regulators. As a provider of electronic data processing and back-office services to financial institutions, FIS is subject to regulatory oversight and examination by the FFIEC, including the Federal Deposit Insurance Corporation ("FDIC"), the Office of the Comptroller of the Currency ("OCC"), the Board of Governors of the Federal Reserve System ("FRB"), the National Credit Union Administration ("NCUA") and the CFPB as part of the Multi-Regional Data Processing Servicer ("MDPS") program. The MDPS program includes technology suppliers that provide mission critical applications for a large number of financial institutions that are regulated by multiple regulatory agencies. Periodic information technology examination assessments are performed using FFIEC Interagency guidelines to identify potential risks that could adversely affect serviced financial institutions, determine compliance with applicable laws and regulations that affect the services provided to financial institutions and ensure the services we provide to financial institutions do not create systemic risk to the banking system or impact the safe and sound operation of the financial institutions we process. In addition, independent auditors annually review several of our operations to provide reports on internal controls for our clients. We are also subject to review and examination by state and international regulatory authorities under state and foreign laws and rules that regulate many of the same activities that are described above, including electronic data processing, payments and back-office services for financial institutions and the use of consumer information.

Our U.S.-based wealth and retirement business holds a charter in the state of Georgia which makes us subject to the regulatory compliance requirements of the Georgia Department of Banking and Finance. As a result, we are also authorized to provide trust services in various additional states subject to additional applicable state regulations.

• Oversight by Securities Regulators. Our subsidiary that conducts our broker-dealer business in the U.S. is registered as a broker-dealer with the SEC, is a member of FINRA, and is registered as a broker-dealer in numerous states. Our broker-dealer is subject to regulation and oversight by the SEC. In addition, FINRA, a self-regulatory organization that is subject to oversight by the SEC, adopts and enforces rules governing the conduct, and examines the activities, of its member firms, including our broker-dealer. State securities regulators, the Municipal Securities Rulemaking Board, and various exchanges, including the New York Stock Exchange, also have regulatory or oversight authority over our broker-dealer. Broker-dealers are subject to regulations that cover all aspects of the securities business, including sales methods, trade practices among broker-dealers, public and private securities offerings, use and safekeeping of customers' funds and securities, capital structure, record keeping, the financing of customers' purchases and the conduct and qualifications of directors, officers and employees. In particular, as a registered broker-dealer and member of a self-regulatory organization, we are subject to the SEC's uniform net capital rule, Rule 15c3-1. Rule 15c3-1 specifies the minimum level of net capital a broker-dealer must maintain and also requires that a significant part of a broker-dealer's assets be kept in relatively liquid form. The SEC and various self-regulatory organizations impose rules that require notification when net capital falls below certain predefined criteria, limit the ratio of

subordinated debt to equity in the regulatory capital composition of a broker-dealer and constrain the ability of a broker-dealer to expand its business under certain circumstances. Additionally, the SEC's uniform net capital rule imposes certain requirements that may have the effect of prohibiting a broker-dealer from distributing or withdrawing capital and requiring prior notice to the SEC for certain withdrawals of capital.

Our subsidiaries also include an SEC-registered transfer agent. Our registered transfer agent is subject to the Securities Exchange Act of 1934 and the rules and regulations promulgated thereunder. These laws and regulations generally grant the SEC and other supervisory bodies broad administrative powers to address non-compliance with regulatory requirements. Sanctions that may be imposed for non-compliance with these requirements include the suspension of individual employees, limitations on engaging in certain activities for specified periods of time or for specified types of clients, the revocation of registrations, other censures and significant fines.

Subsidiaries engaged in activities outside the U.S. are regulated by various government agencies in the particular jurisdiction where they are chartered, incorporated and/or conduct their business activity. For example, pursuant to the U.K. Financial Services and Markets Act 2000 ("FSMA"), certain of our subsidiaries are subject to regulations promulgated and administered by the FCA. The FSMA and rules promulgated thereunder govern all aspects of the U.K. investment business, including sales, research and trading practices, provision of investment advice, use and safekeeping of client funds and securities, regulatory capital, recordkeeping, margin practices and procedures, approval standards for individuals, anti-money laundering, periodic reporting and settlement procedures.

- Payment Services Oversight. Our payment services business is a technology service provider to U.S. financial institutions and is, therefore, subject to oversight and examination by the FFIEC. Our payment services businesses are also subject to regulation, supervision, and enforcement authority of numerous governmental and regulatory bodies in the jurisdictions in which they operate, which includes the CFPB, the DNB in the Netherlands, the METI in Japan, the FCA and the PSR in the U.K. These various regulatory regimes require compliance in respect of many aspects of our payment services business including without limitation corporate governance and oversight functions, capital requirements, safeguarding, technology and cyber resilience, anti-money laundering and sanctions. Because the PSR is an economic regulator in the U.K., it has the power to issue directions in relation to the functioning of the card acquiring market in the U.K. Further, the European Commission is conducting a review of the Regulation of the European Parliament and the Council on interchange fees for card-based payment transactions ("IFR") to examine the appropriateness of the levels of interchange fees, the level of entry of new players, new technology and the impact of innovative business models on the market. The European Union ("E.U.") has overall authority to enforce and establish new standards or guidance which may require banks and authorized payments providers in our Merchant business to modify current pricing and fee structures, and the E.U. could choose to exercise such authority prior to or after conclusion of such review.
- Privacy and Data Protection. The Company is subject to an increasing number of privacy and data protection laws, regulations and directives globally (referred to collectively as "Privacy Laws"), many of which place restrictions on the Company's ability to efficiently transfer, access and use personal data across its business. The legislative and regulatory landscape for privacy and data protection continues to evolve.

Our financial institution clients operating in the U.S. are required to comply with privacy regulations imposed under the Gramm-Leach-Bliley Act (referred to as "GLBA") and numerous similar state laws. GLBA and those state laws place restrictions on the use of non-public personal information. All financial institutions must disclose detailed privacy policies to their customers and offer them the opportunity to direct the financial institution not to share information with third parties. The regulations under GLBA, however, permit financial institutions to share information with non-affiliated parties who perform services for the financial institutions. As a provider of services to financial institutions, we are required to comply with the privacy laws and are bound by the same limitations on disclosure of the information received from our clients as apply to the financial institutions themselves. A

determination that there have been violations of privacy laws could expose us to significant damage awards, fines and other penalties that could, individually or in the aggregate, materially harm our business and reputation.

In July 2016, the European Commission formally approved and adopted the EU-US Privacy Shield, providing a compliance framework for organizations to transfer personal data regarding citizens of the E.U. to the U.S. While we have certified certain lines of business under the Privacy Shield, we have chosen to adopt E.U. model clauses published by the European Commission as the primary basis for the export of data from the E.U. to the U.S.

The E.U.'s General Data Protection Regulation ("GDPR"), which became effective on May 25, 2018, applies to all organizations processing the personal data of individuals in the E.U., regardless of where such organization is based. The GDPR has heightened our data protection compliance obligations, impacted our businesses' collection, processing and retention of personal data and imposed stricter standards for reporting data breaches. The GDPR also imposes significant penalties for non-compliance.

The Company is also subject to the California Consumer Privacy Act ("CCPA"), which came into effect on January 1, 2020 and provides California residents additional data protection rights including the right to be informed about the personal information collected by third parties and the use of that personal information. Further, certain operations of the Company will be subject to the Brazilian General Personal Data Protection Act, which is scheduled to become effective in August 2020. The Company has adopted a comprehensive global privacy program to assess and manage these evolving risks.

In addition, our businesses are increasingly subject to laws and regulations relating to surveillance, encryption and data onshoring in the jurisdictions in which we operate. Compliance with these laws and regulations may require us to change our technology for information security, operational infrastructure, policies and procedures, which could be time-consuming and costly.

• Money Transfer: Elements of our cash access and money transmission businesses are registered as a Money Services Business and are subject to the USA Patriot Act and reporting requirements of the Bank Secrecy Act and U.S. Treasury Regulations. These businesses may also be subject to certain state and local licensing requirements. The Financial Crimes Enforcement Network, state attorneys general, and other agencies have enforcement responsibility over laws relating to money laundering, currency transmission, and licensing. In applicable states, we have obtained money transmitter licenses. However, changes to state money transmission laws and regulations, including changing interpretations and the implementation of new or varying regulatory requirements, may result in the need for additional or expanded money transmitter licenses, additional capital allocations or changes in the way in which we deliver certain services.

We are also subject to certain economic and trade sanctions programs that are administered by the U.S. Treasury's Office of Foreign Assets Control (referred to as "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 laws apply to movements of currency and payments through electronic transactions and to dealings with persons specified in lists maintained by the country equivalents to OFAC in several other countries. We have implemented policies, procedures, and internal controls that are designed to comply with the regulations and economic sanctions programs administered by OFAC, as well as all other applicable anti-money laundering laws and regulations.

Consumer Reporting and Protection. Our decision solutions subsidiary, ChexSystems, maintains a database of
consumer information used to provide various account opening services including credit scoring analysis and is subject
to the Federal Fair Credit Reporting Act ("FCRA") and similar state laws. The FCRA regulates consumer reporting
agencies ("CRAs"), including ChexSystems, and governs the accuracy, fairness, and privacy of information in the files

of CRAs that engage in the practice of assembling or evaluating certain information relating to consumers for certain specified purposes. CRAs are required to follow reasonable procedures to assure maximum possible accuracy of information concerning the individual about whom the report relates and if a consumer disputes the accuracy of any information in the consumer's file, to conduct a reasonable investigation within statutory timelines. The FCRA imposes many other requirements on CRAs and users of consumer report information. Regulatory enforcement of the FCRA is under the purview of the United States Federal Trade Commission, the CFPB, and state attorneys general, acting alone or in concert with one another. In furtherance of our objectives of data accuracy, fair treatment of consumers, protection of consumers' personal information, and compliance with these laws, we have made considerable investment to maintain a high level of security for our computer systems in which consumer data resides, and we maintain consumer relations call centers to facilitate accurate and timely handling of consumer requests for information and handling disputes. We also are focused on ensuring our operating environments safeguard and protect consumer's personal information in compliance with these laws.

Our consumer reporting and consumer-facing businesses are subject to CFPB Bulletin 2013-7 (a succesor to the former Regulation AA - Unfair Deceptive Acts or Practices), which defines Unfair, Deceptive or Abusive Acts or Practices ("UDAAP"). This specific bulletin states that UDAAPs can cause significant financial injury to consumers, erode consumer confidence, and undermine fair competition in the financial marketplace. Original creditors and other covered persons and service providers under the Dodd-Frank Act involved in collecting debt related to any consumer financial product or service are subject to the prohibition against UDAAPs in the Dodd-Frank Act.

- *Debt Collection*. Our collection services are subject to the Federal Fair Debt Collection Practices Act and various state collection laws and licensing requirements. The FTC, as well as state attorneys general and other agencies, have enforcement responsibility over the collection laws, as well as the various credit reporting laws.
- Anti-Corruption. FIS is subject to applicable anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and
 the U.K. Bribery Act, in the jurisdictions in which it operates. Anti-corruption laws generally prohibit offering,
 promising, giving, or authorizing others to give anything of value, either directly or indirectly, to a government official
 or private party in order to influence official action or otherwise gain an unfair business advantage, such as to obtain or
 retain business. FIS has implemented policies, procedures, training and internal controls that are designed to comply
 with such laws, rules and regulations.

The foregoing list of laws and regulations to which our Company is subject is not exhaustive, and the regulatory framework governing our operations changes continuously. Enactment of new laws and regulations may increasingly affect the operations of our business, directly and indirectly, which could result in substantial regulatory compliance costs, litigation expense, adverse publicity, and/or loss of revenue.

Information Security

Globally, attacks on information technology systems continue to grow in frequency, complexity and sophistication. This is a trend we expect to continue. Such attacks have become a point of focus for individuals, businesses and governmental entities. The objectives of these attacks include, among other things, gaining unauthorized access to systems to facilitate financial fraud, disrupt operations, cause denial of service events, corrupt data, and steal non-public information. These circumstances present both a threat and an opportunity for FIS. As part of our business, we electronically receive, process, store and transmit a wide range of confidential information, including sensitive customer information and personal consumer data. We also operate payment, cash access and prepaid card systems.

FIS remains focused on making strategic investments in information security to protect our clients and our information systems. This includes both capital expenditures and operating expense on hardware, software, personnel and consulting services. We also participate in industry and governmental initiatives to improve information security for our clients. Through

the expertise we have gained with this ongoing focus and involvement, we have developed fraud, security, risk management and compliance solutions to target this growth opportunity in the financial services industry.

For more information on Information Security, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

Employees

As of December 31, 2019, we had more than 55,000 employees, including approximately 36,000 employees principally employed outside of the U.S. None of our U.S. workforce currently is unionized. Approximately 9,000 of our employees, primarily in Brazil, U.K., Tunisia, Germany, France, Italy, Mexico and Chile, are represented by labor unions or works councils. We consider our relations with our employees to be good.

Available Information

Our website address is www.fisglobal.com. We make our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, and any amendments to those reports, available, free of charge, on that website as soon as reasonably practicable after we file or furnish them to the Securities and Exchange Commission. Our Corporate Governance Policy and Code of Business Conduct and Ethics are also available on our website and are available in print, free of charge, to any shareholder who mails a request to the Corporate Secretary, Fidelity National Information Services, Inc., 601 Riverside Avenue, Jacksonville, FL 32204 USA. Other corporate governance-related documents can be found at our website as well. However, the information found on our website is not a part of this or any other report.

Item 1A. Risk Factors

In addition to the normal risks of business, we are subject to significant risks and uncertainties, including those listed below and others described elsewhere in this Annual Report on Form 10-K. Any of the risks described herein could result in a significant adverse effect on our results of operations and financial condition.

Risks Related to Our Business and Operations

Security breaches or attacks, or our failure to comply with information security laws or regulations or industry security requirements, could harm our business by disrupting delivery of services and damaging the reputation of FIS and could result in a breach of one or more client contracts.

FIS electronically receives, processes, stores and transmits sensitive business information of its clients. In addition, FIS collects personal consumer data, such as names and addresses, social security numbers, driver's license numbers, cardholder data and payment history records. Such information is necessary to support our clients' transaction processing and to conduct our check authorization and collection businesses. The uninterrupted operation of information systems, as well as the confidentiality of the customer/consumer information that resides on such systems, is critical to the successful operation of FIS. For that reason, cybersecurity is one of the principal operational risks FIS faces as a provider of services to financial institutions. If FIS fails to maintain an adequate security infrastructure, adapt to emerging security threats, or implement sufficient security standards and technology to protect against security breaches, the confidentiality of the information FIS secures could be compromised. Unauthorized access to the computer systems or databases of FIS could result in the theft or publication of confidential information, the deletion or modification of records, damages from legal actions from clients and/or their customers, or otherwise cause interruptions in FIS' operations and damage to its reputation. These risks are greater with increased information transmission over the Internet, the increasing level of sophistication posed by cyber criminals, nation state-sponsored cyber attacks and the integration of FIS systems with those of acquired companies such as Worldpay.

As a provider of services to financial institutions and a provider of card processing services, FIS is bound by the same limitations on disclosure of the information FIS receives from clients as apply to the clients themselves. If FIS fails to comply with these regulations and industry security requirements, it could be exposed to damages from legal actions from clients and/or their customers, governmental proceedings, governmental notice requirements, and the imposition of significant fines or prohibitions on card processing services. In addition, if more restrictive privacy laws, rules or industry security requirements are adopted in the future on the federal or state level, or by a specific industry body, they could have an adverse impact on FIS through increased costs or restrictions on business processes.

Any inability to prevent security or privacy breaches, or the perception that such breaches may occur, could cause existing clients to lose confidence in FIS systems and terminate their agreements with FIS, inhibit FIS' ability to attract new clients, result in increasing regulation, or bring about other adverse consequences from the government agencies that regulate FIS.

Entity mergers or consolidations and business failures in the banking and financial services industry could adversely affect our business by eliminating some of our existing and potential clients and making us more dependent on a more limited number of clients.

There has been and continues to be substantial consolidation activity in the banking and financial services industry. In addition, certain financial institutions that experienced negative operating results, including some of our clients, have failed. These consolidations and failures reduce our number of potential clients and may reduce our number of existing clients, which could adversely affect our revenue, even if the events do not reduce the aggregate activities of the consolidated entities. Further, if our clients or our partners across any of our businesses fail and/or merge with or are acquired by other entities that are not our clients or our partners, or that use fewer of our services, they may discontinue or reduce use of our services. It is also possible that larger financial institutions resulting from consolidations would have greater leverage in negotiating terms or could decide to perform in-house some or all of the services we currently provide or could provide. Any of these developments could have an adverse effect on our business, results of operations and financial condition.

Increased merchant, financial institution or referral partner attrition and decreased transaction volume could cause FIS' revenue to decline.

Our Merchant business may experience attrition and declines in merchant and financial institution credit, debit or prepaid card processing volume resulting from several factors, including business closures, consolidations, loss of accounts to competitors, account closures that it initiates due to heightened credit risks, and reductions in its merchants' sales volumes. Our referral partners, many of which are not exclusive, such as merchant banks, technology solution partners, payment facilitators, independent sales organizations and trade associations are contributors to our revenue growth. If a referral partner switches to another transaction processor, shuts down or becomes insolvent, we will no longer receive new merchant referrals from the referral partner, and we risk losing existing merchants that were originally enrolled by the referral partner. FIS cannot predict the level of attrition and decreased transaction volume in the future, and its revenue could decline as a result of higher-than-expected attrition, which could have a material adverse effect on FIS' business, financial condition and results of operations.

If we fail to innovate or adapt our services to changes in technology or in the marketplace, or if our ongoing efforts to upgrade or implement our technology are not successful, we could lose clients, or our clients could lose customers, and we could have difficulty attracting new clients for our services.

The markets for our services are characterized by constant technological changes, frequent introductions of new services and evolving industry standards. Our future success will be significantly affected by our ability to enhance our current solutions and develop and introduce new solutions and services that address the increasingly sophisticated needs of our clients and their customers. In addition, as more of our revenue and market demand shifts to software as a service ("SaaS"), business process as a service ("BPaaS"), cloud, and new emerging technologies, the need to keep pace with rapid technology changes becomes more acute. These initiatives carry the risks associated with any new solution development effort, including cost overruns, delays in delivery and implementation, and performance issues. There can be no assurance that we will be successful in developing, marketing and selling new solutions or enhancements that meet these changing demands, that we will not

experience difficulties that could delay or prevent the successful development, implementation, introduction, and marketing of these solutions or enhancements, or that our new solutions and enhancements will adequately meet the demands of the marketplace and achieve market acceptance. Any of these developments could have an adverse impact on our future revenue and/or business prospects.

We operate in a competitive business environment; if we are unable to compete effectively, our results of operations and financial condition may be adversely affected.

The market for our services is intensely competitive. Our competitors in Banking and Capital Market Solutions vary in size and in the scope and breadth of the solutions and services they offer. Some of our competitors have substantial resources. We face direct competition from third parties, and because many of our larger potential clients have historically developed their key applications in-house and therefore view their system requirements from a make-versus-buy perspective, we also often compete against our potential clients' in-house capacities. In addition, the markets in which we compete have recently attracted increasing competition from smaller start-ups with emerging technologies which are receiving increasing investments, global banks (and businesses controlled by combinations of global banks) and global internet companies that are introducing competitive products and services into the marketplace, particularly in the payments area. Emerging technologies and increased competition may also have the effect of unbundling bank solutions and result in displacing solutions we are currently providing from our legacy systems. International competitors are also now targeting and entering the U.S. market with greater force. There can be no assurance that we will be able to compete successfully against current or future competitors or that the competitive pressures we face in the markets in which we operate will not materially adversely affect our business, financial condition, and results of operations.

In the Merchant business, our competitors include financial institutions and well-established payment processing companies. In this business, our U.S. competitors that are financial institutions or are affiliated with financial institutions may not incur the sponsorship costs we incur for registration with the payment networks. Accordingly, these competitors may be able to offer more attractive fees to our current and prospective clients or other services that we do not provide. Competition could result in a loss of existing clients and greater difficulty attracting new clients. Furthermore, if competition causes us to reduce the fees we charge in order to attract or retain clients, there is no assurance we can successfully control our costs in order to maintain our profit margins. One or more of these factors could have a material adverse effect on FIS' business, financial condition and results of operations.

FIS is currently facing new competitive pressure from non-traditional payment processors and other parties entering the payments industry, which may compete in one or more of the functions performed in processing merchant transactions. These competitors have significant financial resources and robust networks and are highly regarded by consumers. If these competitors gain a greater share of total electronic payments transactions, or if we are unable to successfully react to changes in the industry spurred by the entry of these new market participants, then it could have a material adverse effect on FIS' business, financial condition and results of operations. See "Item 1. *Business*, Competition."

Global economic, political and other conditions, including business cycles, seasonality and consumer confidence, may adversely affect our clients or trends in consumer spending, which may adversely impact the demand for our services and our revenue and profitability.

A significant portion of our revenue is derived from transaction processing fees. The global transaction processing industries depend heavily upon the overall level of consumer, business and government spending. Any change in economic factors, including a sustained deterioration in general economic conditions or consumer confidence, particularly in the U.S., or increases in interest rates in key countries in which we operate may adversely affect consumer spending, consumer debt levels and credit and debit card usage, and as a result, adversely affect our financial performance by reducing the number or average purchase amount of transactions that we service.

When there is a slowdown or downturn in the economy, a drop in stock market levels or trading volumes, or an event that disrupts the financial markets, our business and financial results, particularly with respect to our Capital Markets segment, may

suffer for a number of reasons. Customers may react to worsening conditions by reducing their capital expenditures in general or by specifically reducing their information technology spending. In addition, customers may curtail or discontinue trading operations, delay or cancel information technology projects, or seek to lower their costs by renegotiating vendor contracts. Moreover, competitors may respond to market conditions by lowering prices and attempting to lure away our customers to lower cost solutions. Any further protective trade policies or actions taken by the U.S. may also result in other countries reducing, or making more expensive, services permitted to be provided by U.S.-based companies. If any of these circumstances remain in effect for an extended period of time, there could be a material adverse effect on our financial results.

The Merchant business has experienced in the past, and expects to continue to experience, seasonal fluctuations in its revenue as a result of consumer spending patterns. Historically, Merchant revenue has been strongest in the fourth quarter and weakest in the first quarter. This is due to the increase in the number and amount of electronic payment transactions related to seasonal retail events.

Constraints within global financial markets or international regulatory requirements could constrain our financial institution clients' ability to purchase our services, impacting our future growth and profitability.

A significant number of our clients and potential clients may hold sovereign debt of economically struggling nations or be subject to international banking regulatory requirements such as Basel III (and a set of further reforms known as Basel IV scheduled to be phased in commencing in January 2022), which may require changes in their capitalization and hence the amount of their working capital available to purchase our services. These potential constraints could alter the ability of clients or potential clients to purchase our services and thus could have a significant impact on our future growth and profitability.

The sales and implementation cycles for many of our software and service offerings can be lengthy and require significant investment from both our clients and FIS. If we fail to close sales, or if a client chooses not to complete an installation after expending significant time and resources to do so, then our business, financial condition, and results of operations may be adversely affected.

The sales and associated deployment of many of our software or service offerings often involve significant capital commitments by our clients and/or FIS. Potential clients generally commit significant resources to an evaluation of available software and services and require us to expend substantial time, effort, and money educating them prior to sales. Further, as part of the sale or deployment of our software and services, clients may also require FIS to perform significant related services to complete a proof of concept or custom development to meet their needs. All of the aforementioned activities may require the expenditure of significant funds and management resources and, ultimately, the client may determine not to close the sale or complete the implementation. If we are unsuccessful in closing sales or implementing our solutions, or if the client decides not to complete an implementation after we expend significant funds and management resources or we experience delays, then it could have an adverse effect on our business, financial condition, and results of operations.

Our results may fluctuate from period to period because of the lengthy and unpredictable sales cycle for our software, changes in our mix of licenses and services, activity by competitors, and customer budgeting, operational requirements or renewal cycles.

Particularly with respect to our Capital Markets segment, our operating results may fluctuate from period to period and be difficult to predict in a particular period due to the timing and magnitude of software license sales and other factors. We offer a number of our software solutions on a license basis, which means that the customer has the right to run the software on its own or a third party's hardware. We generally recognize license revenue when the license contract is signed, the software is delivered, and the term has begun. The value of the license often depends on a number of customer-specific factors, such as the number of customer locations, users or accounts. The sales cycle for a software license may be lengthy and take unexpected turns. Thus, it is difficult to predict when software sales will occur or how much revenue they will generate. Because there are few incremental costs associated with software sales, our operating results may fluctuate from quarter to quarter and year to year due to the timing and magnitude of software sales. Our results may also vary as a result of pricing pressures, increased

cost of equipment, the evolving and unpredictable markets in which our solutions and services are sold, changes in accounting principles, and competitors' new solutions or services.

In addition, there are a number of other factors that could cause our sales and results of operation to fluctuate from period to period, including the following:

- customers periodically renew or upgrade their installed base of our solutions, which trigger buying cycles for current or new versions of our solutions;
- the budgeting cycles and purchasing practices of customers, particularly large customers;
- changes in customer, distributor or reseller requirements or market needs;
- deferral of orders from customers in anticipation of new solutions or offerings announced by us or our competitors or otherwise anticipated by the market;
- our ability to successfully expand our business domestically and internationally; and
- insolvency or credit difficulties confronting our customers, which could adversely affect their ability to purchase or pay for our solutions.

Failure to obtain new clients or renew client contracts on favorable terms could adversely affect results of operations and financial condition.

We may face pricing pressure in obtaining and retaining our clients. Larger clients may be able to seek price reductions from us when they renew a contract, when a contract is extended, or when the client's business has significant volume changes. Larger clients may also reduce services if they decide to move services in-house. Further, our smaller and mid-size clients may also exert pricing pressure, particularly upon renewal, due to competition or other economic needs or pressures being experienced by the client. On some occasions, this pricing pressure results in lower revenue from a client than we had anticipated based on our previous agreement with that client. This reduction in revenue could adversely affect our business, operating results and financial condition.

Further, failure to renew client contracts on favorable terms could have an adverse effect on our business. Our contracts with clients generally run for several years and include liquidated damage provisions that provide for early termination fees. Terms are generally renegotiated prior to the end of a contract's term. If we are not successful in achieving a high rate of contract renewals on favorable terms, then our results of operations and financial condition could be adversely affected.

Our business and operating results could be adversely affected if we experience business interruptions, errors or failure in connection with our or third-party information technology and communication systems and other software and hardware used in connection with our business, if we experience defects or design errors in the software solutions we offer, or more generally, if the third-party vendors we rely upon are unwilling or unable to provide the services we need to effectively operate our business.

Many of our services are based on sophisticated software and computing systems, and we may encounter delays when developing new technology solutions and services. Further, the technology solutions underlying our services have occasionally contained, and may in the future 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 technologies on platforms used by our clients, or our clients may cancel a project after we have expended significant effort and resources to complete an installation. Finally, our systems and operations could be exposed to damage or interruption from fire, natural disaster, power loss, telecommunications failure, unauthorized entry and computer viruses. Defects in our technology solutions, errors or delays in the processing of electronic transactions, or other difficulties could result in (i) interruption of business operations; (ii) delay in market acceptance; (iii) additional development and remediation costs; (iv) diversion of technical and other resources; (v) loss of clients; (vi) negative publicity; or (vii) exposure to liability claims. Any one or more of the foregoing could have an adverse effect on our business, financial condition and results of operations. Although we attempt to limit our potential liability through controls, including system redundancies, security controls, application development and testing controls, and disclaimers and

limitation-of-liability provisions in our license and client agreements, we cannot be certain that these measures will always be successful in preventing disruption or limiting our liability.

Further, most of the solutions we offer are very complex software systems that are regularly updated. No matter how careful the design and development, complex software often contains errors and defects when first introduced and when major new updates or enhancements are released. If errors or defects are discovered in current or future solutions, then we may not be able to correct them in a timely manner, if at all. In our development of updates and enhancements to our software solutions, we may make a major design error that makes the solution operate incorrectly or less efficiently. The failure of software to properly perform could result in the Company and its clients being subjected to losses or liability, including censures, fines, or other sanctions by the applicable regulatory authorities, and we could be liable to parties who are financially harmed by those errors. In addition, such errors could cause the Company to lose revenue, lose clients or damage its reputation.

In addition, we generally depend on a number of third parties, both in the United States and internationally, to supply elements of our systems, computers, research and market data, connectivity, communication network infrastructure, other equipment and related support and maintenance. We cannot be certain that any of these third parties will be able to continue providing these services to effectively meet our evolving needs. If our vendors, or in certain cases vendors of our customers, fail to meet their obligations, provide poor or untimely service, or we are unable to make alternative arrangements for the provision of these services, then we may in turn fail to provide our services or to meet our obligations to our customers, and our business, financial condition and operating results could be adversely affected.

The Dodd-Frank Act, the CFPB, and rules and regulations adopted by state regulatory authorities, such as the New York State Department of Financial Services, may result in business changes for certain of our businesses and clients; these have had, and further could have, an adverse effect on our financial condition, revenue, results of operations, or prospects for future growth and overall business.

The Dodd-Frank Act represented a comprehensive overhaul of the regulations governing the financial services industry within the U.S. The Dodd-Frank Act established the CFPB and provided the CFPB with rulemaking authority with respect to certain federal consumer protection statutes as well as examination and supervisory authority over consumer reporting agencies, including ChexSystems.

The CFPB continues to establish rules and regulations for regulating financial and non-financial institutions and providers to those institutions to ensure adequate protection of consumer privacy and to ensure consumers are not impacted by deceptive business practices. These rules and regulations govern our clients or potential clients and also govern certain of our businesses. These regulations have resulted, and may further result, in the need for FIS to make capital investments to modify our solutions and services to facilitate our clients' and potential clients' compliance, as well as to deploy additional processes or reporting to comply with these regulations. In the future, we may be subject to additional expense to ensure continued compliance with applicable laws and regulations and to investigate, defend and/or remedy actual or alleged violations. Further, requirements of these regulations have resulted, and could further result, in changes in our business practices, our clients' business practices and those of other marketplace participants that may alter the delivery of services to consumers, which have impacted, and could further impact, the demand for our software and services as well as alter the type or volume of transactions that we process on behalf of our clients. As a result, these requirements, or proposed or future requirements, could have an adverse impact on our financial condition, revenue, results of operations, prospects for future growth and overall business.

The New York Department of Financial Services has enacted new rules that require covered financial institutions to establish and maintain cybersecurity programs. These, and a set of newer rules just issued, subject FIS to additional regulation and require us to adopt additional business practices that could also require additional capital expenditures or impact our operating results. Changes to state money transmission laws and regulations, including changing interpretations and the implementation of new or varying regulatory requirements, may result in the need for additional money transmitter licenses. These changes could result in increased costs of compliance, as well as fines or penalties.

Moreover, the legislative and regulatory landscape for financial crimes compliance continues to evolve, and any failure to comply with such laws could expose us to liability and/or reputational damage. Financial crimes laws may be interpreted and applied inconsistently from country to country and impose inconsistent or conflicting requirements. Complying with varying jurisdictional requirements could increase the costs and complexity of compliance and associated recordkeeping costs or require us to change our business practices in a manner adverse to our business.

The Company is subject to regulation, supervision, and enforcement authority of numerous governmental and regulatory bodies in the jurisdictions in which it operates, which includes banking regulators and the CFPB in the U.S., the FCA and PSR in the U.K., and the DNB in the Netherlands.

Because the Company is a technology service provider to U.S. financial institutions, it is subject to regular oversight and examination by the Federal Banking Agencies ("FBA"), each of which is a member of the FFIEC, an inter-agency body of federal banking regulators. The FBA have broad discretion in the implementation, interpretation and enforcement of banking and consumer protection laws and use the FFIEC's uniform principles, standards and report forms in its review of bank service providers like FIS. A failure to comply with these laws, or a failure to meet the supervisory expectations of the banking regulators, could result in adverse action against the Company. The regulators have the power to, among other things, enjoin "unsafe or unsound" practices; require affirmative actions to correct any violation or practice; issue administrative orders that can be judicially enforced; direct the sale of subsidiaries or other assets; and assess civil money penalties.

The Company is also subject to ongoing supervision by regulatory and governmental bodies across the world, including economic and conduct regulators, such as the FCA and PSR in the U.K. and the DNB in the Netherlands, and regulatory and

governmental bodies responsible for issuing anti-money laundering, anti-bribery, and global economic sanctions regulations. These various regulatory regimes require compliance across many aspects of our merchant activities in respect of capital requirements, safeguarding, training, authorization and supervision of personnel, systems, processes and documentation.

If we fail to comply with relevant regulations, then we risk reputational damage, potential civil and criminal sanctions, fines or other action imposed by regulatory or governmental authorities, including the potential suspension or revocation of the permission-based regulatory licenses which authorize the Company to provide core services to customers. Certain aspects of our business may be determined by an appropriate regulator, quasi-regulatory body or the courts as not being conducted in accordance with applicable laws or regulations, or we may face allegations of direct or indirect non-compliance with relevant regulatory regimes (such as the misselling of financial products), or other actions in the U.K., the Netherlands and other jurisdictions, as well as private litigation resulting from such actions. This could result in an adverse effect on FIS' business, reputation and customer relationships, which in turn could adversely affect its financial position and performance.

We are also involved, from time to time, in regulatory investigations, reviews and proceedings (both formal and informal) by regulatory authorities regarding our businesses, certain of which may result in adverse judgments, settlements, fines, penalties, injunctions or other relief. Specifically, the PSR is carrying out a market review into card-acquiring services provided by merchant acquirers in the U.K. with the scope of such review to include the following: the nature and characteristics of card-acquiring services; who provides card-acquiring services and how their market shares have developed historically; how merchants buy card-acquiring services; whether there are credible alternatives to card-acquiring services for some or all merchants; the outcomes of the competitive process including the fees merchants pay and the quality of service they receive. Because the PSR is an economic regulator in the U.K., it has the power to issue directions in relation to the functioning of the card acquiring market in the U.K. as a result of this review. Further, the European Commission is conducting a review of the relevant E.U. regulations on interchange fees for card-based payment transactions ("IFR") to examine the appropriateness of the levels of interchange fees (taking into account the use and cost of the various means of payments), the level of entry of new players, new technology and the impact of innovative business models on the market. The primary purpose of this review is to understand whether overall costs for card acceptance for merchants, including the overall merchant service charge, have gone up, down or broadly stayed the same since the introduction of the IFR. The E.U. has overall authority to enforce and establish new standards or guidance which may require banks and payments institutions, including our Merchant business, to modify current pricing and fee structures, and the E.U. could choose to exercise such authority prior to or after conclusion of this review.

Failure to comply with applicable laws and regulations may result in suspension or revocation of the permission-based regulatory licenses and/or restrictions on our ability to provide services and/or the imposition of civil fines and/or criminal penalties and sanctions.

Many of our clients are subject to a regulatory environment and to industry standards that may change in a manner that reduces the types or volume of solutions or services we provide, or may reduce the type or number of transactions in which our clients engage, and therefore reduce our revenue.

Our clients are subject to a number of government regulations and industry standards with which our services must comply. Our clients must ensure that our services and related solutions work within the extensive and evolving regulatory and industry requirements applicable to them. Federal, state, foreign or industry authorities could adopt laws, rules or regulations affecting our clients' businesses that could lead to increased operating costs and could reduce the convenience and functionality of our services, possibly resulting in reduced market acceptance. In addition, action by regulatory authorities relating to credit availability, data usage, privacy, or other related regulatory developments could have an adverse effect on our clients and, therefore, could have a material adverse effect on our financial condition, revenue, results of operations, prospects for future growth and overall business. Elimination of regulatory requirements could also adversely affect the sales of our solutions designed to help clients comply with complex regulatory environments.

Our revenue relating to all aspects of the sale of services to members of Visa, MasterCard and other payment networks is dependent upon our continued certification and sponsorship, and the loss or suspension of certification or sponsorship could adversely affect our business.

In order to provide our card processing services, we must be certified (including applicable sponsorship) by Visa, MasterCard, American Express, Discover and other similar organizations. These certifications are dependent upon our continued adherence to the standards of the issuing bodies and sponsoring member banks. The member financial institutions, some of which are our competitors, set the standards with which we must comply. If we fail to comply with these standards we could be fined, our certifications could be suspended, or our registration could be terminated. The suspension or termination of our certifications, or any changes in, or the enforcement of, the rules and regulations governing or relating to the businesses of Visa, MasterCard or other payment networks, could result in a reduction in revenue or increased costs of operation for us, which in turn could have a material adverse effect on our business.

In order to provide merchant transaction processing services in the U.S. and certain other jurisdictions, we are registered through our bank sponsorships with the Visa, MasterCard and other payment networks as service providers for member institutions. As a result, FIS and many of its clients are subject to payment network rules. If FIS or its associated participants do not comply with the payment network requirements, the payment networks could seek to fine FIS, suspend FIS or terminate its registrations. Our Merchant business has occasionally received notices of noncompliance and fines, which have typically related to excessive chargebacks by a merchant or data security failures on the part of a merchant. If FIS is unable to recover fines from, or pass through costs to, its merchants or other associated participants, then FIS would experience a financial loss. The termination of its registration, or any changes in the payment network rules that would impair FIS' registrations, could require the Company to stop providing payment network services to the Visa, MasterCard or other payment networks, which would have a material adverse effect on FIS' business, financial condition and results of operations.

Outside of the U.S., our Merchant business primarily provides acquiring and processing services directly through international credit and debit card networks run by Visa, MasterCard and other payment networks. In order to access the card networks, the Company must maintain the relevant jurisdictional operating licenses or memberships. In some markets where it is not feasible or possible for the Company to have a direct acquiring license with a card network, we have a relationship with a local financial institution sponsor. As part of the Company's registration with card networks (either directly or indirectly through local sponsors), the Company is subject to operating rules, including mandatory technology requirements, promulgated by the card networks that could subject the Company and its customers to a variety of fines and penalties, as well as suspension and termination of membership or access.

Changes in the contracts, rules or standards of networks, or relevant legal or regulatory scrutiny of pricing practices, could adversely affect FIS' business, financial condition and results of operations.

From time to time, card and debit networks increase the interchange fees that they charge. At their sole discretion, our financial institution sponsors have the right to pass any increases in interchange and other fees on to us, and they have consistently done so in the past. While we are generally permitted under the contracts with our merchants to pass these fee increases along to our merchants through corresponding increases in our processing fees, if we cannot continue to do so due to contractual or regulatory requirements or competitive pressures, the inability to pass through such fees could have a material adverse effect on FIS' business, financial condition and results of operations. Additionally, in order to access the card networks directly, as our Merchant business does primarily outside the U.S., we must pay card network membership fees, which are subject to change from time to time, and which we may be unable to pass along to our merchant clients, potentially resulting in FIS absorbing a portion or all of such increases in the future.

Furthermore, the rules and regulations of 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. Moreover, as payment networks become more dependent on proprietary technology, modify their technological approach or operating practices, and/or seek to provide value added services to issuers and merchants, there is heightened risk that rules and standards may be

governed by their own self-interest, or the self-interest of third parties with influence over them, which could materially impact FIS' competitive position and operations.

Interchange fees and pricing practices have been receiving significant legal and regulatory scrutiny worldwide. The resulting changes that could occur from proposed regulations or other forms of enforcement could alter the fees charged by us, card associations and debit networks worldwide. Such changes could have an adverse impact on our business or financial condition and results of operations.

If FIS' agreements with U.S. financial institution sponsors and clearing service providers to process electronic payment transactions are terminated or otherwise expire and we are unable to renew existing or secure new sponsors or clearing service providers, then we will not be able to conduct our Merchant business in the U.S.

In the U.S. and certain other markets, the Visa, MasterCard and other payment network rules require our Merchant business to be sponsored by a member bank in order to process electronic payment transactions. Because we are not a U.S. bank, we are unable to directly access these payment networks in the U.S. We are currently registered with the Visa, MasterCard and other payment networks through Fifth Third Bank and other sponsor banks in the U.S. and elsewhere. Our current agreement with Fifth Third Bank expires in December 2024. These agreements with Fifth Third Bank and other sponsors give such sponsors substantial discretion in approving certain aspects of our business practices in our Merchant business, including our solicitation, application and qualification procedures for merchants and the terms of our agreements with merchants. Our financial institution sponsors' discretionary actions under these agreements could have a material adverse effect on our business, financial condition and results of operations. We also rely on Fifth Third Bank and various other financial institutions to provide clearing services in connection with our settlement activities. Without these sponsorships or clearing services agreements in our Merchant business, we would not be able to process Visa, MasterCard and other payment network transactions or settle transactions in relevant markets, including the U.S. which would have a material adverse effect on FIS' business, financial condition and results of operations. Furthermore, FIS' financial results could be adversely affected if the costs associated with such sponsorships or clearing services agreements increase.

Our securities brokerage operations are highly regulated and subject to risks that are not encountered in our other businesses.

One of our subsidiaries is an SEC registered broker-dealer in the U.S., and others are authorized by the FCA to conduct certain regulated business in the U.K. Domestic and foreign regulatory and self-regulatory organizations, such as the SEC, FINRA, and the FCA, can, among other things, fine, censure, issue cease-and-desist orders against, and suspend or expel a broker-dealer or its officers or employees for failure to comply with the many laws and regulations that govern brokerage activities. Those laws and regulations derive from a variety of policy considerations and address a wide range of topics, including those designed to protect customers of broker-dealers, and the privacy of their information, and those designed to protect the integrity of the markets, such as laws and regulations requiring broker-dealers to report suspicious activity of customers. Sanctions for failure to comply with such laws and regulations may arise out of currently conducted activities or those conducted in prior periods. Our ability to comply with these laws and regulations is largely dependent on our establishment, maintenance, and enforcement of an effective brokerage compliance program. Failure to establish, maintain, and enforce the required brokerage compliance procedures, even if unintentional, could subject us to significant losses, lead to disciplinary or other actions, and tarnish our reputation. Regulations affecting the brokerage industry may change, which could adversely affect our financial results.

We are exposed to certain risks relating to the execution services provided by our brokerage operations to our customers and counterparties, which include other broker-dealers, active traders, hedge funds, asset managers, and other institutional and non-institutional clients. These risks include, but are not limited to, customers or counterparties failing to pay for or deliver securities, trading errors, the inability or failure to settle trades, and trade execution system failures. As trading in the U.S. securities markets has become more automated, the potential impact of a trading error or a rapid series of errors caused by a computer or human error or a malicious act has become greater. In our other businesses, we generally can disclaim liability for trading losses that may be caused by our software, but in our brokerage operations, we may not be able to limit our liability for

trading losses or failed trades even when we are not at fault. As a result, we may suffer losses that are disproportionately large compared to the relatively modest profit contributions of our brokerage operations.

Privacy laws and regulations, such as the GDPR, have required and will further require FIS to adopt new business practices and contractual provisions in existing and new contracts which may require transitional and incremental expenses which may impact our future operating results.

New privacy laws, such as the GDPR in the E.U., continue to develop in unpredictable ways. The Company is also subject to the California Consumer Privacy Act effective January 1, 2020 and will be subject to the Brazilian General Personal Data Protection Act, which is scheduled to become effective in August 2020. Failure to comply with these new laws could result in significant penalties, damage to our brand and loss of business. The Company has incurred, and will continue to incur, costs to comply with these new laws. There are also several additional privacy laws being considered by state legislatures, the federal legislature and countries around the world; so, a more substantial compliance effort with varying regimes in different jurisdictions is considered probable in the future, which will increase the costs and complexities of the business. Moreover, privacy laws may be interpreted and applied inconsistently from country to country and impose inconsistent or conflicting requirements. Complying with varying jurisdictional requirements could increase the costs and complexity of compliance and associated recordkeeping costs or require us to change our business practices in a manner adverse to our business and incur additional costs. Data localization requirements in evolving data protection laws could also increase the cost and alter the approach to housing data around the world.

In addition, our businesses are increasingly subject to laws and regulations relating to surveillance, encryption and data onshoring in the jurisdictions in which we operate. Compliance with these laws and regulations may require us to change our technology for information security, operational infrastructure, policies and procedures, which could be time-consuming and costly.

If we fail to comply with applicable regulations or to meet regulatory expectations, our business, results of operations or financial condition could be adversely impacted.

The majority of our data processing services for financial institutions are not directly subject to federal or state regulations specifically applicable to financial institutions such as banks, thrifts and credit unions. However, as a provider of services to these financial institutions, our data processing operations are examined on a regular basis by various federal and state regulatory authorities and by international regulatory authorities, such as the FCA, in certain jurisdictions. If we fail to comply with any applicable regulations or guidelines for operations of a data services provider, we could be subject to regulatory actions or rating changes, may not meet contractual obligations, and may suffer harm to our client relationships or reputation. Failure to meet the aforementioned requirements or to adapt to new requirements at the federal, state or international level could inhibit our ability to retain existing clients or obtain new clients, which could have an adverse impact on our business, results of operations and financial condition.

In addition to our data processing services described above, we also have business operations that store, process or transmit consumer information or have direct relationships with consumers that are obligated to comply with regulations, including, but not limited to, the FCRA, the Federal Fair Debt Collection Practices Act and applicable privacy requirements. Further, our international businesses must comply with applicable laws such as the U.S. Foreign Corrupt Practices Act. Failure to maintain compliance with or adapt to changes in any of the aforementioned requirements could result in fines, penalties or regulatory actions that could have an adverse impact on our business, results of operations and financial condition.

High profile payment card industry or digital banking security breaches could impact consumer payment behavior patterns in the future and reduce our card payment transaction volumes.

We are unable to predict whether or when high profile card payment or digital banking security breaches will occur and if they occur, whether consumers will transact less on their payment cards or reduce their digital banking service. If consumers

transact less on cards issued by our clients or reduce digital banking services and we are not able to adapt to offer our clients alternative technologies, then our revenue and related earnings could be adversely affected.

Misappropriation of our intellectual property and proprietary rights or a finding that our patents are invalid could impair our competitive position.

Our ability to compete depends in some part upon our proprietary solutions and technology. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our services or to obtain and use information that we regard as proprietary or challenge the validity of our patents with governmental authorities. Policing unauthorized use of our proprietary rights is difficult. We cannot make any assurances that the steps we have taken will prevent misappropriation of technology or that the agreements entered into for that purpose will be enforceable. 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 online. Misappropriation of our intellectual property or potential litigation concerning such matters could have an adverse effect on our results of operations or financial condition. As we increase our international business, we are subject to further risks of misappropriation of our intellectual property risks in countries which have laws which are less protective of intellectual property or are enforced in a less protective manner.

If our applications or services are found to infringe the proprietary rights of others, then we may be required to change our business practices and may also become subject to significant costs and monetary penalties.

As our information technology applications and services develop, we are increasingly subject to infringement claims. Any claims, whether with or without merit, could (i) be expensive and time-consuming to defend; (ii) result in an injunction or other equitable relief which could cause us to cease making, licensing or using applications that incorporate the challenged intellectual property; (iii) require us to redesign our applications, if feasible; (iv) divert management's attention and resources; and (v) require us to enter into royalty or licensing agreements in order to obtain the right to use necessary technologies or pay damages resulting from any infringing use.

Some of our solutions contain "open source" software, and any failure to comply with the terms of one or more of these open source licenses could adversely affect our business.

We use a limited amount of software licensed by its authors or other third parties under so-called "open source" licenses and may continue to use such software in the future. Some of these licenses contain requirements that we make available source code for modifications or derivative works we create based upon the open source software and that we license such modifications or derivative works under the terms of a particular open source license or other license granting third parties certain rights of further use. By the terms of certain open source licenses, we could be required to release the source code of our proprietary software if we combine our proprietary software with open source software in a certain manner. Additionally, the terms of many open source licenses have not been interpreted by U.S. or other courts, and there is a risk that these licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our solutions. In addition to risks related to license requirements, usage of open source software can lead to greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or controls on origin of the software. We have established processes to help alleviate these risks, including a review process for screening requests from our development organizations for the use of open source, but we cannot be sure that all open source is submitted for approval prior to use in our solutions. In addition, many of the risks associated with usage of open source cannot be eliminated, and could, if not properly addressed, adversely affect our business.

Lack of system integrity, fraudulent payments, credit quality, and undetected errors related to funds settlement or the availability of clearing services could result in a financial loss.

We settle funds on behalf of financial institutions, other businesses and consumers and receive funds from clients, card issuers, payment networks and consumers on a daily basis for a variety of transaction types. Transactions facilitated by us include debit card, credit card, electronic bill payment transactions, banking payments and check clearing that supports

consumers, financial institutions and other businesses. These payment activities rely upon the technology infrastructure that facilitates the verification of activity with counterparties, the facilitation of the payment as well as the detection or prevention of fraudulent payments. If our continuity of operations, integrity of processing, or ability to detect or prevent fraudulent payments were compromised, this could result in a financial loss to us. In addition, we rely on various financial institutions to provide ACH services in support of funds settlement for certain of our solutions. If we are unable to obtain such ACH services in the future, that could have a material adverse effect on our business, financial position and results of operations. In addition, we may issue credit to consumers, financial institutions or other businesses as part of the funds settlement. A default on this credit by a counterparty could result in a financial loss to us. Furthermore, if one of our clients for which we facilitate settlement suffers a fraudulent event due to a deficiency in their controls, we may suffer a financial loss if the client does not have sufficient capital to cover the loss.

The Referendum on the U.K.'s membership in the E.U. could cause disruption to and create uncertainty surrounding our business.

Significant portions of our Merchant business is located in, and services clients in, the U.K. We also have other business and operations in the U.K. and the E.U. The U.K. left the E.U. ("Brexit") on January 31, 2020, pursuant to the terms of a withdrawal agreement concluded between the U.K. Government and the Council of the E.U. The withdrawal agreement includes a transition period until December 31, 2020, during which time the U.K. will follow the E.U.'s rules and regulations and will remain in the single market and the customs union. The go-forward relationship between the U.K. and the E.U. will continue to be a point of negotiation during this transition period and there can be no guarantee as to what relationship will be agreed upon following the end of such transition period. Actions to implement Brexit may also create global economic uncertainty, which may cause clients to closely monitor their costs and reduce their spending on our solutions and services.

Although the potential impact of Brexit on our business cannot be fully assessed until the detailed terms of the U.K.'s continued relationship with the E.U. following the transition period are finalized and the U.K. negotiates, concludes and implements successor trading arrangements with other countries, it is likely that this withdrawal process will continue to result in a sustained period of economic and political uncertainty and complexity.

These developments, or the perception that any of them could occur, have had, and may continue to have, a material adverse effect on global economic conditions and the stability of global financial markets and could significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Asset valuations, currency exchange rates and credit ratings may be especially subject to increased market volatility. Lack of clarity about future U.K. laws and regulations as the U.K. determines which E.U. laws to replace or replicate following the transition period, including financial laws and regulations, tax and free trade agreements, intellectual property rights, supply chain logistics, environmental, health and safety laws and regulations, competition laws, immigration laws and employment laws, could decrease foreign direct investment in the U.K., increase costs, depress economic activity and restrict our access to capital. If the U.K. and the E.U. are unable to negotiate acceptable terms following the transition period or if other E.U. member states pursue withdrawal, barrier-free access between the U.K. and other E.U. member states or among the European economic area overall could be diminished or eliminated. Any of these factors could have a direct or indirect impact on our business in the U.K. and the broader E.U., on our suppliers and customers in the U.K. and the broader E.U. and on our business outside the U.K. and the broader E.U., which could have a material adverse effect on our business, business opportunities, financial condition, cash flows and operating results.

Failure to properly manage or mitigate risks in the operation of our wealth and retirement businesses in the U.S and the U.K could have adverse liability consequences.

We have wealth and retirement businesses in the U.S. and U.K. engaged in processing securities transactions on behalf of clients and serving as a custodian. Failure to properly manage or mitigate risks in those operations and increased volatility in the financial markets may increase the potential for, and magnitude of, resulting losses, including those that may arise from human errors or omissions, defects or interruptions in computer or communications systems or breakdowns in processes or in internal controls. Human errors or omissions may include failures to comply with applicable laws or corporate policies and

procedures, theft, fraud or misappropriation of assets, whether arising from the intentional actions of internal personnel or external third parties. In addition, the U.S.-based business holds a charter in the state of Georgia, which exposes us to further regulatory compliance requirements of the Georgia Department of Banking and Finance. The U.S. wealth and retirement business is required to hold certain levels of regulatory capital as defined by the state banking regulator in Georgia. In the U.K., our Platform Securities and broker-dealer businesses are regulated by the FCA and are subject to further regulatory capital requirements.

Our business is subject to the risks of international operations, including movements in foreign currency exchange rates.

The international operations of FIS represented approximately 24% of our total 2019 revenue and are largely conducted in currencies other than the U.S. Dollar, including the British Pound Sterling, Euro, Brazilian Real, and Indian Rupee. As a result of the Worldpay acquisition, FIS has significantly expanded its international presence by offering merchant acquiring, including eCommerce, services outside of the U.S., including in the U.K. and E.U. countries, where Worldpay's principal non-U.S. operations are currently located. Our business and financial results could be adversely affected due to a variety of factors, including the following:

- changes in a specific country or region's political and cultural climate or economic condition, including change in governmental regime;
- unexpected or unfavorable changes in foreign laws, regulatory requirements and related interpretations;
- difficulty of effective enforcement of contractual provisions in local jurisdictions;
- inadequate intellectual property protection in foreign countries;
- trade-protection measures, import or export licensing requirements such as Export Administration Regulations
 promulgated by the U.S. Department of Commerce and fines, penalties or suspension or revocation of export
 privileges;
- trade sanctions imposed by the U.S. or other governments with jurisdictional authority over our business operations;
- the effects of applicable and potentially adverse foreign tax law changes;
- significant adverse changes in foreign currency exchange rates;
- lesser enforcement of intellectual property laws and protections internationally;
- longer accounts receivable cycles;
- managing a geographically dispersed workforce;
- trade treaties, tariffs or agreements that could adversely affect our ability to do business in affected countries; and
- compliance with the U.S. Foreign Corrupt Practices Act and the Office of Foreign Assets Control regulations, particularly in emerging markets.

As we expand our international operations, more of our clients may pay us in foreign currencies. Conducting business in currencies other than the U.S. Dollar subjects us to fluctuations in foreign currency exchange rates that can negatively impact our results, period to period, including relative to analyst estimates or guidance. Our primary exposure to movements in foreign currency exchange rates relates to foreign currencies in Brazil, Europe, including the U.K., and parts of Asia. The U.S. Dollar value of our net investments in foreign operations, the periodic conversion of foreign-denominated earnings to the U.S. Dollar (our reporting currency), and our results of operations and, in some cases, cash flows, could be adversely affected in a material manner by movements in foreign currency exchange rates. These risks could cause an adverse effect on the business, financial position and results of operations of the Company.

Failure to comply with anti-bribery and anti-corruption laws could subject us to penalties and other adverse consequences.

We are subject to the FCPA, the U.K. Bribery Act and other anti-bribery, anti-corruption and anti-money laundering laws in various countries around the world. The FCPA, the U.K. Bribery Act and similar applicable laws generally prohibit companies, as well as their officers, directors, employees and third-party intermediaries, business partners and agents, from making improper payments or providing other improper things of value to government officials or other persons for the purpose of obtaining or retaining business abroad or otherwise obtaining favorable treatment. The FCPA also requires that U.S. public

companies maintain books and records that fairly and accurately reflect transactions and maintain an adequate system of internal accounting controls.

We conduct business in many foreign countries, including a number of countries with developing economies, and many of our employees, third-party intermediaries and agents in such countries may have direct or indirect interactions with officials and employees of government agencies, state owned or affiliated entities and other third parties where we may be held liable if they take actions in violation of these laws, even if we do not explicitly authorize them. Although our policies and procedures require compliance with these laws and are designed to facilitate compliance with these laws, we do business in many countries all over the world and cannot assure that our employees, contractors or agents somewhere in the world will not take actions in violation of applicable laws or our policies, for which we may be ultimately held responsible.

In the event that we believe or have reason to believe that our employees, contractors or agents have or may have violated such laws, we may be required to investigate or to have outside counsel investigate the relevant facts and circumstances. Detecting, investigating and resolving actual or alleged violations can be extensive and require a significant diversion of time, resources and attention from senior management. Further, we cannot assure that any such investigation will successfully uncover all relevant facts and circumstances. Any violation of the FCPA, the U.K. Bribery Act or other applicable anti-bribery or anti-corruption laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, and criminal or civil sanctions, penalties and fines, any of which could adversely affect our business, results of operations or financial condition.

We have businesses in emerging markets that may experience significant economic volatility.

We have operations in emerging markets, primarily in Brazil, India, Southeast Asia, the Middle East and Africa. These emerging market economies tend to be more volatile than the more established markets we serve in North America and Europe, which could add volatility to our future revenue and earnings.

Acts of war or terrorism, international conflicts, political instability, natural disasters, or widespread outbreak of an illness could negatively affect various aspects of our business, including our workforce and our business partners, make it more difficult and expensive to meet our obligations to our customers, and result in reduced revenue from our customers.

Our global operations are susceptible to global events, including acts or threats of war or terrorism, international conflicts, political instability and natural disasters. We are also susceptible to a widespread outbreak of an illness or other health issue, such as the recent COVID-19 coronavirus outbreak first reported in Wuhan, Hubei Province, China in December 2019, resulting to date in tens of thousands of confirmed cases in China and many additional cases identified in other countries in which we conduct business. Although we have limited operations in China, we are nevertheless exposed to business risk as a result of COVID-19 or other epidemics. These events can spread to different locations across the globe and can have an adverse effect on the global economy, reducing consumer and corporate spending upon which our revenue depends. Individual employees can become ill, quarantined, or otherwise unable to work and/or travel due to health reasons or governmental restrictions. Some of our operations are in countries where the effects of a widespread illness could be magnified due to health care systems that are less well-developed than in the U.S. The occurrence of any of these events, including the potential future effects of the COVID-19 outbreak, could have an adverse effect on our business results and financial condition.

Failure to attract and retain skilled technical employees or senior management personnel could harm our ability to grow.

Our future success depends upon our ability to attract and retain highly-skilled technical personnel. Because the development of our solutions and services requires knowledge of computer hardware, operating system software, system management software and application software, our technical personnel must be proficient in a number of disciplines. Competition for such technical personnel is intense, and our failure to hire and retain talented personnel could have a material adverse effect on our business, operating results and financial condition.

Our future growth will also require sales and marketing, financial and administrative personnel to develop and support new solutions and services, to enhance and support current solutions and services and to expand operational and financial systems. There can be no assurance that we will be able to attract and retain the necessary personnel to accomplish our growth strategies, and we may experience constraints that could adversely affect our ability to satisfy client demand in a timely fashion.

Our ability to maintain compliance with applicable laws, rules and regulations and to manage and monitor the risks facing our business relies upon the ability to maintain skilled compliance, security, risk and audit professionals. Competition for such skillsets is intense, and our failure to hire and retain talented personnel could have an adverse effect on our internal control environment and impact our operating results.

Our senior management team has significant experience in the financial services industry and the loss of this leadership could have an adverse effect on our business, operating results and financial condition. Further, the loss of this leadership may have an adverse impact on senior management's ability to provide effective oversight and strategic direction for all key functions within the Company, which could impact our future business, operating results and financial condition.

We are the subject of various legal proceedings that could have a material adverse effect on our revenue and profitability.

We are involved in various litigation matters, including in some instances class-action cases and patent infringement litigation. If we are unsuccessful in our defense of litigation matters, we may be forced to pay damages and/or change our business practices, any of which could have a material adverse effect on our business and results of operations.

Unfavorable resolution of tax contingencies or unfavorable future tax law changes could adversely affect our tax expense.

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 and could negatively impact our effective tax rate, financial position, results of operations and cash flows in the current and/or future periods. Unfavorable future tax law changes could result in negative impacts. In addition, tax-law amendments in the United States and other jurisdictions could significantly impact how U.S. multinational corporations are taxed. Although we cannot predict whether or in what form such legislation will pass, if enacted it could have a material adverse effect on our business and financial results.

A material weakness in our internal controls could have a material adverse effect on us.

Effective internal controls are necessary for us to provide reasonable assurance with respect to our financial reports and to adequately mitigate risk of fraud. If we cannot provide reasonable assurance with respect to our financial reports and adequately mitigate risk of fraud, our reputation and operating results could be harmed. Internal control over financial reporting may not prevent or detect misstatements because of its inherent limitations, including the possibility of human error, the circumvention or overriding of controls, or fraud. Therefore, even effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. In addition, projections of any evaluation of effectiveness of internal control over financial reporting to future periods are subject to the risk that the control may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis. A material weakness in our internal control over financial reporting could adversely impact our ability to provide timely and accurate financial information. If we are unable to report financial information timely and accurately or to maintain effective disclosure controls and procedures, we could adversely affect our business prospects.

FIS expects that the Worldpay acquisition may necessitate significant modifications to its internal control systems, processes and information systems, both on a transition basis and over the longer term as FIS fully integrates the combined company. Due to the complexity of the merger, FIS cannot be certain that changes to internal control over financial reporting will be effective for any period, or on an ongoing basis. If FIS is unable to accurately report financial results in a timely manner, or is unable to assert that our internal controls over financial reporting are effective, our business, financial condition and results of operations and the market perception thereof may be materially adversely affected.

Risks Related to Business Combinations and Ventures

Strategic transactions, including acquisitions and divestitures, involve significant risks and uncertainties that could adversely affect our business, financial condition, results of operations and cash flows.

Strategic acquisitions and divestitures we have made in the past, and may make in the future, present significant risks and uncertainties that could adversely affect our business, financial condition, results of operations and cash flows. These risks include the following:

- Difficulty in evaluating potential acquisitions, including the risk that our due diligence does not identify or fully assess valuation issues, potential liabilities or other acquisition risks;
- Difficulty and expense in integrating newly acquired businesses and operations, including combining product and service offerings, and in entering into new markets in which we are not experienced, in an efficient and cost-effective manner while maintaining adequate standards, controls and procedures, and the risk that we encounter significant unanticipated costs or other problems associated with integration;
- Difficulty and expense in consolidating and rationalizing IT infrastructure and integrating acquired software;
- Challenges in achieving strategic objectives, cost savings and other benefits expected from acquisitions;
- Risk that our markets do not evolve as anticipated and that the strategic acquisitions and divestitures do not prove to be those needed to be successful in those markets;
- Risk that acquired systems expose us to cybersecurity and other data security risks;
- Costs to reach appropriate standards to protect against cybersecurity and other data security risks or timeline to achieve such standards may exceed those estimated in diligence;
- Risk that acquired companies are subject to new regulatory regimes or oversight where we have limited experience that may result in additional compliance costs and potential regulatory penalties;
- Risk that we assume or retain, or that companies we have acquired have assumed or retained or otherwise become subject to, significant liabilities that exceed the limitations of any applicable indemnification provisions or the financial resources of any indemnifying parties;
- Risk that indemnification related to businesses divested or spun-off that we may be required to provide or otherwise bear may be significant and could negatively impact our business;
- Risk of exposure to potential liabilities arising out of applicable state and federal fraudulent conveyance laws and legal distribution requirements from spin-offs in which we or companies we have acquired were involved;
- Risk that we may be responsible for U.S. federal income tax liabilities related to acquisitions or divestitures;
- Risk that we are not able to complete strategic divestitures on satisfactory terms and conditions, including non-competition arrangements applicable to certain of our business lines, or within expected time frames;
- Potential loss of key employees or customers of the businesses acquired or to be divested; and
- Risk of diverting the attention of senior management from our existing operations.

We have substantial goodwill and other intangible assets recorded as a result of acquisitions, and a severe or extended economic downturn could cause these assets to become impaired, requiring write-downs that would reduce our operating income.

As of December 31, 2019, goodwill aggregated to \$52.2 billion, or 62% of total assets. Current accounting rules require goodwill to be assessed for impairment at least annually or whenever changes in circumstances indicate potential impairment. Factors that may be considered a change in circumstance include significant underperformance relative to historical or projected future operating results, a significant decline in our stock price and market capitalization, and negative industry or economic trends. The results of our 2019 annual assessment of the recoverability of goodwill did not indicate that it is more likely than not that the fair values of the Company's reporting units were less than the carrying values of those reporting units, and thus no goodwill impairment existed as of December 31, 2019. However, if worldwide or U.S. economic conditions decline significantly with negative impacts to bank spending and consumer behavior, or if other business or market changes impact our outlook, then the carrying amount of our goodwill and other indefinite-lived intangible assets may no longer be recoverable, and we may be required to record an impairment charge, which would have a negative impact on our results of operations.

As of December 31, 2019, intangible assets with finite useful lives aggregated to \$15.8 billion, or 19% of total assets. Current accounting rules require intangible assets with finite useful lives to be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Factors that may be considered a change in circumstance include significant underperformance relative to historical or projected future operating results, a significant decline in our stock price and market capitalization, and negative industry or economic trends.

We will continue to monitor the fair value of our intangible assets as well as our market capitalization and the impact of any economic downturn on our business to determine if there is an impairment in future periods.

Uncertainties associated with the Worldpay acquisition may cause a loss of management personnel and other key employees, which could adversely affect our future business and operations.

Prior to the acquisition, each of FIS and Worldpay were dependent on the experience and industry knowledge of their officers and other key employees to execute their business plans. FIS' success after the acquisition will depend in part upon its ability to retain key management personnel and other key employees. Current and prospective employees of FIS may experience uncertainty about their roles within FIS following the acquisition or other concerns regarding the operations of FIS following the acquisition, any of which may have an adverse effect on the ability of FIS to retain or attract key management and other key personnel. If FIS is unable to retain personnel after the acquisition, including FIS' key management, who are critical to the future operations of the Company, FIS could face disruptions in its operations, loss of existing customers, loss of key information, expertise or know-how and unanticipated additional recruitment and training costs. In addition, the loss of key personnel could diminish the anticipated benefits of the acquisition. No assurance can be given that FIS will be able to retain or attract key management personnel and other key employees to the same extent that FIS and Worldpay were previously able to retain or attract their own employees.

FIS may be unable to integrate the business of Worldpay successfully or realize the anticipated benefits of the acquisition.

The acquisition involved the combination of two companies that formerly operated as two independent public companies. The combination of two independent businesses is complex, costly and time consuming, and FIS will be required to devote significant management attention and resources to integrating the business practices and operations of Worldpay into FIS. Potential difficulties that FIS may encounter as part of the integration process include the following:

- the inability to successfully combine the business of Worldpay in a manner that permits FIS to achieve, on a timely basis, or at all, the enhanced revenue opportunities and cost savings and other benefits anticipated to result from the acquisition;
- 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 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 acquisition.

In addition, it is possible that the integration process could result in the following:

- · diversion of the attention of FIS' management; and
- the disruption of, or the loss of momentum in, FIS' ongoing businesses or inconsistencies in standards, controls, procedures and policies.

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 acquisition, or could reduce our earnings or otherwise adversely affect our business and financial results.

The synergies attributable to the Worldpay acquisition may vary from expectations.

FIS may fail to realize the anticipated benefits and synergies expected from the acquisition, which could adversely affect FIS' business, financial condition and operating results. The success of the acquisition will depend, in significant part, on FIS' 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. FIS believes that the addition of Worldpay will complement FIS' strategy by providing scale and revenue diversity, accelerating FIS' growth strategy, enabling FIS to have a strong global

footprint and to cross-sell across each others' client bases. However, achieving these goals requires growth of the revenue of the combined company and realization of the targeted cost synergies expected from the acquisition. 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 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 acquisition within the anticipated timing or at all, then our business, financial condition and operating results may be adversely affected.

The future results of FIS following the Worldpay acquisition will suffer if FIS does not effectively manage its expanded operations.

Following the acquisition, the size of the business of FIS increased significantly beyond the prior size of either FIS' or Worldpay's business. FIS' future success will depend, in part, upon its 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. FIS may also face increased scrutiny from governmental authorities as a result of the significant increase in the size of its business. There can be no assurances that FIS will be successful or that it will realize the expected operating efficiencies, cost savings, revenue enhancements or other benefits currently anticipated from the acquisition.

FIS is expected to incur substantial costs related to the Worldpay acquisition and integration.

FIS is expected to incur substantial costs in connection with the Worldpay acquisition and the related integration. There are a large number of processes, policies, procedures, operations, technologies and systems that are in the process of being integrated, including purchasing, accounting and finance, sales, payroll, pricing and benefits. While FIS has assumed that a certain level of costs will be incurred, there are many factors beyond its control that could affect the total amount or the timing of the integration costs. Moreover, many of the costs that will be incurred are, by their nature, difficult to estimate accurately. These costs could, particularly in the near term, exceed the savings that FIS expects to achieve from the elimination of duplicative costs and the realization of economies of scale and cost savings. These integration costs may result in FIS taking significant charges against earnings, and the amount and timing of such charges are uncertain. Any material delays, difficulties or unanticipated additional costs associated with integration activities may harm our business, financial condition and results of operations.

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

Following the acquisition, some of the customers, distributors, suppliers, vendors, landlords, joint venture partners and other business partners of FIS or Worldpay may terminate or scale back their current or prospective business relationships with FIS. Some customers may not wish to source a larger percentage of their needs from a single company or may feel that FIS is 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 acquisition, or if FIS, following the acquisition, loses the benefits of the contracts of FIS or Worldpay, our business and financial performance could suffer.

Following the Worldpay acquisition, FIS is subject to certain risks associated with the implementation of our Merchant business' new proprietary global acquiring platform.

Our Merchant business has made progress toward implementation of a new proprietary global acquiring platform project. As we continue to implement this project, through the migration of existing merchant customers and onboarding of new merchant customers to the platform, the scale and complexity associated with this project presents the increased potential for service level delays or disruptions in the processing of transactions, telecommunications failures or other difficulties. Such delays or disruptions could result in reputational harm, loss of business and increased operational or technological costs.

Following the Worldpay acquisition, FIS may not be able to continue to expand its share of the existing payment processing markets or expand into new markets, which would inhibit FIS' ability to grow and increase its profitability.

Following the acquisition, FIS' future growth and profitability will depend in part upon the growth of the payment processing markets in which FIS currently operates and its ability to increase its penetration and service offerings within these markets, as well as the emergence of new markets for Merchant services and its ability to penetrate these new markets. Attracting new clients is difficult because of potential disadvantages associated with switching payment processing vendors, such as transition costs, business disruption and loss of accustomed functionality. FIS will seek to overcome these factors by making investments to enhance the functionality of the Company's platforms and differentiate its services. However, there can be no assurance that these efforts will be successful, and this resistance may adversely affect its growth.

FIS' expansion into new markets will also be dependent upon its ability to adapt existing merchant payment processing technology and offerings or to develop new or innovative applications to meet the particular service needs of each new market. In order to do so, FIS will need to anticipate and react to market changes and devote appropriate financial and technical resources to its development efforts, and there can be no assurance that it will be successful in these efforts.

Furthermore, in response to market developments, FIS may continue to expand into new geographical markets and foreign countries in which it currently has no operating experience. However, there can be no assurance that FIS will be able to successfully continue such expansion efforts due to this lack of experience and the multitude of risks associated with global operations or lack of appropriate regulatory approval.

Following the Worldpay acquisition, fraud by merchants or others could have a material adverse effect on FIS' business, financial condition and results of operations.

In our Merchant business, we face potential liability for fraudulent electronic payment transactions initiated by merchants, third parties or other associated participants. Examples of merchant fraud include when a merchant or other party knowingly accepts payment by a stolen or counterfeit credit, debit or prepaid card, card number or other credentials; records a false sales transaction utilizing a stolen or counterfeit card or credentials; processes an invalid card; or intentionally fails to deliver the merchandise or services sold in an otherwise valid transaction. In the event a dispute between a cardholder and a merchant is not resolved in favor of the merchant, the transaction is normally charged back to the merchant, and the purchase price is credited or otherwise refunded to the cardholder. Failure to effectively manage risk and prevent fraud would increase FIS' chargebacks or other liability. Increases in chargebacks or other liability could have a material adverse effect on FIS' business, financial condition and results of operations following the acquisition. This business is also subject to risk associated with the financial stability of its merchant clients.

Following the Worldpay acquisition, Worldpay, as a subsidiary of FIS, continues to be a party to a Tax Receivable Agreement ("TRA") and the amounts the Company and its subsidiaries may be required to pay under the TRA and certain related agreements are expected to be significant. In certain cases, payments under the TRA may be accelerated and/or significantly exceed the actual benefits FIS realizes in respect of the tax attributes subject to the TRA.

As result of the Worldpay acquisition, FIS assumed a contingent liability pursuant to an existing TRA with Fifth Third Bank. As of December 31, 2019, the Company has a liability recorded of approximately \$564 million associated with the TRA. It is possible that future transactions or events, including changes in tax rates, could increase or decrease the actual tax benefits realized and the corresponding TRA payments. In December 2019, the Company entered into a Tax Receivable Purchase Addendum (the "Amendment") that provides written call and put options (collectively "the options") to terminate certain future obligations under the TRA for fixed cash payments.

With respect to obligations not subject to the Amendment or for which the options are not exercised, the TRA provides that, upon certain mergers, asset sales, other forms of business combination or certain other changes of control, FIS' obligations to make payments with respect to tax benefits would be based on certain assumptions, including that FIS would have sufficient

taxable income to fully use net operating losses ("NOLs") or deductions arising from increased tax basis of assets. As a result, FIS could be required to make payments under the TRA that are greater than 85% of actual tax savings.

If the IRS challenges the tax basis increases or NOLs that give rise to payments under the TRA and the tax basis increases or NOLs are subsequently disallowed, payments under the TRA could exceed our actual tax savings, and the Company may not be able to recoup previous payments under the TRA or the Amendment that were calculated on the assumption that the disallowed tax savings were available.

Risks Related to Our Indebtedness

Our existing debt levels and future levels under existing facilities and debt service requirements may adversely affect FIS, including our financial condition or business flexibility and prevent us from fulfilling our obligations under our outstanding indebtedness.

As of December 31, 2019, we had total debt of approximately \$20.2 billion. This level of debt or any increase in our debt level could adversely affect our business, financial condition, operating results and operational flexibility, including the following: (i) the debt level may cause us to have difficulty borrowing money in the future for working capital, capital expenditures, acquisitions or other purposes; (ii) our debt level may limit operational flexibility and our ability to pursue business opportunities and implement certain business strategies; (iii) some of our debt has a variable rate of interest, which exposes us to the risk of increased interest rates; (iv) we have a higher level of debt than some of our competitors or potential competitors, which may cause a competitive disadvantage and may reduce flexibility in responding to changing business and economic conditions, including increased competition and vulnerability to general adverse economic and industry conditions; (v) there are significant maturities on our debt that we may not be able to repay at maturity or that may be refinanced at higher rates; and (vi) if we fail to satisfy our obligations under our outstanding debt or fail to comply with the financial or other restrictive covenants contained in the indenture governing our senior notes, or our credit facility, an event of default could result that could cause all of our debt to become due and payable.

We may be adversely affected by changes in LIBOR reporting practices or the method in which LIBOR is determined.

As of December 31, 2019, we had outstanding approximately \$600 million of variable debt that was indexed to the London Interbank Offered Rate ("LIBOR"). On July 27, 2017, the FCA announced its intention to stop persuading or compelling banks to submit rates for calibration of LIBOR to the administrator of LIBOR after 2021. It is not possible to predict the further effect of the rules or policies of the FCA, any changes in the methods by which LIBOR is determined, or any other reforms to LIBOR that may be enacted in the U.K., the E.U. or elsewhere. Any such developments may cause LIBOR to perform differently than in the past, or cease to exist. In addition, any other legal or regulatory changes made by the FCA, ICE Benchmark Administration Limited, the European Money Markets Institute (formerly Euribor-EBF), the European Commission or any other successor governance or oversight body, or future changes adopted by such body, in the method by which LIBOR is determined or the transition from LIBOR to a successor benchmark rate may result in, among other things, a sudden or prolonged increase or decrease in LIBOR, a delay in the publication of LIBOR, and changes in the rules or methodologies in LIBOR, which may discourage market participants from continuing to administer or to participate in LIBOR's determination, and, in certain situations, could result in LIBOR no longer being determined and published. If a published U.S. Dollar LIBOR rate is unavailable after 2021, the interest rates on our debt which is indexed to LIBOR will be determined using various alternative methods, any of which may result in interest obligations which are more than or do not otherwise correlate over time with the payments that would have been made on such debt if U.S. Dollar LIBOR was available in its current form. Further, the same costs and risks that may lead to the discontinuation or unavailability of U.S. Dollar LIBOR may make one or more of the alternative methods impossible or impracticable to determine. Any of these proposals or consequences could have a material adverse effect on our financing costs.

Our Euro- and GBP-denominated indebtedness has increased in recent years; accordingly, we have increased exposure to fluctuations in the Euro-USD and GBP-USD exchange rates, which could negatively affect our cost to service or refinance our Euro- and GBP-denominated debt securities.

In recent years, our indebtedness denominated in Euro or GBP has significantly increased as a result of our issuance of senior notes of varying maturities and our issuance of Euro-denominated commercial paper. At December 31, 2019, the Company had outstanding approximately $\&pmath{\in}8.3$ billion aggregate principal amount of Euro-denominated senior notes, approximately $\&pmath{\in}2.2$ billion aggregate principal amount of Euro-denominated commercial paper and approximately $\&pmath{\notin}1.9$ billion aggregate principal amount of GBP-denominated senior notes, or the combined equivalent of approximately $\&pmath{\notin}14.2$ billion aggregate principal amount.

Following the acquisition of Worldpay, we have increased our revenue and cash flows denominated in Euro and GBP. Although we currently have substantial available cash flows in excess of the projected debt service requirements on our existing Euro and GBP-denominated debt, we cannot assure that we will be always be able to continue generating earnings in Euros and GBP in amounts sufficient, taking into account the funding requirements and other needs of our business, to make payments of interest and/or repayment of principal on our Euro and GBP senior debt, or to permit us to economically borrow in those currencies if needed to refinance our existing Euro and GBP debt. If our cash flows in Euros or GBP are insufficient for such purposes, we may need to exchange U.S. Dollars or funds in other currencies to make such payments, which could result in increased costs to us in the event of adverse changes in currency exchange rates. We have utilized and expect to continue to utilize foreign currency forward contracts and other hedges on a limited basis in an effort to mitigate currency risk, but we cannot assure that such hedging arrangements will be effective or will remain available to us on acceptable terms, or at all. In addition, we cannot predict economic and market conditions (including prevailing interest rates and foreign currency exchange rates) at the applicable times when our various series of Euro and GBP senior debt are scheduled to mature, nor can there be any assurance that we would be able to refinance any series of our Euro and GBP senior debt in those currencies on acceptable terms at any such time, all of which could have an adverse financial impact on us.

Rising interest rates could increase our borrowing costs.

Our exposure to market risk for changes in interest rates relates to our short-term commercial paper borrowings, Revolving Credit Facility and interest rate derivatives. In the future we may have additional borrowings under existing or new variable-rate debt. Increases in interest rates on variable-rate debt would increase our interest expense. A rising interest rate environment could increase the cost of refinancing existing debt and incurring new debt, which could have an adverse effect on our financing costs.

Credit ratings, if lowered below investment grade, would adversely affect our cost of funds and liquidity.

The Company maintains investment grade credit ratings from the major U.S. rating agencies on its senior unsecured debt (S&P BBB, Moody's Baa2, Fitch BBB), as well as its commercial paper program (S&P A-2, Moody's P-2, Fitch F2). Failure to maintain investment grade rating levels could adversely affect the Company's cost of funds and liquidity and access to certain capital markets, but would not have an adverse effect on the Company's ability to access its existing Revolving Credit Facility.

Please note that a security rating is not a recommendation to buy, sell or hold securities, that it may be subject to revision or withdrawal at any time by the assigning rating organization, and that each rating should be evaluated independently of any other rating.

Statement Regarding Forward-Looking Information

The statements contained in this Form 10-K or in our other documents or in oral presentations or other statements made by our management that are not purely historical are forward-looking statements within the meaning of the U.S. federal securities laws. Statements that are not historical facts, including statements about anticipated financial outcomes, including any earnings guidance of the Company, business and market conditions, outlook, foreign currency exchange rates, expected dividends and

share repurchases, the Company's sales pipeline and anticipated profitability and growth, as well as other statements about our expectations, beliefs, intentions, or strategies regarding the future are forward-looking statements. These statements relate to future events and our future results and involve a number of risks and uncertainties. Forward-looking statements are based on management's beliefs, as well as assumptions made by, and information currently available to, management. Any statements that refer to beliefs, expectations, projections or other characterizations of future events or circumstances and other statements that are not historical facts are forward-looking statements. In many cases, forward-looking statements can be identified by terminology such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "potential," or "continue," or the negative of these terms and other comparable terminology. Actual results, performance or achievement could differ materially from those contained in these forward-looking statements. The risks and uncertainties that forward-looking statements are subject to include the following, without limitation:

- the risk that the Worldpay transaction will not provide the expected benefits or that we will not be able to achieve the cost or revenue synergies anticipated;
- the risk that the integration of FIS and Worldpay will be more difficult, time-consuming or expensive than anticipated;
- the risk of customer loss or other business disruption in connection with the Worldpay transaction, or of the loss of key employees;
- the fact that unforeseen liabilities of FIS or Worldpay may exist;
- the risk that other acquired businesses will not be integrated successfully or that the integration will be more costly or more time-consuming and complex than anticipated;
- the risk that cost savings and other synergies anticipated to be realized from other acquisitions may not be fully realized or may take longer to realize than expected;
- the risks of doing business internationally;
- changes in general economic, business and political conditions, including the possibility of intensified international hostilities, acts of terrorism, pandemics, changes in either or both the United States and international lending, capital and financial markets and currency fluctuations;
- the effect of legislative initiatives or proposals, statutory changes, governmental or other applicable regulations and/or changes in industry requirements, including privacy and cybersecurity laws and regulations;
- the risks of reduction in revenue from the elimination of existing and potential customers due to consolidation in, or new laws or regulations affecting, the banking, retail and financial services industries or due to financial failures or other setbacks suffered by firms in those industries;
- changes in the growth rates of the markets for our solutions;
- failures to adapt our solutions to changes in technology or in the marketplace;
- internal or external security breaches of our systems, including those relating to unauthorized access, theft, corruption or loss of personal information and computer viruses and other malware affecting our software or platforms, and the reactions of customers, card associations, government regulators and others to any such events;
- the risk that implementation of software (including software updates) for customers or at customer locations or employee error in monitoring our software and platforms may result in the corruption or loss of data or customer information, interruption of business operations, outages, exposure to liability claims or loss of customers;
- the reaction of current and potential customers to communications from us or regulators regarding information security, risk management, internal audit or other matters;
- competitive pressures on pricing related to the decreasing number of community banks in the U.S., the development of
 new disruptive technologies competing with one or more of our solutions, increasing presence of international
 competitors in the U.S. market and the entry into the market by global banks and global companies with respect to
 certain competitive solutions, each of which may have the impact of unbundling individual solutions from a
 comprehensive suite of solutions we provide to many of our customers;
- the failure to innovate in order to keep up with new emerging technologies, which could impact our solutions and our ability to attract new, or retain existing, customers;
- an operational or natural disaster at one of our major operations centers;
- failure to comply with applicable requirements of payment networks or changes in those requirements;
- fraud by merchants or bad actors; and
- other risks detailed elsewhere in this Risk Factors section and in our other filings with the SEC.

Other unknown or unpredictable factors also could have a material adverse effect on our business, financial condition, results of operations and prospects. Accordingly, readers should not place undue reliance on our forward-looking statements. These forward-looking statements are inherently subject to uncertainties, risks and changes in circumstances that are difficult to predict. Except as required by applicable law or regulation, we do not undertake (and expressly disclaim) any obligation and do not intend to publicly update or review any of our forward-looking statements, whether as a result of new information, future events or otherwise. You should carefully consider the possibility that actual results may differ materially from our forward-looking statements.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

FIS' corporate headquarters is located at 601 Riverside Avenue, Jacksonville, Florida. In addition, FIS owns or leases support centers, data processing facilities and other facilities at approximately 200 locations. We believe our facilities and equipment are generally well maintained and are in good operating condition. We believe that the equipment we own and our various facilities are adequate for our present and foreseeable business needs.

Item 3. Legal Proceedings

In the ordinary course of business, the Company is involved in various pending and threatened litigation matters related to its business and operations, some of which include claims for punitive or exemplary damages. The Company believes no such currently pending or threatened actions are likely to have a material adverse effect on its consolidated financial position. With respect to litigation in which the Company is involved generally, please note the following:

- These matters raise difficult and complicated factual and legal issues and are subject to many uncertainties and complexities.
- The Company reviews all of its litigation on an ongoing basis and follows the authoritative provision for accounting for contingencies when making accrual and disclosure decisions. A liability must be accrued if (a) it is probable that a liability has been incurred and (b) the amount of loss can be reasonably estimated. If one of these criteria has not been met, disclosure is required when there is at least a reasonable possibility that a material loss may be incurred. When assessing reasonably possible and probable outcomes, the Company bases decisions on the assessment of the ultimate outcome following all appeals. Legal fees associated with defending litigation matters are expensed as incurred.

Indemnifications and Warranties

The Company generally indemnifies its clients, subject to certain limitations and exceptions, against damages and costs resulting from claims of patent, copyright, or trademark infringement associated solely with its customers' use of the Company's software applications or services. Historically, the Company has not made any material payments under such indemnifications but continues to monitor the conditions that are subject to the indemnifications to identify whether it is probable that a loss has occurred and would recognize any such losses when they are estimable. In addition, the Company warrants to customers that its software operates substantially in accordance with the software specifications. Historically, no material costs have been incurred related to software warranties, and no accruals for warranty costs have been made.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Our common stock trades on the New York Stock Exchange under the ticker symbol "FIS."

As of January 31, 2020, there were approximately 10,406 shareholders of record of our common stock.

We currently expect to continue to pay quarterly dividends. However, the amount, declaration and payment of future dividends is at the discretion of the Board of Directors and depends on, among other things, our investment opportunities, results of operations, financial condition, cash requirements, future prospects, and other factors that may be considered relevant by our Board of Directors, including legal and contractual restrictions. A regular quarterly dividend of \$0.35 per common share is payable on March 27, 2020, to shareholders of record as of the close of business on March 13, 2020.

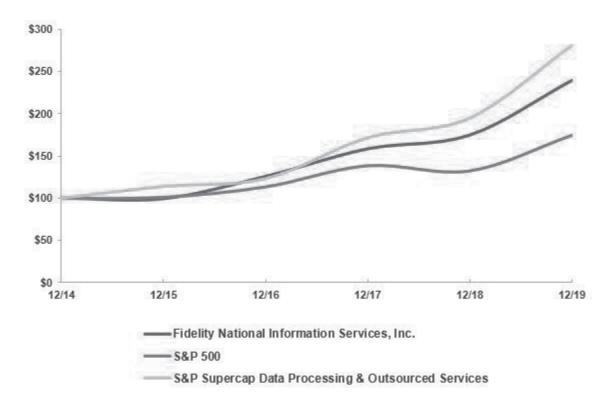
Item 12 of Part III contains information concerning securities authorized for issuance under our equity compensation plans.

Our Board of Directors has approved a series of plans authorizing repurchases of our common stock in the open market at prevailing market prices or in privately negotiated transactions, the most recent of which on July 20, 2017, authorized repurchases of up to \$4.0 billion through December 31, 2020. This share repurchase authorization replaced any existing share repurchase authorization plan. Approximately \$2.3 billion of plan capacity remained available for repurchases as of December 31, 2019. Management temporarily suspended share repurchases as a result of the Worldpay transaction to accelerate debt repayment.

The graph below compares the cumulative 5-year total return of holders of FIS common stock with the cumulative total returns of the S&P 500 index and S&P Supercap Data Processing & Outsourced Services index. The graph assumes that the value of the investment in our common stock and in each index (including reinvestment of dividends) was \$100 on December 31, 2014 and tracks it through December 31, 2019.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Fidelity National Information Services, Inc., the S&P 500 Index, and S&P Supercap Data Processing & Outsourced Services



*\$100 invested on 12/31/14 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

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	12/14	12/15	12/16	12/17	12/18	12/19
Fidelity National Information Services, Inc.	100.00	99.01	125.39	158.03	174.33	239.14
S&P 500	100.00	101.38	113.51	138.29	132.23	173.86
S&P Supercap Data Processing & Outsourced Services	100.00	113.97	123.23	171.68	195.04	281.09

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Item 6. Selected Financial Data

The selected financial data set forth below constitutes historical financial data of FIS and should be read in conjunction with "Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*" and "Item 8. *Financial Statements and Supplementary Data*" included elsewhere in this Annual Report.

On July 31, 2019, we completed the Worldpay acquisition. The results of operations and financial position of Worldpay are included in the Consolidated Financial Statements since the date of acquisition.

Effective January 1, 2019, we adopted the new leases accounting standard, Topic 842, as described further in "Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations*, Recent Accounting Pronouncements." Amounts for the years ended prior to December 31, 2019, were not recast to reflect application of the new accounting standard; therefore, our assets and liabilities for those years are not presented on the same accounting basis. This new standard had no effect on our results of operations or cash flows.

On September 28, 2018, FIS entered into an agreement with Banco Bradesco to unwind the Brazilian Venture. The transaction closed on December 31, 2018. As a result of the transaction, the Brazilian Venture spun-off certain assets of the business that also provide services to non-Bradesco clients to a new wholly-owned FIS subsidiary. Also as a result of the transaction, Banco Bradesco owns 100% of the entity that previously housed the Brazilian Venture and its remaining assets that relate to card processing for Banco Bradesco, which Banco Bradesco will perform internally. In the third quarter of 2018, FIS incurred impairment charges of \$95 million related to the expected disposal, including impairments of its contract intangible asset, goodwill and its assets held for sale to fair value less cost to sell. Upon closing of the transaction, FIS recorded an additional pre-tax loss of \$12 million related to the business divested, removed FIS' noncontrolling interest balance of \$90 million, and recorded a \$57 million increase to additional paid in capital for the business spun-off into the new wholly-owned FIS subsidiary. The transaction did not meet the standard necessary to be reported as discontinued operations; therefore, the impairment loss, pre-tax loss and related prior period earnings remain reported within earnings from continuing operations.

Effective August 31, 2018, FIS sold substantially all the assets of the Certegy Check Services business unit in North America, resulting in a pre-tax loss of \$54 million, including goodwill distributed through the sale of business of \$43 million.

On July 31, 2017, FIS closed on the sale of a majority ownership stake in its Capco consulting business and risk and compliance consulting business to Clayton, Dubilier & Rice L.P., by and through certain funds that it manages ("CD&R"), for cash proceeds of approximately \$469 million, resulting in a pre-tax loss of \$41 million. The divestiture is consistent with our strategy to focus on our intellectual property-led businesses. CD&R acquired preferred units convertible into 60% of the common units of the venture, Cardinal Holdings, L.P. ("Cardinal") and FIS obtained common units representing the remaining 40%, in each case before equity was issued to management. The preferred units are entitled to a quarterly dividend at an annual rate of 12%, payable in cash (if available) or additional preferred units at FIS' option. FIS' ownership in Cardinal was initially valued at \$172 million and was recorded as an equity method investment included within Other noncurrent assets on the Consolidated Balance Sheet. After the sale on July 31, 2017, FIS began to recognize the earnings in after-tax equity method investment earnings outside of operating income. For periods prior to July 31, 2017, the Capco consulting business and risk and compliance consulting business were included within operating income.

On February 1, 2017, FIS completed the sale of the Public Sector and Education ("PS&E") business for \$850 million, resulting in a pre-tax gain of \$85 million. The transaction included all PS&E solutions, which provided a comprehensive set of technology solutions to address public safety and public administration needs of government entities as well as the needs of K-12 school districts. The divestiture is consistent with our strategy to serve the financial services markets. Cash proceeds were used to reduce outstanding debt. Net cash proceeds, after payment of taxes and transaction-related expenses, were approximately \$500 million. The sale did not meet the standard necessary to be reported as discontinued operations; therefore, the pre-tax gain and related prior period earnings remain reported within earnings from continuing operations

On November 30, 2015, we completed the SunGard acquisition. The results of operations and financial position of SunGard are included in the Consolidated Financial Statements since the date of acquisition.

During the second quarter of 2015, we sold certain assets associated with our gaming industry check warranty business, resulting in a pre-tax gain of \$139 million, which is included in Other income (expense), net. The sale did not meet the standard necessary to be reported as discontinued operations; therefore, the gain and related prior period earnings remain reported within earnings from continuing operations.

We have engaged in share repurchases in the periods presented. In 2019, 2018, 2017, and 2015, we repurchased a total of approximately 3.9 million shares for \$400 million, 12.0 million shares for \$1,215 million, 1.1 million shares for \$105 million, and 5.0 million shares for \$300 million, respectively. There were no share repurchases in 2016.

The effective tax rate for the 2019 period included a detriment of \$44 million due to non-deductible executive stock compensation primarily driven by acceleration of heritage Worldpay stock compensation awards and the accrual of additional stock compensation due to reaching certain Worldpay synergy targets and a detriment of \$21 million due to the post-acquisition combined state income tax rates. The effective tax rate for the 2018 period included the impact of the reduction in the U.S. federal income tax rate from 35% to 21% due to tax reform enacted December 22, 2017. The effective tax rate for the 2017 period included a net benefit of \$761 million related to tax reform items including \$48 million of tax credits due to tax planning strategies implemented in the fourth quarter and a net detriment of \$180 million due to the book basis in excess of the tax basis of certain businesses sold during the year. The effective tax rate for the 2015 period included a net detriment of \$90 million due to the book basis in excess of the tax basis of a business sold during the year. The effective tax rate for the 2016 and 2015 periods did not include a net benefit for the recognition of excess tax benefit for stock compensation as the effective date of ASU 2016-09 was for reporting periods beginning after December 15, 2016.

Year Ended December 31,

	2019		2018	018 2017			2016		2015	
				(In million	ıs, ex	cept per s	share data)			
Statement of Earnings Data:										
Revenue	\$	10,333	\$	8,423	\$	8,668	\$	8,831	\$	6,260
Cost of revenue		6,610		5,569		5,794		5,895		4,071
Gross profit	-	3,723		2,854		2,874		2,936		2,189
Selling, general and administrative expenses		2,667		1,301		1,442		1,707		1,102
Asset impairments		87		95		_		_		_
Operating income		969		1,458		1,432		1,229		1,087
Total other income (expense), net		(556)		(354)		(456)		(392)		(62)
Earnings from continuing operations before income taxes and equity method investment earnings (loss)		413		1,104		976		837		1,025
Provision (benefit) for income taxes		100		208		(321)		291		375
Equity method investment earnings (loss)		(10)		(15)		(3)				
Earnings from continuing operations, net of tax		303		881		1,294		546		650
Earnings (loss) from discontinued operations, net of tax		_				_		1		(7)
Net earnings	-	303		881		1,294		547		643
Net (earnings) loss attributable to noncontrolling interest		(5)		(35)		(33)		(22)		(19)
Net earnings attributable to FIS common stockholders	\$	298	\$	846	\$	1,261	\$	525	\$	624
Net earnings per share-basic from continuing operations attributable to FIS common stockholders	\$	0.67	\$	2.58	\$	3.82	\$	1.61	\$	2.21
Net earnings (loss) per share-basic from discontinued operations attributable to FIS common stockholders										(0.03)
Net earnings per share-basic attributable to FIS common stockholders *	\$	0.67	\$	2.58	\$	3.82	\$	1.61	\$	2.19
Weighted average shares outstanding-basic		445		328		330		326		285
Net earnings per share-diluted from continuing operations attributable to FIS common stockholders	\$	0.66	\$	2.55	\$	3.75	\$	1.59	\$	2.18
Net earnings (loss) per share-diluted from discontinued operations attributable to FIS common stockholders		_		_		_		_		(0.03)
Net earnings per share-diluted attributable to FIS common stockholders *	\$	0.66	\$	2.55	\$	3.75	\$	1.59	\$	2.16
Weighted average shares outstanding-diluted		451		332		336		330		289
Amounts attributable to FIS common stockholders:										
Earnings from continuing operations, net of tax	\$	298	\$	846	\$	1,261	\$	524	\$	631
Earnings (loss) from discontinued operations, net of tax								1		(7)
Net earnings attributable to FIS common stockholders	\$	298	\$	846	\$	1,261	\$	525	\$	624

^{*} Amounts may not sum due to rounding.

	As of December 31,									
	2019			2018		2017		2016		2015
				(In millio	ns, e	except per	shar	e data)		
Balance Sheet Data:										
Cash and cash equivalents	\$	1,152	\$	703	\$	665	\$	683	\$	682
Goodwill		52,242		13,545		13,730		14,178		14,745
Intangible assets, net		15,798		3,132		3,885		4,590		5,080
Total assets		83,806		23,770		24,526		26,026		26,185
Total debt		20,192		8,985		8,763		10,478		11,444
Total FIS stockholders' equity		49,440		10,215		10,711		9,675		9,298
Noncontrolling interest		16		7		109		104		86
Total equity		49,456		10,222		10,820		9,779		9,384
Cash dividends declared per share	\$	1.40	\$	1.28	\$	1.16	\$	1.04	\$	1.04

Selected Quarterly Financial Data

Selected unaudited quarterly financial data is as follows:

	Quarter Ended							
	March 31			June 30	Se	eptember 30	I	December 31
			(In	millions, exc	ept p	er share data	1)	
2019								
Revenue	\$	2,057	\$	2,112	\$	2,822	\$	3,341
Gross profit		676		708		984		1,355
Earnings (loss) before income taxes and equity method investment earnings (loss)		188		199		209		(183)
Net earnings (loss) attributable to FIS common stockholders		148		154		154		(158)
Net earnings (loss) per share-basic attributable to FIS common stockholders	\$	0.46	\$	0.48	\$	0.30	\$	(0.26)
Net earnings (loss) per share-diluted attributable to FIS common stockholders	\$	0.45	\$	0.47	\$	0.29	\$	(0.26)
2018								
Revenue	\$	2,066	\$	2,106	\$	2,084	\$	2,167
Gross profit		652		692		720		790
Earnings before income taxes and equity method investment earnings (loss)		225		276		204		400
Net earnings attributable to FIS common stockholders		182		212		154		299
Net earnings per share-basic attributable to FIS common stockholders	\$	0.55	\$	0.64	\$	0.47	\$	0.92
Net earnings per share-diluted attributable to FIS common stockholders	\$	0.54	\$	0.64	\$	0.47	\$	0.91

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

The following section discusses management's view of the financial condition and results of operations of FIS and its consolidated subsidiaries as of December 31, 2019 and 2018 and for the years ended December 31, 2019, 2018 and 2017.

This section should be read in conjunction with the audited Consolidated Financial Statements and related Notes of FIS included elsewhere in this Annual Report. Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements. See "Forward-Looking Statements" and "Risk Factors" in Item 1A of this Annual Report for a discussion of the uncertainties, risks and assumptions associated with these forward-looking statements that could cause future results to differ materially from those reflected in this section.

Business Trends and Conditions

Our revenue is primarily derived from a combination of technology and processing services, payment transaction fees, professional services and software license fees. The majority of our revenue has historically been recurring, and has been provided under multi-year contracts in Banking and Capital Markets that contribute relative stability to our revenue stream. These services, in general, are considered critical to our clients' operations. Although Merchant has a lesser percentage of multi-year contracts, a substantial part of its revenue is recurring. A considerable portion of our recurring revenue is derived from transaction processing fees that fluctuate with the level of accounts and card transactions, among other variable measures, associated with consumer, commercial and capital markets activity. Professional services revenue is typically non-recurring, though recognition often occurs over time rather than at a point in time. Sales of software licenses are typically non-recurring with recognition at a point in time and are less predictable.

We continue to assist financial institutions in migrating to outsourced integrated technology solutions to improve their profitability and address increasing and ongoing regulatory requirements. As a provider of outsourcing solutions, we benefit from multi-year recurring revenue streams, which help moderate the effects of broader year-to-year economic and market changes that otherwise might have a larger impact on our results of operations. We believe our integrated solutions and outsourced services are well-positioned to address this outsourcing trend across the markets we serve.

Over the last four years, we have moved approximately 60% of our server compute to our FIS cloud located in our strategic data centers and our goal is to increase that percentage to 73% by the end of 2020 and approximately 80% by the end of 2021. This allows us to further enhance security for our clients' data and increases the flexibility and speed with which we can provide services and solutions to our clients, eventually at lesser cost. Concurrently, we have continued to consolidate our data centers, closing seven additional data centers in 2019. Our consolidation has generated a savings for the Company as of year-end 2019 exceeding \$170 million in run rate annual expense reduction since the program's inception in mid-2016. We plan to close and consolidate approximately 13 more data centers by the end of 2021, which should result in additional run rate annual expense reduction of approximately \$80 million.

We continue to invest in modernization, innovation and integrated solutions and services in order to meet the demands of the markets we serve and compete with global banks, financial and other technology providers, and emerging technology innovators. We invest both organically and through investment opportunities in companies building complementary technologies in the financial services space. Our internal efforts in research and development activities have related primarily to the modernization of our proprietary core systems in each of our segments, design and development of next generation digital and innovative solutions and development of processing systems and related software applications and risk management platforms. We have increased our investments in these areas in each of the last three years. Our innovation efforts have recently resulted in bringing to market our Modern Banking Platform that is among the first cloud-native core banking solutions. We expect to continue our practice of investing an appropriate level of resources to maintain, enhance and extend the functionality of our proprietary systems and existing software applications, to develop new and innovative software applications and systems to address emerging technology trends in response to the needs of our clients and to enhance the capabilities of our outsourcing infrastructure.

Consumer preference continues to shift from traditional branch banking services to digital banking solutions, and our clients seek to provide a single integrated banking experience through their branch, mobile, internet and voice banking channels. We have been providing our large regional banking customers in the U.S. with Digital One, an integrated digital banking platform, and are now adding functionality and offering Digital One to our community bank clients to provide a consistent, omnichannel experience for consumers of banking services across self-service channels like mobile banking and online banking, as well as supporting channels for bank staff operating in bank branches and contact centers. The uniform customer experience extends to support a broad range of financial services including opening new accounts, servicing of existing accounts, providing money movement services, and personal financial management, as well as other consumer, small business and commercial banking capabilities. Digital One is integrated into several of the core banking platforms offered by FIS and is also offered to customers of non-FIS core banking systems.

We anticipate consolidation within the banking industry will continue, primarily in the form of merger and acquisition activity among financial institutions, which we believe as a whole is detrimental to the profitability of the financial technology industry. However, consolidation resulting from specific merger and acquisition transactions may be beneficial to our business. When consolidations of financial institutions occur, merger partners often operate systems obtained from competing service providers. The newly formed entity generally makes a determination to migrate its core and payments systems to a single platform. When a financial institution processing client is involved in a consolidation, we may benefit by their expanding the use of our services if such services are chosen to survive the consolidation and support the newly combined entity. Conversely, we may lose revenue if we are providing services to both entities, or if a client of ours is involved in a consolidation and our services are not chosen to survive the consolidation and support the newly combined entity. It is also possible that larger financial institutions resulting from consolidation may have greater leverage in negotiating terms or could decide to perform inhouse some or all of the services that we currently provide or could provide. We seek to mitigate the risks of consolidations by offering other competitive services to take advantage of specific opportunities at the surviving company.

In certain of the international markets in which we do business, we continue to experience growth on a constant currency basis. Demand for our solutions may also continue to be driven in developing countries by government-led financial inclusion policies aiming to reduce the unbanked population and by growth in the middle classes in these markets driving the need for more sophisticated banking solutions. The majority of our international revenue is generated by clients in the U.K., Germany, Brazil, India, Canada and Australia. For the full year of 2020, we do not expect a material impact to revenue due to foreign currency translation, although the actual amount of impact is uncertain due to the many factors that affect exchange rates.

As a result of the Worldpay acquisition, FIS is now a global leader in the merchant solutions industry, with differentiated solutions throughout the payments market, including capabilities in global eCommerce, U.S. integrated payments, and enterprise payments and data security solutions in business-to-business ("B2B") payments. These solutions bring together advanced payments technologies at each stage of the transaction life cycle. The Worldpay acquisition, which was completed on July 31, 2019, broadens our solution portfolio, enabling us to significantly expand our merchant acquiring solutions, including our capabilities in the growing eCommerce and integrated payments segments of the market, which are in demand among our merchant clients as they look for ways to integrate technology into their business models. The combination also favorably impacts our business mix with a greater concentration in higher growth and higher margin services. As we integrate Worldpay into our existing operations, we anticipate the potential to achieve incremental revenue opportunities and annual synergy runrate savings.

Following the Worldpay acquisition, we are focused on completing post-merger integration to achieve potential incremental revenue opportunities and expense efficiencies created by the combination of the two companies. We have a history of successfully integrating the operations and technology platforms of acquired companies, including winding down legacy environments and consolidating platforms from other acquisitions into our environment. Based on prior integration experience, we developed integration plans to achieve the potential benefits created by the Worldpay acquisition. As of the end of 2019, our achievement of expense and revenue synergies is ahead of schedule.

We continue to see demand for innovative solutions in the payments market that will deliver faster, more convenient payment solutions in mobile channels, internet applications and cards. Our acquisition of Worldpay will help position us to

capitalize on this demand. The payment processing industry is adopting new technologies, developing new products and services, evolving new business models and being affected by new market entrants and an evolving regulatory environment. As merchants and financial institutions respond to these changes by seeking services to help them enhance their own offerings to consumers, including the ability to accept card-not-present ("CNP") payments in eCommerce and mobile environments as well as contactless cards and mobile wallets at the point-of-sale, FIS believes that payment processors will seek to develop additional capabilities in order to serve clients' evolving needs. In order to facilitate this expansion, we believe that payment processors will need to enhance their technology platforms so they can deliver these capabilities and differentiate their offerings from other providers.

We believe that these market changes present both an opportunity and a risk for us, and we cannot predict which emerging technologies or solutions will be successful. However, FIS believes that payment processors, like FIS, that have scalable, integrated business models, provide solutions across the payment processing value chain and utilize broad distribution capabilities will be best positioned to enable emerging alternative electronic payment technologies. Further, FIS believes that its depth of capabilities and breadth of distribution will enhance its position as emerging payment technologies are adopted by merchants and other businesses. FIS' ability to partner with non-financial institution enterprises, such as mobile payment providers, internet, retail and social media companies, could create attractive growth opportunities as these new entrants seek to become more active participants in the development of alternative electronic payment technologies and to facilitate the convergence of retail, online, mobile and social commerce applications.

Globally, attacks on information technology systems continue to grow in frequency, complexity and sophistication. This is a trend we expect to continue. Such attacks have become a point of focus for individuals, businesses and governmental entities. The objectives of these attacks include, among other things, gaining unauthorized access to systems to facilitate financial fraud, disrupt operations, cause denial of service events, corrupt data, and steal non-public information. These circumstances present both a threat and an opportunity for FIS. As part of our business, we electronically receive, process, store and transmit a wide range of confidential information, including sensitive customer information and personal consumer data. We also operate payment, cash access and prepaid card systems.

FIS remains focused on making strategic investments in information security to protect our clients and our information systems. This includes both capital expenditures and operating expense on hardware, software, personnel and consulting services. We also participate in industry and governmental initiatives to improve information security for our clients. Through the expertise we have gained with this ongoing focus and involvement, we have developed fraud, security, risk management and compliance solutions to target this growth opportunity in the financial services industry.

For 2019, the Worldpay acquisition significantly increased our revenue as well as our amortization expense for acquired intangibles and our acquisition, integration and other costs. Also, as described in Note 19 of the Notes to Consolidated Financial Statements, on December 31, 2018, FIS closed the transaction to unwind the Brazilian Venture with Banco Bradesco. The results of the Brazilian Venture that were spun-off in the transaction were included within the Banking segment. On July 31, 2017, we sold a majority interest in certain of our consulting businesses to affiliates of CD&R. These businesses had lower margins than many of our other businesses. The consulting businesses sold were included within the Capital Markets segment. Also, on February 1, 2017, we sold our PS&E business, which had been included in our Corporate and Other segment. The Worldpay acquisition and these divestitures affect the comparability of our results of operations for the 2019, 2018 and 2017 periods presented.

Critical Accounting Policies

The accounting policies described below are those we consider critical in preparing our Consolidated Financial Statements. These policies require management to make estimates, judgments and assumptions that affect the reported amounts of assets and liabilities and disclosures with respect to contingent liabilities and assets at the date of the Consolidated Financial Statements and the reported amounts of revenue and expenses during the reporting periods. Actual amounts could differ from those estimates. See Note 2 of the Notes to Consolidated Financial Statements for a more detailed description of the significant accounting policies that have been followed in preparing our Consolidated Financial Statements.

Revenue Recognition

The Company generates revenue in a number of ways, including from the delivery of account- or transaction-based processing, SaaS, BPaaS, cloud offerings, software licensing, software-related services and professional services. Our contracts frequently contain non-standard terms that require judgment to determine the appropriate impact on revenue recognition. We are frequently a party to multiple concurrent contracts with the same client. These situations require judgment to determine whether the individual contracts should be combined or evaluated separately for purposes of revenue recognition. In making this determination, we consider the timing of negotiating and executing the contracts, whether the different elements of the contracts are negotiated as a package with a single commercial objective, whether the solutions or services promised in the contracts are a single performance obligation, and whether any of the payment terms of the contracts are interrelated. Our individual contracts also frequently include multiple promised solutions or services. At contract inception, we assess the solutions and services promised in our contracts with customers and identify a performance obligation for each promise to transfer to the customer a solution or service (or bundle of solutions or services) that is distinct - i.e., if a solution or service is separately identifiable from other items in the bundled package and if a customer can benefit from it on its own or with other resources that are readily available to the customer. We must apply judgment in these circumstances in determining whether individual promised solutions or services can be considered distinct or should instead be combined with other promised solutions or services in the contract. We recognize revenue when or as we satisfy a performance obligation by transferring control of a solution or service to a customer. We must use judgment to determine the appropriate measure of progress for performance obligations satisfied over time and the timing of when the customer obtains control for performance obligations satisfied at a point in time. Judgment is also required in estimating and allocating variable consideration to one or more, but not all, performance obligations in a contract, determining the standalone selling prices of each performance obligation, and allocating the transaction price to each distinct performance obligation in a contract.

Due to the large number, broad nature and average size of individual contracts we are party to, the impact of judgments and assumptions that we apply in recognizing revenue for any single contract is not likely to have a material effect on our consolidated operations or financial position. However, the broader accounting policy assumptions that we apply across similar contracts or classes of clients could significantly influence the timing and amount of revenue recognized in our historical and future results of operations or financial position. Additional information about our revenue recognition policies is included in Note 2 of the Notes to Consolidated Financial Statements.

Software

Software includes the fair value of software acquired in business combinations, purchased software and capitalized software development costs. Purchased software is recorded at cost and amortized using the straight-line method over its estimated useful life, which is generally three to five years. Software acquired in business combinations is recorded at its fair value and amortized using straight-line or accelerated methods over its estimated useful life, which is one to 10 years (see also the *Purchase Accounting* section below). As of December 31, 2019 and 2018, software, net, was \$3.2 billion and \$1.8 billion, respectively, and amortization of software was \$616 million, \$468 million, and \$436 million for the years ended December 31, 2019, 2018, and 2017, respectively. Balances related to acquired software represent a significant portion of these balances, particularly for the period after the acquisition of Worldpay, which resulted in acquired software of \$1.3 billion.

The capitalization of software development costs is governed by FASB ASC Subtopic 985-20 if the software is to be sold, leased or otherwise marketed, or by FASB ASC Subtopic 350-40 if the software is for internal use. After the technological feasibility of the software has been established (for software to be marketed), or at the beginning of application development (for internal-use software), software development costs, which include primarily salaries and related payroll costs and costs of independent contractors incurred during development, are capitalized. Research and development costs incurred prior to the establishment of technological feasibility (for software to be marketed), or prior to application development (for internal-use software), are expensed as incurred. Evaluating whether technological feasibility has been achieved requires the use of management judgment.

Software development costs are amortized on a product-by-product basis commencing on the date of general release of the solutions (for software to be marketed) or the date placed in service (for internal-use software). Software development costs for software to be marketed are amortized using the greater of (1) the straight-line method over its estimated useful life, which ranges from three to 10 years, or (2) the ratio of current revenue to total anticipated revenue over its useful life.

In determining useful lives, management considers historical results and technological trends that may influence the estimate. Useful lives for all software range from one to 10 years.

We also assess the recorded value of software for impairment on a regular basis by comparing the carrying value to the estimated future cash flows to be generated by the underlying software asset (net realizable value analysis for software to be marketed). There are inherent uncertainties in determining the expected useful life or cash flows to be generated from software. For the year ended December 31, 2019, we recorded \$87 million in asset impairments, primarily related to certain software to be marketed. For the years ended December 31, 2018 and 2017, respectively, we have not had more than minimal charges for impairments of software. While we have not historically experienced significant changes in these balances due to changes in estimates, our results of operations could be subject to such changes in the future.

Purchase Accounting

We are required to allocate the purchase price of acquired businesses to the assets acquired and liabilities assumed in the transaction at their estimated fair values. The estimates used to determine the fair value of long-lived assets, such as intangible assets and software, are complex and require a significant amount of management judgment. We generally engage third-party valuation specialists to assist us in making fair value determinations. The third-party valuation specialists generally use discounted cash flow models, which require internally-developed assumptions, to determine the acquisition fair value of customer relationship intangible assets and developed technology software assets. Assumptions for customer relationship asset valuations generally include forecasted revenue attributable to existing customer contracts and relationships, estimated annual attrition, forecasted EBITDA margin, and estimated weighted average cost of capital and discount rates. Assumptions for software asset valuations generally include forecasted revenue attributable to the software assets, obsolescence rates, estimated royalty rates and estimated weighted average cost of capital and discount rates.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, we are required to record provisional amounts in the financial statements for the items for which the accounting is incomplete. Adjustments to provisional amounts initially recorded that are identified during the measurement period are recognized in the reporting period in which the adjustment amounts are determined. This includes any effect on earnings of changes in depreciation or amortization, or other income effects as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. During the measurement period, we are also required to recognize additional assets or liabilities if new information is obtained about facts and circumstances that existed as of the acquisition date that, if known, would have resulted in the recognition of those assets and liabilities as of that date. The measurement period ends the sooner of one year from the acquisition date or when we receive the information we were seeking about facts and circumstances that existed as of the acquisition date or learn that more information is not obtainable.

We are also required to estimate the useful lives of intangible assets to determine the amount of acquisition-related intangible asset amortization expense to record in future periods. We periodically review the estimated useful lives assigned to our finite-lived intangible assets to determine whether such estimated useful lives continue to be appropriate. Additionally, we review our indefinite-lived intangible assets to determine if there is any change in circumstances that may indicate the asset's useful life is no longer indefinite.

See Note 3 to the Notes to Consolidated Financial Statements for discussion of the Worldpay acquisition in 2019. We had no significant business combinations during 2018.

Goodwill and Other Intangible Assets

Goodwill represents the excess of cost over the fair value of identifiable assets acquired and liabilities assumed in business combinations. Goodwill and other intangible assets with indefinite useful lives should not be amortized, but shall be tested for impairment annually, or more frequently if circumstances indicate potential impairment. FASB ASC Subtopic 350-20 allows an entity first to assess qualitatively whether it is more likely than not that a reporting unit's carrying amount exceeds its fair value, referred to in the guidance as "step zero." If an entity concludes that it is more likely than not that a reporting unit's fair value is less than its carrying amount (that is, a likelihood of more than 50 percent), the "step one" quantitative assessment must be performed for that reporting unit. FASB ASC Subtopic 350-20 provides examples of events and circumstances that should be considered in performing the step zero qualitative assessment, including macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, events affecting a reporting unit or the entity as a whole and a sustained decrease in share price. Performance of a qualitative impairment assessment requires judgment.

When applying the quantitative analysis, we determine the fair value of our reporting units based on a weighted average of multiple valuation techniques, principally a combination of an income approach and a market approach. The income approach calculates a value based upon the present value of estimated future cash flows, while the market approach uses earnings multiples of similarly situated guideline public companies. If the fair value of a reporting unit exceeds the carrying value of the reporting unit's net assets, goodwill is not impaired and further testing is not required.

We assess goodwill for impairment on an annual basis during the fourth quarter or more frequently if circumstances indicate potential impairment. For each of 2019, 2018, and 2017, we began our annual impairment test with the step zero qualitative assessment. In performing the step zero qualitative assessment for each year, examining those factors most likely to affect our valuations, we concluded that it remained more likely than not that the fair value of each of our reporting units continued to exceed their carrying amounts. Consequently, we did not perform a step one quantitative assessment for the purpose of our annual impairment test for these years.

Similar to the FASB ASC Subtopic 350-20 guidance for goodwill, FASB ASC Subtopic 350-30 allows an organization to first perform a qualitative assessment of whether it is more likely than not that an indefinite-lived intangible asset has been impaired. We assess indefinite-lived intangible assets for impairment on an annual basis during the fourth quarter or more frequently if circumstances indicate potential impairment. For each of 2019, 2018 and 2017, we performed a qualitative assessment examining those factors most likely to affect our valuations and concluded that it is more likely than not that our indefinite-lived intangible assets were not impaired. Consequently, we did not perform a quantitative impairment assessment for the purpose of our annual impairment test for these years.

Determining the fair value of a reporting unit or acquired intangible assets with indefinite lives involves judgment and the use of significant estimates and assumptions, which include assumptions regarding forecasted revenue growth rates, operating margins, capital expenditures, tax rates, and other factors used to calculate estimated future cash flows. In addition, risk-adjusted discount rates and future economic and market conditions and other assumptions are applied. Goodwill was \$52.2 billion and \$13.5 billion as of December 31, 2019 and 2018, respectively, and indefinite-lived intangible assets were \$43 million as of each of December 31, 2019 and 2018. As a result, a meaningful change in one or more of the underlying forecasts, estimates, or assumptions used in testing these assets for impairment could result in a material impact on the Company's results of operations and financial position. However, based on the qualitative assessment performed and because there was a substantial excess of fair value over carrying value in our previous third-party valuations performed in 2015 for goodwill and 2016 for indefinite-lived intangible assets, we believe the likelihood of obtaining materially different results based on a change of assumptions is low.

Related Party Transactions

We are a party to certain historical related party agreements as discussed in Note 18 of the Notes to Consolidated Financial Statements.

Factors Affecting Comparability

For information regarding factors affecting comparability, see "Item 6. *Selected Financial Data."* As a result of the transactions noted in Item 6. *Selected Financial Data*, our financial position, results of operations, earnings per share and cash flows in the periods covered by the Consolidated Financial Statements may not be directly comparable.

Consolidated Results of Operations (In millions, except per share amounts)

Revenue \$ 10,333 \$ 8,423 \$ 8,668 Cost of revenue 6,610 5,569 5,794 Gross profit 3,723 2,854 2,874 Selling, general and administrative expenses 2,667 1,301 1,442 Asset impairments 87 95 — Operating income 969 1,458 1,432 Other income (expense): 387 25 17 22 Interest expense (389) (314) (359) Other income (expense), net (219) (57) (119) Total other income (expense), net (556) (354) (456) Earnings before income taxes and equity method investment earnings (loss) 413 1,104 976 Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) (10) (15) (3) Net earnings loss attributable to noncontrolling interest (5) (35) (35) Net earnings per share-basic attributable to FIS common stockholders 208 846 1,261		 2019	 2018	 2017
Gross profit 3,723 2,854 2,874 Selling, general and administrative expenses 2,667 1,301 1,442 Asset impairments 87 95 — Operating income 969 1,458 1,432 Other income (expense): 52 17 22 Interest income 52 17 22 Interest expense (389) (314) (359) Other income (expense), net (219) (57) (119) Total other income (expense), net (556) (354) (456) Earnings before income taxes and equity method investment earnings (loss) 413 1,104 976 Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) (10) (15) (3) Net earnings 303 881 1,294 Net (earnings) loss attributable to noncontrolling interest (5) (35) (33) Net earnings per share-basic attributable to FIS common stockholders 298 846 1,261 <	Revenue	\$ 10,333	\$ 8,423	\$ 8,668
Selling, general and administrative expenses 2,667 1,301 1,442 Asset impairments 87 95 — Operating income 969 1,458 1,432 Other income (expense): 52 17 22 Interest income 52 17 22 Interest expense (389) (314) (359) Other income (expense), net (219) (57) (119) Total other income (expense), net (556) (354) (456) Earnings before income taxes and equity method investment earnings (loss) 413 1,104 976 Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) (10) (15) (3) Net earnings 303 881 1,294 Net (earnings) loss attributable to FIS common stockholders 5 298 846 1,261 Net earnings per share-basic attributable to FIS common stockholders 5 0.67 2.58 3.82 Weighted average shares outstanding-basic 445	Cost of revenue	 6,610	 5,569	 5,794
Asset impairments 87 95 — Operating income 969 1,458 1,432 Other income (expense):	Gross profit	3,723	 2,854	 2,874
Operating income 969 1,458 1,432 Other income (expense): 32 17 22 Interest income 52 17 22 Interest expense (389) (314) (359) Other income (expense), net (219) (57) (119) Total other income (expense), net (556) (354) (456) Earnings before income taxes and equity method investment earnings (loss) 413 1,104 976 Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) (10) (15) (3) Net earnings 303 881 1,294 Net (earnings) loss attributable to noncontrolling interest (5) (35) (33) Net earnings per share-basic attributable to FIS common stockholders 298 846 1,261 Net earnings per share-basic attributable to FIS common stockholders 30.67 2.58 3.82 Weighted average shares outstanding-basic 445 328 330 Net earnings per share-diluted attributable to FIS common stockho	Selling, general and administrative expenses	2,667	1,301	1,442
Other income (expense): Interest income 52 17 22 Interest expense (389) (314) (359) Other income (expense), net (219) (57) (119) Total other income (expense), net (556) (354) (456) Earnings before income taxes and equity method investment earnings (loss) 413 1,104 976 Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) (10) (15) (3) Net earnings 303 881 1,294 Net (earnings) loss attributable to noncontrolling interest (5) (35) (33) Net earnings attributable to FIS common stockholders \$ 298 \$ 846 \$ 1,261 Net earnings per share-basic attributable to FIS common stockholders \$ 0.67 \$ 2.58 3.82 Weighted average shares outstanding-basic 445 328 330 Net earnings per share-diluted attributable to FIS common stockholders \$ 0.66 \$ 2.55 \$ 3.75	Asset impairments	 87	 95	
Interest income 52 17 22 Interest expense (389) (314) (359) Other income (expense), net (219) (57) (119) Total other income (expense), net (556) (354) (456) Earnings before income taxes and equity method investment earnings (loss) 413 1,104 976 Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) (10) (15) (3) Net earnings 303 881 1,294 Net (earnings) loss attributable to noncontrolling interest (5) (35) (33) Net earnings attributable to FIS common stockholders \$ 298 \$ 846 \$ 1,261 Net earnings per share-basic attributable to FIS common stockholders \$ 0.67 \$ 2.58 \$ 3.82 Weighted average shares outstanding-basic 445 328 330 Net earnings per share-diluted attributable to FIS common stockholders \$ 0.66 \$ 2.55 \$ 3.75	Operating income	969	1,458	1,432
Interest expense (389) (314) (359) Other income (expense), net (219) (57) (119) Total other income (expense), net (556) (354) (456) Earnings before income taxes and equity method investment earnings (loss) 413 1,104 976 Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) (10) (15) (3) Net earnings 303 881 1,294 Net (earnings) loss attributable to noncontrolling interest (5) (35) (33) Net earnings attributable to FIS common stockholders \$ 298 \$ 846 1,261 Net earnings per share-basic attributable to FIS common stockholders \$ 0.67 \$ 2.58 3.82 Weighted average shares outstanding-basic 445 328 330 Net earnings per share-diluted attributable to FIS common stockholders \$ 0.66 \$ 2.55 \$ 3.75	Other income (expense):			
Other income (expense), net (219) (57) (119) Total other income (expense), net (556) (354) (456) Earnings before income taxes and equity method investment earnings (loss) 413 1,104 976 Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) (10) (15) (3) Net earnings 303 881 1,294 Net (earnings) loss attributable to noncontrolling interest (5) (35) (33) Net earnings attributable to FIS common stockholders \$ 298 \$ 846 \$ 1,261 Net earnings per share-basic attributable to FIS common stockholders \$ 0.67 \$ 2.58 \$ 3.82 Weighted average shares outstanding-basic 445 328 330 Net earnings per share-diluted attributable to FIS common stockholders \$ 0.66 \$ 2.55 \$ 3.75	Interest income	52	17	22
Total other income (expense), net Earnings before income taxes and equity method investment earnings (loss) Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) Net earnings Net (earnings) loss attributable to noncontrolling interest Net earnings attributable to FIS common stockholders Net earnings per share-basic attributable to FIS common stockholders Net earnings per share-basic attributable to FIS common stockholders Net earnings per share-basic attributable to FIS common stockholders Net earnings per share-basic attributable to FIS common stockholders Net earnings per share-basic attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders 100 208 (321) 100 (15) (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (3) 100 (15) (3) 100 (3) 100 (15) (3) 100 (3) 100 (3) 100 (3) 100 (15) (3) 100 (3) 100 (3) 100 (3) 100 (15) (3) 100 (3) 100 (3) 100 (3) 100 (15) (3) 100	Interest expense	(389)	(314)	(359)
Earnings before income taxes and equity method investment earnings (loss) Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) Net earnings Net (earnings) loss attributable to noncontrolling interest (5) (35) (33) Net earnings attributable to FIS common stockholders Net earnings per share-basic attributable to FIS common stockholders Net earnings per share-basic attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders 100 208 (321) (31) (32) (33) (34) (35) (35) (35) (36) (37) (38) (39) (39) (30) (30) (30) (31) (31) (32) (32) (33) (34) (35) (35) (36) (36) (37) (38) (38) (39) (30) (30) (30) (30) (31) (31) (32) (32) (33) (34) (35) (35) (36) (37) (37) (38) (38) (39) (30) (30) (30) (30) (31) (31) (32) (32) (32) (33) (34) (35) (36) (37) (37) (38) (38) (39) (30) (30) (30) (31) (31) (32) (32) (32) (33) (34) (35) (35) (36) (37) (37) (38) (38) (38) (39) (30) (30) (30) (30) (31) (30) (30) (31) (30) (31) (30) (31) (30) (31) (31) (32) (32) (32) (32) (32) (33) (34) (35) (35) (35) (36) (37) (38) (38) (38) (39) (39) (30) (Other income (expense), net	 (219)	(57)	 (119)
Provision (benefit) for income taxes 100 208 (321) Equity method investment earnings (loss) (10) (15) (3) Net earnings 303 881 1,294 Net (earnings) loss attributable to noncontrolling interest (5) (35) (33) Net earnings attributable to FIS common stockholders \$ 298 \$ 846 \$ 1,261 Net earnings per share-basic attributable to FIS common stockholders \$ 0.67 \$ 2.58 \$ 3.82 Weighted average shares outstanding-basic 445 328 330 Net earnings per share-diluted attributable to FIS common stockholders \$ 0.66 \$ 2.55 \$ 3.75	Total other income (expense), net	(556)	(354)	(456)
Equity method investment earnings (loss) Net earnings Net (earnings) loss attributable to noncontrolling interest Net (earnings attributable to FIS common stockholders Net earnings per share-basic attributable to FIS common stockholders Net earnings per share-basic attributable to FIS common stockholders Net earnings per share-outstanding-basic Net earnings per share-diluted attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders Net earnings per share-diluted attributable to FIS common stockholders	Earnings before income taxes and equity method investment earnings (loss)	413	1,104	976
Net earnings3038811,294Net (earnings) loss attributable to noncontrolling interest(5)(35)(33)Net earnings attributable to FIS common stockholders\$ 298\$ 846\$ 1,261Net earnings per share-basic attributable to FIS common stockholders\$ 0.67\$ 2.58\$ 3.82Weighted average shares outstanding-basic445328330Net earnings per share-diluted attributable to FIS common stockholders\$ 0.66\$ 2.55\$ 3.75	Provision (benefit) for income taxes	100	208	(321)
Net (earnings) loss attributable to noncontrolling interest(5)(35)(33)Net earnings attributable to FIS common stockholders\$ 298\$ 846\$ 1,261Net earnings per share-basic attributable to FIS common stockholders\$ 0.67\$ 2.58\$ 3.82Weighted average shares outstanding-basic445328330Net earnings per share-diluted attributable to FIS common stockholders\$ 0.66\$ 2.55\$ 3.75	Equity method investment earnings (loss)	 (10)	 (15)	 (3)
Net earnings attributable to FIS common stockholders\$ 298 \$ 846 \$ 1,261Net earnings per share-basic attributable to FIS common stockholders\$ 0.67 \$ 2.58 \$ 3.82Weighted average shares outstanding-basic445 328 330Net earnings per share-diluted attributable to FIS common stockholders\$ 0.66 \$ 2.55 \$ 3.75	Net earnings	303	881	1,294
Net earnings per share-basic attributable to FIS common stockholders \$\frac{0.67}{2.58} \frac{3.82}{3.82}\$ Weighted average shares outstanding-basic 445 \frac{328}{328} \frac{330}{330}\$ Net earnings per share-diluted attributable to FIS common stockholders \$\frac{0.66}{5.066} \frac{5.255}{5.055} \frac{5.375}{5.065}\$	Net (earnings) loss attributable to noncontrolling interest	 (5)	(35)	 (33)
Weighted average shares outstanding-basic445328330Net earnings per share-diluted attributable to FIS common stockholders\$ 0.66\$ 2.55\$ 3.75	Net earnings attributable to FIS common stockholders	\$ 298	\$ 846	\$ 1,261
Net earnings per share-diluted attributable to FIS common stockholders \$ 0.66 \ \$ 2.55 \ \$ 3.75	Net earnings per share-basic attributable to FIS common stockholders	\$ 0.67	\$ 2.58	\$ 3.82
	Weighted average shares outstanding-basic	445	 328	330
Weighted average chares outstanding diluted 451 222 226	Net earnings per share-diluted attributable to FIS common stockholders	\$ 0.66	\$ 2.55	\$ 3.75
weighted average shares outstanding-unded 431 332 330	Weighted average shares outstanding-diluted	451	332	336

Revenue

Revenue for 2019 increased \$1,910 million, or 22.7% from 2018 primarily due to incremental revenue from the Worldpay acquisition and increased sales across our business lines as discussed in our Segment Results of Operations below.

Revenue for 2018 decreased \$245 million, or 2.8% from 2017, due to (1) the reduction in revenue from the sale of the Capco consulting business and the risk and compliance consulting business during the third quarter of 2017; (2) the reduction in revenue from the sale of the PS&E business during the first quarter of 2017; (3) the reduction in revenue from the sale of the Certegy Check Services business unit in North America during the third quarter of 2018; and (4) lower volumes in the trading services and data business. These decreases were partially offset by (1) increased volumes in debit, loyalty and Latin America payments; (2) growth in wealth outsourcing, core solutions and digital banking; (3) strong demand for private equity and insurance offerings; and (4) growth in the biller solutions business. Additionally, 2018 was impacted by a \$40 million unfavorable foreign currency impact primarily resulting from a stronger U.S. Dollar versus the Brazilian Real.

Cost of Revenue and Gross Profit

Cost of revenue totaled \$6,610 million, \$5,569 million and \$5,794 million during 2019, 2018 and 2017, respectively, resulting in gross profit of \$3,723 million, \$2,854 million and \$2,874 million, respectively. Gross profit as a percentage of revenue ("gross margin") was 36.0%, 33.9% and 33.2% in 2019, 2018 and 2017, respectively. The increase in gross profit for 2019 as compared to 2018 primarily resulted from the revenue variances noted above. The gross profit percentage for 2019 as compared to 2018 benefited from higher margin revenue from the Worldpay acquisition, partially offset by higher acquired intangible asset amortization expense.

Selling, General and Administrative Expenses

Selling, general and administrative expenses for 2019 increased \$1,366 million, or 105.0% from 2018. The year-over-year increase was primarily driven by (1) incremental Worldpay corporate and infrastructure expenses and (2) higher acquisition, integration and other costs of \$704 million in 2019 as compared to \$156 million in 2018. These increases were partially offset by (1) the sale of Reliance Trust Company of Delaware during the fourth quarter of 2018 and (2) the sale of the Certegy Check Services business unit in North America during the third quarter of 2018.

Selling, general and administrative expenses for 2018 decreased \$141 million, or 9.8% from 2017. The year-over-year decrease is primarily driven by the sale of PS&E during the first quarter of 2017, the sale of the Capco consulting business and risk and compliance consulting business during the third quarter of 2017, the sale of Certegy Check Services business unit in North America during the third quarter of 2018 and cost management initiatives.

Asset Impairments

During 2019, the Company recorded pre-tax asset impairments totaling \$87 million, primarily related to certain software resulting from the Company's net realizable value analysis.

During 2018, as a result of entering into an agreement to unwind the Brazilian Venture that the Company operated with Banco Bradesco, the Company recorded pre-tax asset impairments totaling \$95 million, including \$42 million for the Brazilian Venture contract intangible asset, \$25 million for goodwill, and \$28 million for the assets being held for sale that were transferred to Banco Bradesco upon closing of the agreement (see Note 19 of the Notes to Consolidated Financial Statements).

Operating Income

Operating income totaled \$969 million, \$1,458 million and \$1,432 million for 2019, 2018 and 2017, respectively. Operating income as a percentage of revenue ("operating margin") was 9.4%, 17.3% and 16.5% for 2019, 2018 and 2017, respectively. The annual changes in operating income resulted from the revenue and cost variances addressed above. The change in operating margin during 2019 was negatively impacted by higher acquired intangible asset amortization expense, higher acquisition, integration and other costs and asset impairments of \$87 million related to certain software. The change in operating margin during 2018 was negatively impacted by asset impairments of \$95 million related to the unwinding of the Brazilian Venture. Notwithstanding the asset impairments, however, operating margins improved primarily from cost management initiatives and the Capco consulting business divestiture during 2017.

Total Other Income (Expense), Net

Interest expense is typically the primary component of Total other income (expense), net.

The increase of \$75 million in interest expense in 2019 as compared to 2018 is primarily due to higher outstanding debt, partially offset by a lower weighted average interest rate on the outstanding debt and an increase in interest income on the proceeds from the Worldpay acquisition-related debt issuances prior to closing.

The decrease of \$45 million in interest expense in 2018 as compared to 2017 is primarily due to a lower weighted average interest rate on the outstanding debt and benefits realized from interest rate swaps executed in the fourth quarter of 2018, which are discussed in Note 13 of the Notes to Consolidated Financial Statements.

Other income (expense), net for 2019 includes a pre-tax charge of approximately \$217 million in tender premiums and fees and the write-off of previously capitalized debt issuance costs on the early redemption of approximately \$3.0 billion in aggregate principal amount of our senior notes as well as approximately \$33 million of acquisition financing costs related to the acquisition of Worldpay. These items were partially offset by the non-cash foreign currency gain on non-hedged Euro- and Pound Sterling-denominated notes issued to finance the Worldpay acquisition, during the period from the date of issue of the notes to the date of the acquisition.

Other income (expense), net for 2018 includes a pre-tax loss of \$54 million on the sale of the Certegy Check Services business unit in North America and \$12 million to unwind the Brazilian Venture, partially offset by a pre-tax gain of \$19 million on the sale of Reliance Trust Company of Delaware.

Other income (expense), net for 2017 includes (1) a pre-tax charge of \$171 million in tender premiums and the write-off of previously capitalized debt issuance costs on the repurchase of approximately \$2.0 billion in aggregate principal of our senior notes; (2) a net pre-tax loss of \$29 million on the sale of the Capco consulting and risk and compliance business and other divestitures; (3) a pre-tax charge of approximately \$25 million due to the redemption of our senior notes and the pay down of term loans, consisting of the call premium on the senior notes and the write-off of previously capitalized debt issuance costs; partially offset by (4) a pre-tax gain of \$85 million on the sale of the PS&E business, an \$8 million pre-tax gain on an investment sale and a \$12 million foreign currency gain.

Provision (Benefit) for Income Taxes

Provision (benefit) for income taxes from continuing operations totaled \$100 million, \$208 million and \$(321) million for 2019, 2018 and 2017, respectively. This resulted in an effective tax rate on continuing operations of 24.2%, 18.8% and (32.9)% for 2019, 2018 and 2017, respectively. The effective tax rate for the 2019 period included a detriment of \$44 million due to non-deductible executive stock compensation primarily driven by acceleration of converted heritage Worldpay stock compensation awards and the accrual of additional stock compensation due to reaching certain Worldpay synergy targets and a detriment of \$21 million due to the post-acquisition combined state income tax rates. The effective tax rate for the 2018 period included the impact of the reduction in the U.S. federal income tax rate from 35% to 21% due to tax reform enacted December 22, 2017, and a net detriment of \$33 million due to the book basis in excess of the tax basis of certain businesses sold during the year. The effective tax rate for the 2017 period included a net benefit of \$761 million related to tax reform items including \$48 million of tax credits due to tax planning strategies implemented in the fourth quarter and a net detriment of \$180 million due to the book basis in excess of the tax basis of certain businesses sold during the year.

Equity Method Investment Earnings (Loss)

FIS holds a 38% equity interest in Cardinal as further described in Note 19 of the Notes to Consolidated Financial Statements. As a result, we recorded equity method investment losses of \$10 million, \$15 million and \$3 million during the years ended December 31, 2019, 2018 and 2017, respectively.

Net (Earnings) Loss Attributable to Noncontrolling Interest

Net (earnings) loss attributable to noncontrolling interest for 2018 and 2017 predominantly relates to the joint venture in Brazil (see Notes 18 and 19 of the Notes to Consolidated Financial Statements) and totaled \$(5) million, \$(35) million and \$(33) million for 2019, 2018 and 2017, respectively.

Net Earnings Attributable to FIS Common Stockholders

Net earnings attributable to FIS common stockholders totaled \$298 million, \$846 million and \$1,261 million for 2019, 2018 and 2017, respectively, or \$0.66, \$2.55 and \$3.75 per diluted share, respectively, due to the factors described above coupled with the impact of our share repurchase initiatives.

Segment Results of Operations

As a result of the Company's acquisition of Worldpay, the Company reorganized its reportable segments and recast all prior-period segment information presented to align with the new reportable segments. The new segments are Merchant Solutions ("Merchant"), Banking Solutions ("Banking"), and Capital Market Solutions ("Capital Markets"), which are organized based on the markets and clients served aligned with the solutions they provide, as well as the Corporate and Other segment. A description of these segments is included in Note 22 of the Notes to Consolidated Financial Statements.

Adjusted EBITDA is defined as EBITDA (defined as net earnings (loss) before net interest expense, income tax provision (benefit) and depreciation and amortization) plus certain non-operating items. This measure is reported to the chief operating decision maker for purposes of making decisions about allocating resources to the segments and assessing their performance. For this reason, Adjusted EBITDA, as it relates to our segments, is presented in conformity with FASB ASC Topic 280, *Segment Reporting*. The non-operating items affecting the segment profit measure generally include acquisition accounting adjustments; acquisition, integration and certain other costs; and asset impairments. These costs and adjustments are recorded in the Corporate and Other segment for the periods discussed below. Adjusted EBITDA for the respective segments excludes the foregoing costs and adjustments. Financial information, including details of our adjustments to EBITDA, for each of our segments is set forth in Note 22 of the Notes to Consolidated Financial Statements.

Merchant Solutions

	 2019		2018	2017		
	 (In millions)					
Revenue	\$ 2,013	\$	276	\$	261	
Adjusted EBITDA	\$ 994	\$	59	\$	68	

Year ended December 31, 2019:

Revenue increased \$1,737 million due to incremental revenue from the Worldpay acquisition totaling \$1,722 million and heritage FIS merchant solutions growth of \$27 million.

Adjusted EBITDA increased \$935 million and adjusted EBITDA margin increased to 49.4% resulting from higher margin incremental revenue from the Worldpay acquisition.

Year ended December 31, 2018:

Revenue increased \$15 million, or 5.7%, driven by growth in the biller solutions business.

Adjusted EBITDA decreased \$9 million, or 13.2%, and adjusted EBITDA margin decreased 470 basis points to 21.4% primarily resulting from an increase in lower margin revenue due to biller solutions growth, along with an increase in cost of goods sold.

Banking Solutions

	2019		2018	2017		
		(I	n millions)			
Revenue	\$ 5,873	\$	5,712	\$	5,552	
Adjusted EBITDA	\$ 2,454	\$	2,256	\$	2,101	

Year ended December 31, 2019:

Revenue increased \$161 million, or 2.8%, due to (1) incremental revenue from the Worldpay acquisition contributing 3.1%; (2) increased termination fees contributing 0.8%; and (3) other items contributing an aggregate of 3.2% due in part to license and professional services growth in the wealth and retirement business, strong network and back-office volumes, and growth in the card production business. These items were partially offset by (1) the unwinding of the Brazilian Venture offset in part by the new commercial agreement with Banco Bradesco and growth in Latin America payments contributing (3.0%) and (2) the reduction in revenue from the sale of Reliance Trust Company of Delaware business contributing (0.6%). Banking Solutions had an unfavorable foreign currency impact contributing (0.7%), or approximately \$37 million, driven primarily by a stronger U.S. Dollar versus the Brazilian Real and Euro.

Adjusted EBITDA increased \$198 million, or 8.8%, primarily resulting from the revenue variances noted above. Adjusted EBITDA margin increased 230 basis points to 41.8% primarily resulting from positive revenue mix, the addition of higher margin Worldpay revenue, and the unwinding of lower margin Brazilian Venture revenue.

Year ended December 31, 2018:

Revenue increased \$160 million, or 2.9%, with processing and other recurring revenue contributing 3.8% due in part to growth in wealth outsourcing, core solutions and digital banking, along with increased volumes in debit, loyalty, and Latin America payments. Non-recurring revenue contributed 0.4% to growth. These items were partially offset by the sale of the risk and compliance consulting business contributing (0.4%) and an unfavorable foreign currency impact contributing (0.9%), or approximately \$49 million, driven primarily by a stronger U.S. Dollar versus the Brazilian Real.

Adjusted EBITDA increased \$155 million, or 7.4%, primarily resulting from the revenue variances noted above and continued cost management. Adjusted EBITDA margin increased 170 basis points to 39.5% primarily driven by a revenue mix shift and operating efficiencies.

Capital Market Solutions

		2019	2018	2017		
Revenue	\$	2,447	\$ 2,391	\$	2,749	
Adjusted EBITDA	\$	1,129	\$ 1,081	\$	1,080	

Year ended December 31, 2019:

Revenue increased \$56 million, or 2.3%, primarily due to (1) strong managed services growth, partially offset by a decline in trading volumes, contributing 1.3% and (2) the remaining revenue contributing 1.8% primarily due to increased demand for risk and compliance offerings. These items were partially offset by unfavorable foreign currency impact contributing (0.8%) or approximately \$20 million, primarily driven by a stronger U.S. Dollar versus the British Pound Sterling.

Adjusted EBITDA increased \$48 million, or 4.4%, and adjusted EBITDA margin increased 90 basis points to 46.1%, due to continued cost management.

Year ended December 31, 2018:

Revenue decreased \$358 million, or 13.0%, primarily due to the sale of the Capco consulting business and other divestitures contributing (13.4%). This was partially offset by favorable currency impact contributing 0.2%, or approximately \$6 million, driven by a weaker U.S. Dollar versus the British Pound Sterling. The remaining 0.2% contribution was primarily due to strong demand for private equity and insurance offerings, partially offset by a decline in trading volumes.

Adjusted EBITDA increased \$1 million, or 0.1%, and adjusted EBITDA margins increased 590 basis points to 45.2% primarily resulting from the positive impact of the Capco consulting business divestiture during 2017, as well as continued cost management.

Corporate and Other

	 2019	2018		2017
		(In million	s)	
Revenue	\$ 	\$ 4	14 \$	106
Adjusted EBITDA	\$ (373)	\$ (26	53) \$	(265)

The Corporate and Other segment results consist of selling, general and administrative expenses and depreciation and intangible asset amortization not otherwise allocated to the reportable segments. Corporate and Other also includes operations from non-strategic businesses, including the PS&E business (which was divested on February 1, 2017) and the Certegy Check Services business unit in North America (which was divested on August 31, 2018).

Year ended December 31, 2019:

Revenue decreased \$44 million, or 100.0%, due to the sale of the Certegy Check Services business unit in North America during the third quarter of 2018.

Adjusted EBITDA decreased \$110 million, or 41.8%, primarily due to incremental Worldpay corporate and infrastructure expenses and increased corporate health care and other benefit plan expenses.

Year ended December 31, 2018:

Revenue decreased \$62 million, or 58.5%, primarily due to the sale of the PS&E business during the first quarter of 2017 and Certegy Check Services business unit in North America during the third quarter of 2018.

Adjusted EBITDA increased \$2 million, or 0.8%, primarily from a reduction in infrastructure technology expenses and the results of our data center consolidation program, partially offset by the reduction in revenue from the sale of the PS&E business during the first quarter of 2017 and Certegy Check Services business unit in North America during the third quarter of 2018.

Liquidity and Capital Resources

Cash Requirements

Our ongoing cash requirements include operating expenses, income taxes, tax receivable obligations, mandatory debt service payments, capital expenditures, stockholder dividends, working capital and timing differences in settlement-related assets and liabilities, and may include discretionary debt repayments, share repurchases and business acquisitions. Our principal sources of funds are cash generated by operations and borrowings, including the capacity under our Revolving Credit Facility, the U.S. commercial paper program and the Euro-commercial paper program described in Note 12 of the Notes to Consolidated Financial Statements.

As of December 31, 2019, we had cash and cash equivalents of \$1.2 billion and debt of \$20.2 billion, including the current portion, net of capitalized debt issuance costs. Approximately \$570 million of cash and cash equivalents is held by our foreign entities. The majority of our domestic cash and cash equivalents represents net deposits-in-transit at the balance sheet dates and relates to daily settlement activity. We expect that cash and cash equivalents plus cash flows from operations over the next 12 months will be sufficient to fund our operating cash requirements, capital expenditures and mandatory debt service.

We currently expect to continue to pay quarterly dividends. However, the amount, declaration and payment of future dividends is at the discretion of our Board of Directors and depends on, among other things, our investment opportunities, results of operations, financial condition, cash requirements, future prospects, and other factors that may be considered relevant by our Board of Directors, including legal and contractual restrictions. Additionally, the payment of cash dividends may be limited by covenants in certain debt agreements. A regular quarterly dividend of \$0.35 per common share is payable on March 27, 2020 to shareholders of record as of the close of business on March 13, 2020.

On July 20, 2017, our Board of Directors approved a plan authorizing repurchases of up to \$4.0 billion of our outstanding common stock in the open market at prevailing market prices or in privately negotiated transactions through December 31, 2020. This share repurchase authorization replaced any existing share repurchase authorization. Approximately \$2.3 billion of plan capacity remained available for repurchases as of December 31, 2019. Management temporarily suspended share repurchases as a result of the Worldpay transaction to accelerate debt repayment.

Cash Flows from Operations

Cash flows from operations were \$2,410 million, \$1,993 million and \$1,741 million in 2019, 2018 and 2017, respectively. Our net cash provided by operating activities consists primarily of net earnings, adjusted to add back depreciation and amortization. Cash flows from operations increased \$417 million in 2019 and \$252 million in 2018. The 2019 increase in cash flows from operations is primarily due to increased cash flow due to the Worldpay acquisition, partially offset by the timing of working capital and Worldpay acquisition transaction- and integration-related expenses. The 2018 increase in cash flows from operations is primarily due to lower trade receivables from increased collections resulting from a reduction in days sales outstanding. These increases were partially offset by U.S. federal estimated income tax payments normally due in the third and fourth quarters of 2017 that were paid during the first quarter of 2018 due to the Hurricane Irma Relief Program and timing of working capital.

Capital Expenditures and Other Investing Activities

Our principal capital expenditures are for software (purchased and internally developed) and additions to property and equipment. We invested approximately \$828 million, \$622 million and \$613 million in capital expenditures (excluding other financing obligations for certain hardware and software) during 2019, 2018 and 2017, respectively. In 2020, we expect to continue investing in property and equipment, purchased software and internally developed software to support our core business initiatives. We expect to invest a similar percentage of our 2020 revenue in capital expenditures as in previous years.

In 2019, we used \$6,629 million of cash (net of cash acquired, including restricted cash) for the Worldpay acquisition. See Note 3 of the Notes to Consolidated Financial Statements.

In 2017, cash flows from investing activities included proceeds from the sale of businesses and investments primarily relating to the sale of PS&E and the Capco consulting and risk and compliance businesses.

Financing

For more information regarding the Company's debt and financing activity, see Note 12 of the Notes to Consolidated Financial Statements.

Contractual Obligations

FIS' long-term contractual obligations generally include its long-term debt, interest on long-term debt, lease payments on certain of its property and equipment and payments for certain purchase commitments and other obligations. The following table summarizes FIS' significant contractual obligations and commitments as of December 31, 2019 (in millions):

			Payments Due in							
	Less than			1-3		3-5	More			
Type of Obligation		Total	1 Year		Year		Years		5 Years	
Long-term debt (1)	\$	17,516	\$	140	\$	3,299	\$	3,708	\$	10,369
Interest (2)		3,489		312		624		572		1,981
Operating leases		664		151		239		136		138
Purchase commitments (3)		807		355		285		166		1
Obligations under TRA (4)		564		32		267		252		13
Total	\$	23,040	\$	990	\$	4,714	\$	4,834	\$	12,502

(1) The principal amounts assume no changes in currency rates for our notes denominated in Euro and GBP. See Note 12 of the Notes to Consolidated Financial Statements for more details.

- (2) The calculations above assume that (a) applicable margins and commitment fees remain constant; (b) all floating-rate debt is priced at the rates in effect as of December 31, 2019; (c) no refinancing occurs at debt maturity; (d) only mandatory debt repayments are made; (e) no new hedging transactions are effected; and (f) there are no currency effects.
- (3) Includes obligations principally related to software, maintenance support, and telecommunication and network services as well as to third-party processors to provide gateway authorization and other processing services.
- (4) Obligation represents estimated Tax Receivable Agreement ("TRA") payments to Fifth Third Bank. See Note 16 of the Notes to Consolidated Financial Statements for more details.

Off-Balance Sheet Arrangements

FIS does not have any off-balance sheet arrangements.

Recent Accounting Pronouncements

Recently Adopted Accounting Guidance

In February 2018, the FASB issued ASU No. 2018-02 ("ASU 2018-02"), *Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects From Accumulated Other Comprehensive Income.* ASU 2018-02 allows companies to elect whether to reclassify from accumulated other comprehensive income to retained earnings the tax effects of items within accumulated other comprehensive income, referred to as stranded tax effects, resulting from the Tax Cuts and Jobs Act. FIS adopted ASU 2018-02 on January 1, 2019, and did not elect to reclassify the income tax effects of the Tax Cuts and Jobs Act from accumulated other comprehensive income to retained earnings. As a result, the adoption of this ASU did not have an impact on the Company's Consolidated Financial Statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which requires lessees to recognize leases on the balance sheet and disclose key information about leasing arrangements. Topic 842 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, Leases*; ASU No. 2018-11, *Targeted Improvements*; ASU No. 2018-20, *Leases (Topic 842): Narrow-Scope Improvements for Lessors;* and ASU No. 2019-1, *Leases (Topic 842): Codification Improvements* (collectively, the "new standard"). The new standard establishes a right-of-use ("ROU") model that requires a lessee to recognize an ROU asset and lease liability on the balance sheet for all leases with a term longer than 12 months. Leases are classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the income statement. Under the new standard, lessor accounting is largely unchanged.

The new standard is effective for public business entities on January 1, 2019, with early adoption permitted. A modified retrospective transition approach is required, applying the new standard to all leases existing at the date of initial application. An entity may choose to use either (1) its effective date (the "effective date method") or (2) the beginning of the earliest comparative period presented in the financial statements as its date of initial application. If an entity chooses the second option, the transition requirements for existing leases also apply to leases entered into between the date of initial application and the effective date. The entity must also recast its comparative period financial statements and provide the disclosures required by the new standard for the comparative periods. FIS adopted the new standard effective January 1, 2019 using the effective date method. Consequently, financial information was not updated and the disclosures required under the new standard were not provided for dates and periods before January 1, 2019.

The new standard provides several optional practical expedients in transition and for an entity's ongoing accounting. We elected the "package of practical expedients," which permits us not to reassess under the new standard our prior conclusions about lease identification, lease classification and initial direct costs. We also elected the practical expedient not to separate lease and non-lease components. We did not elect the use-of-hindsight practical expedient nor the short-term lease recognition exemption.

The adoption of the new standard resulted in the recognition of operating lease ROU assets and lease liabilities on the Company's Condensed Consolidated Balance Sheet of \$442 million and \$446 million, respectively, on January 1, 2019. The standard did not impact our results of operations or cash flows. The Company's accounting for finance leases, which are immaterial, remained substantially unchanged.

Recent Accounting Guidance Not Yet Adopted

On August 29, 2018, the FASB issued ASU No. 2018-15 ("ASU 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.* This ASU clarifies that implementation costs incurred by customers in cloud computing arrangements should be deferred and recognized over the term of the arrangement, if those costs would be capitalized by the customer in a software licensing arrangement under the internal-use software guidance. The provisions in ASU 2018-15 should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. For public business entities, ASU 2018-15 is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods, with early adoption permitted. We will prospectively adopt the new guidance effective January 1, 2020. We expect that the new guidance will not have a material impact on our consolidated financial statements.

On June 16, 2016, the FASB issued ASU No. 2016-13 ("ASU 2016-13"), Financial Instruments - Credit Losses (Topic 326): Measurements on Credit Losses of Financial Instruments. This ASU was subsequently amended by ASU No. 2018-19, Codification Improvements to Topic 326, Financial Instruments - Credit Losses (collectively, "Topic 326"). The primary objectives of Topic 326 are to implement new methodology for calculating credit losses on financial instruments, such as trade receivables, based on expected credit losses and to broaden the types of information companies must use when calculating the estimated losses. Under current guidance, the credit losses are calculated based on multiple credit impairment objectives and recognition is delayed until the loss is probable to occur. Under the new guidance, financial assets measured at amortized cost basis must be shown as the net amount expected to be collected. The credit loss allowance is a contra-valuation account. The new guidance also applies to receivables arising from revenue transactions such as contract assets. For public business entities, Topic 326 is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods, with early adoption permitted. We will adopt the new standard effective January 1, 2020. We expect to apply a modified retrospective transition approach with a cumulative effect adjustment recorded in retained earnings as of the beginning of the year of adoption. While we are continuing to evaluate the impact, we expect that the new guidance will not have a material impact on our Consolidated Financial Statements.

Item 7A. Quantitative and Qualitative Disclosure About Market Risks

Market Risk

We are exposed to market risks primarily from changes in interest rates and foreign currency exchange rates. We periodically use certain derivative financial instruments, including interest rate swaps and foreign currency forward contracts, to manage interest rate and foreign currency risk. We do not use derivatives for trading purposes, to generate income or to engage in speculative activity.

Interest Rate Risk

In addition to existing cash balances and cash provided by operating activities, we use fixed-rate and variable-rate debt to finance our operations. We are exposed to interest rate risk on these debt obligations and related interest rate swaps.

Our fixed-rate senior notes (as described in Note 12 of the Notes to Consolidated Financial Statements) represent the majority of our fixed-rate long-term debt obligations as of December 31, 2019. The carrying value, excluding the fair value of the interest rate swap described below and unamortized discounts, of these senior notes was \$16.6 billion as of December 31, 2019. The fair value of these senior notes was approximately \$17.5 billion as of December 31, 2019. The potential reduction in fair value of the fixed-rate senior notes from a hypothetical 10 percent increase in market interest rates would not be material to the overall fair value of the debt.

Our variable-rate risk principally relates to borrowings under our U.S. commercial paper program, Euro-commercial paper program, Revolving Credit Facility, Senior Euro Floating Rate Notes (as defined in Note 12 of the Notes to Consolidated Financial Statements) and an interest rate swap on our fixed-rate long-term debt. At December 31, 2019, our weighted average cost of debt was 1.66% with a weighted average maturity of 6.2 years; 78% of our debt was fixed-rate and the remaining 22% of our debt was variable-rate. A 100 basis point increase in the weighted average interest rate on our variable-rate debt would have increased our 2019 interest expense by \$45 million. We performed the foregoing sensitivity analysis based solely on the principal amount of our variable-rate debt as of December 31, 2019. This sensitivity analysis does not take into account any changes that occurred in the prior 12 months or that may take place in the next 12 months in the amount of our outstanding debt. Further, this sensitivity analysis assumes the change in interest rates is applicable for an entire year. For comparison purposes, based on principal amounts of variable-rate debt outstanding as of December 31, 2018, and calculated in the same manner as set forth above, an increase of 100 basis points in the weighted average interest rate would have increased our annual interest expense by approximately \$10 million.

As of December 31, 2019, the following interest rate swap converting the interest rate exposure on our Senior Euro Notes due July 2024 from fixed to variable is outstanding (in millions):

				Bank pays	FIS pays
Effective Date	Maturity Date	Not	ional	fixed rate of	variable rate of
December 21, 2018	July 15, 2024	€	500	1.100%	3-month Euribor + 0.878% (1)

(1) 0.460% in effect as of December 31, 2019

We designated the interest rate swap as a fair value hedge for accounting purposes as described in Note 13 of the Notes to Consolidated Financial Statements. A 100 basis point increase in the 3-month Euribor rate would increase our annual interest expense on this swap by approximately \$6 million.

Foreign Currency Risk

We are exposed to foreign currency risks that arise from normal business operations. These risks include the translation of local currency balances of foreign subsidiaries, transaction gains and losses associated with intercompany loans with foreign

subsidiaries and transactions denominated in currencies other than a location's functional currency. We manage the exposure to these risks through a combination of normal operating activities and the use of foreign currency forward contracts and non-derivative and derivative investment hedges.

Our exposure to foreign currency exchange risks generally arises from our non-U.S. operations, to the extent they are conducted in local currency. Changes in foreign currency exchange rates affect translations of revenue denominated in currencies other than the U.S. Dollar. During the years ended December 31, 2019, 2018 and 2017, we generated approximately \$1,852 million, \$1,542 million and \$1,821 million, respectively, in revenue denominated in currencies other than the U.S. Dollar. The major currencies to which our revenue is exposed are the British Pound Sterling, Euro, Brazilian Real and Indian Rupee. A 10% move in average exchange rates for these currencies (assuming a simultaneous and immediate 10% change in all of such rates for the relevant period) would have resulted in the following increase or decrease in our reported revenue for the years ended December 31, 2019, 2018 and 2017 (in millions):

Currency	2019	2018	2017
Pound Sterling	\$ 87	\$ 34	\$ 41
Euro	31	30	33
Real	16	38	39
Rupee	11	13	14
Total increase or decrease	\$ 145	\$ 115	\$ 127

While our results of operations have been impacted by the effects of currency fluctuations, our international operations' revenue and expenses are generally denominated in local currency, which reduces our economic exposure to foreign exchange risk in those jurisdictions.

Revenue included \$70 million and \$40 million of unfavorable foreign currency impact during 2019 and 2018, respectively, resulting from changes in the U.S. Dollar. Net earnings attributable to FIS common stockholders included \$2 million and \$12 million of unfavorable foreign currency impact during 2019 and 2018, respectively, resulting from changes in the U.S. Dollar. For the full year of 2020, we do not expect a material impact to revenue due to foreign currency translation, although the actual amount of impact is uncertain due to the many factors that affect exchange rates.

Our foreign exchange risk management policy permits the use of derivative instruments, such as forward contracts and options, to reduce volatility in our results of operations and/or cash flows resulting from foreign exchange rate fluctuations. We do not enter into foreign currency derivative instruments for trading purposes or to engage in speculative activity. We periodically enter into foreign currency forward contracts to hedge foreign currency exposure to intercompany loans and other balance sheet items. During the second quarter of 2019, we entered into foreign currency forward contracts to reduce the volatility in the Company's cash flows due to foreign exchange rate fluctuations during the period leading up to the Company's Euro- and Pound Sterling-denominated debt issuances related to the Worldpay acquisition, as discussed in Note 13 of the Notes to Consolidated Financial Statements. The Company also utilizes foreign currency denominated debt and cross-currency interest rate swaps designated as net investment hedges in order to reduce the volatility of the net investment value of certain of its Euro and Pound Sterling functional subsidiaries (see Note 13 of the Notes to Consolidated Financial Statements).

Item 8. Financial Statements and Supplementary Data

FIDELITY NATIONAL INFORMATION SERVICES, INC. AND SUBSIDIARIES

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors Fidelity National Information Services, Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited Fidelity National Information Services, Inc.'s and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, the related consolidated statements of earnings, comprehensive earnings, equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements), and our report dated February 20, 2020 expressed an unqualified opinion on those consolidated financial statements.

The Company acquired Worldpay, Inc. (Worldpay) during 2019, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2019, Worldpay's internal control over financial reporting. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of Worldpay. The acquired business represents approximately 73% of total assets, consisting principally of goodwill and other intangible assets, and 18% of total revenue included in the consolidated financial statements of the Company as of and for the year ended December 31, 2019.

Basis for Opinion

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

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ KPMG LLP Jacksonville, Florida February 20, 2020

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors Fidelity National Information Services, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Fidelity National Information Services, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of earnings, comprehensive earnings, equity, and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 20, 2020 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 2(o) to the consolidated financial statements, the Company has changed its method of accounting for leases as of January 1, 2019 due to the adoption of Accounting Standards Codification Topic 842, *Leases*.

Acquisition of Worldpay, Inc.

As discussed in Note 3 to the consolidated financial statements, the Company acquired Worldpay, Inc. (Worldpay) on July 31, 2019.

Basis for Opinion

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

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

Critical Audit Matters

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

Evaluation of software license revenue from arrangements with terms and conditions that are not standard

As discussed in Notes 2(p) and 4 to the consolidated financial statements, the Company enters into arrangements containing software licenses. Software license revenue typically relates to the Company's promise to provide the customer a right to use the Company's intellectual property and is typically part of an offering of multiple services. Offerings that contain software license components often contain non-standard terms and conditions and vary with regards to the number and type of promises included and pricing.

We identified the evaluation of software license revenue from arrangements with terms and conditions that are not standard as a critical audit matter. Significant auditor judgment was required to evaluate the Company's assessment of the impact on revenue

recognition of certain terms and conditions that are unique to individual contracts. Specifically, judgment was required to evaluate the Company's identification of performance obligations and determination of the corresponding pattern of revenue recognition, particularly for new contracts or renewals with software license performance obligations.

The primary procedures performed to address this critical audit matter included the following. We tested certain internal controls over the Company's revenue recognition process, including controls over the Company's assessment of contractual terms and conditions on software license revenue recognition. We tested certain arrangements containing software license components by reading the underlying contracts and evaluating the Company's assessment of the contractual terms and conditions in accordance with the revenue recognition requirements. Specifically, this included an evaluation of the Company's identification and assessment of terms and conditions that were not standard that could give rise to additional performance obligations or different patterns of revenue recognition. We obtained external confirmation directly from certain of the Company's customers and compared the key terms and conditions relevant to the Company's revenue recognition to the Company's written customer agreement. Additionally, we tested a sample of individual software license revenue, and obtained the underlying contract and accounting analysis to evaluate the identification of performance obligations and timing of software license revenue recognition.

Evaluation of the acquisition-date fair value of the customer relationship intangible assets and software assets acquired in the Worldpay transaction

As discussed in Note 3 to the consolidated financial statements, on July 31, 2019, the Company acquired Worldpay in a business combination. As a result of the transaction, the Company acquired customer relationship intangible assets associated with the generation of future income from Worldpay's existing customers and software assets associated with Worldpay's technology applications. The acquisition-date fair value for the customer relationship intangible assets and software assets was \$13.7 billion and \$1.3 billion, respectively.

We identified the evaluation of the acquisition-date fair value of the customer relationship intangible assets and software assets acquired in the Worldpay transaction as a critical audit matter. There was a high degree of subjectivity in evaluating the discounted cash flow model used to determine the acquisition-date fair value of the customer relationship intangible assets and software assets. The discounted cash flow model included the internally-developed assumptions for which there was limited observable market information, and the fair value of such assets could be sensitive to changes. The internally-developed assumptions for customer relationship intangible assets included 1) forecasted revenue attributable to existing customer contracts and relationships, 2) estimated annual attrition, 3) forecasted earnings before interest, taxes, depreciation and amortization (EBITDA) margin, and 4) weighted-average cost of capital (WACC), including estimated discount rates. For software assets, the internally developed assumptions included 1) forecasted revenue attributable to software assets, including obsolescence rates, 2) estimated royalty rates, and 3) WACC, including estimated discount rates.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's acquisition-date valuation process, including controls over the development of the above assumptions. We compared the Company's estimates of 1) forecasted revenue, including obsolescence rates on software assets, and forecasted EBITDA margin to Worldpay's historical actual results and to the Company's peers and industry reports, 2) forecasted annual attrition to Worldpay's historical customer attrition data and industry data and 3) royalty rates to third-party royalty rates of similar software licenses. We assessed the assumptions for comparison to those of a market participant, including consideration of recent similar market transactions. In addition, we involved valuation professionals with specialized skills and knowledge, who assisted in:

- evaluating the Company's determined WACC by comparing relevant inputs to independent market data for the Company's peers,
- evaluating the Company's discount rates, by comparing them against a discount rate range that was independently developed using publicly available market data for comparable entities,
- evaluating the Company's selected royalty rates, by comparing them against a royalty rate range that was independently developed using publicly available market data for comparable licensing activities, and
- testing the Company's model utilized to estimate the fair value of the customer relationship intangible assets and software assets using the Company's cash flow forecasts and discount rates.

/s/ KPMG LLP

We have served as the Company's auditor since 2004. Jacksonville, Florida February 20, 2020

Consolidated Balance Sheets December 31, 2019 and 2018 (In millions, except per share amounts)

	2019	2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 1,152	\$ 703
Settlement deposits and merchant float	2,882	700
Trade receivables, net	3,242	1,472
Contract assets	124	123
Settlement receivables	647	281
Other receivables	337	166
Prepaid expenses and other current assets	 308	288
Total current assets	8,692	3,733
Property and equipment, net	900	587
Goodwill	52,242	13,545
Intangible assets, net	15,798	3,132
Software, net	3,204	1,795
Other noncurrent assets	2,303	503
Deferred contract costs, net	 667	475
Total assets	\$ 83,806	\$ 23,770
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable, accrued and other liabilities	\$ 2,374	\$ 1,099
Settlement payables	4,228	972
Deferred revenue	817	739
Short-term borrowings	2,823	267
Current portion of long-term debt	 140	48
Total current liabilities	10,382	3,125
Long-term debt, excluding current portion	17,229	8,670
Deferred income taxes	4,281	1,360
Other noncurrent liabilities	2,406	326
Deferred revenue	 52	 67
Total liabilities	34,350	13,548
Equity:		
FIS stockholders' equity:		
Preferred stock, $$0.01$ par value, 200 shares authorized, none issued and outstanding as of December $31,2019$ and 2018	_	_
Common stock, \$0.01 par value, 750 and 600 shares authorized, 615 and 433 shares issued as of December 31, 2019 and 2018, respectively	6	4
Additional paid in capital	45,358	10,800
Retained earnings	4,161	4,528
Accumulated other comprehensive earnings (loss)	(33)	(430)
Treasury stock, \$0.01 par value, less than 1 and 106 common shares as of December 31, 2019 and 2018, respectively, at cost	 (52)	 (4,687)
Total FIS stockholders' equity	49,440	10,215
Noncontrolling interest	16	 7
Total equity	49,456	10,222
Total liabilities and equity	\$ 83,806	\$ 23,770

Consolidated Statements of Earnings Years Ended December 31, 2019, 2018 and 2017 (In millions, except per share amounts)

		2019	2018	2017
Revenue (for related party activity, see Note 18)	\$	10,333	\$ 8,423	\$ 8,668
Cost of revenue (for related party activity, see Note 18)	_	6,610	5,569	5,794
Gross profit		3,723	2,854	2,874
Selling, general and administrative expenses (for related party activity, see Note 18)		2,667	1,301	1,442
Asset impairments		87	 95	
Operating income		969	1,458	1,432
Other income (expense):				
Interest income		52	17	22
Interest expense		(389)	(314)	(359)
Other income (expense), net		(219)	 (57)	(119)
Total other income (expense), net		(556)	(354)	(456)
Earnings before income taxes and equity method investment earnings (loss)		413	1,104	976
Provision (benefit) for income taxes		100	208	(321)
Equity method investment earnings (loss)		(10)	 (15)	(3)
Net earnings		303	 881	1,294
Net (earnings) loss attributable to noncontrolling interest		(5)	 (35)	(33)
Net earnings attributable to FIS common stockholders	\$	298	\$ 846	\$ 1,261
Net earnings per share-basic attributable to FIS common stockholders	\$	0.67	\$ 2.58	\$ 3.82
Weighted average shares outstanding-basic		445	328	330
Net earnings per share-diluted attributable to FIS common stockholders	\$	0.66	\$ 2.55	\$ 3.75
Weighted average shares outstanding-diluted		451	332	336

Consolidated Statements of Comprehensive Earnings Years Ended December 31, 2019, 2018 and 2017 (In millions)

	2019)	_	201	8	 201	17
Net earnings	\$	303		9	\$ 881		\$ 1,294
Other comprehensive earnings (loss), before tax:							
Unrealized gain (loss) on derivatives	\$ (17)		\$			\$ (28)	
Adjustment for (gain) loss reclassified to net earnings	 2		_				
Unrealized gain (loss) on derivatives, net	(15)					(28)	
Foreign currency translation adjustments	646			(120)		23	
Minimum pension liability adjustments	(38)			5		 (8)	
Other comprehensive earnings (loss), before tax	593			(115)		 (13)	
Provision for income tax expense (benefit) related to items of other comprehensive earnings	196			1		(11)	
Other comprehensive earnings (loss), net of tax	\$ 397	397	\$	(116)	(116)	\$ (2)	(2)
Comprehensive earnings		700		_	765		1,292
Net (earnings) loss attributable to noncontrolling interest		(5)			(35)		(33)
Other comprehensive (earnings) loss attributable to noncontrolling interest	_	_		-	18		1
Comprehensive earnings attributable to FIS common stockholders	\$	695		=	\$ 748	-	\$ 1,260

Consolidated Statements of Equity
Years ended December 31, 2019, 2018 and 2017
(In millions, except per share amounts)

Treasury shares held for taxes due upon exercise of stock options Treasury shares held for taxes due upon exercise of stock options Treasury shares held for taxes due upon exercise of stock options Cash dividends declared (\$1.40 per share) and other distributions Cash dividends declared (\$1.16 per share) and other distributions Cash dividends declared (\$1.28 per share) and other distributions Other comprehensive earnings (loss), net of tax Other comprehensive earnings (loss), net of tax Other comprehensive earnings (loss), net of tax Balances, December 31, 2016 Balances, December 31, 2017 Brazilian Venture divestiture Balances, December 31, 2018 Purchases of treasury stock Issuance of restricted stock Purchases of treasury stock Issuance of restricted stock Issuance of restricted stock Purchases of treasury stock Stock-based compensation Stock-based compensation Stock-based compensation Exercise of stock options Exercise of stock options Exercise of stock options Worldpay acquisition Net earnings Net earnings Net earnings

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

Balances, December 31, 2019

		•		l										
Number of shares					Additional			Accumulated other	ılated r					
Common		Treasurv	Common		paid in	2 2	Retained	comprehensive		Treasury	Noncontrolling interest	пg	Ĕ 5	Total
	431	(103) \$	1	4 &	10,380	s	3,233	S	(331) \$	(3,611) \$		104 \$		9,779
	_			1					I			1		
		5	,	ı	73					137				210
			,	ı	(28)				I	(25)				(53)
		(1)	,	ı	1				I	(105)				(105)
				1	109									109
		I	,	1			(385)		I		<u> </u>	(27)		(412)
	1			1			1,261		I			33		1,294
			'	ı					(1)			\equiv		(2)
	432	\$ (66)		4	10,534	s	4,109	S	(332) \$	(3,604)	S	109		10,820
	-	1	'	 	I									
		4	,	ı	135					155				290
			,	ı	(10)				I	(22)				(32)
	I	(11)		1					I	(1,216)				(1,216)
			'	ı	84				1					84
			,	ı	1		(422)		I		<u> </u>	(29)		(451)
			1	ı	57						<u> </u>	(06)		(33)
				ı			(5)							(5)
	1			1			846		I			35		881
	I			1					(86)		<u> </u>	(18)		(116)
	433	(106)		8	10,800	S	4,528	s	(430) \$	(4,687)	S	7		10,222
	180	109		2	34,040		1			5,042		11		39,095
	-		'	1						2				2
	_	1	,	ı	1117					46				163
		I	1		(1)					(55)		1		(56)
		(4)	1	ı					I	(400)				(400)
				ı	402									402
			,	1			(858)					()		(999)
	1	I		1	1		(7)		I			1		(7)
			1	ı			298					5		303
				1					397					397
	615	8		9	45,358	S	4,161	s	(33) \$	(52)	S	16		49,456
												l	ı	

Consolidated Statements of Cash Flows Years ended December 31, 2019, 2018 and 2017 (In millions)

	2019		2018		2017
Cash flows from operating activities:					
Net earnings	\$ 303	\$	881	\$	1,294
Adjustment to reconcile net earnings to net cash provided by operating activities:					
Depreciation and amortization	2,444		1,420		1,366
Amortization of debt issue costs	24		17		19
Acquisition-related financing foreign exchange	(125)		_		_
Asset impairments	87		95		_
Loss (gain) on sale of businesses, investments and other	18		50		(62)
Loss on extinguishment of debt	217		1		196
Stock-based compensation	402		84		107
Deferred income taxes	(109)		(116)		(985)
Net changes in assets and liabilities, net of effects from acquisitions and foreign currency:					
Trade and other receivables	(161)		78		(232)
Contract assets	17		(20)		62
Settlement activity	(165)		9		(51)
Prepaid expenses and other assets	(129)		4		(2)
Deferred contract costs	(379)		(248)		(153)
Deferred revenue	40		(100)		67
Accounts payable, accrued liabilities, and other liabilities	(74)	_	(162)		115
Net cash provided by operating activities	2,410		1,993		1,741
Cash flows from investing activities:					
Additions to property and equipment	(200)		(127)		(145)
Additions to software	(628)		(495)		(468)
Acquisitions, net of cash acquired	(6,632)		_		_
Net proceeds from sale of businesses and investments	49		(16)		1,307
Other investing activities, net	(90)		(30)		(4)
Net cash provided by (used in) investing activities	 (7,501)	_	(668)	_	690
Cash flows from financing activities:					
Borrowings	33,352		26,371		9,615
Repayment of borrowings and other financing obligations	(24,672)		(26,148)		(11,689)
Debt issuance costs	(101)		(30)		(13)
Proceeds from exercise of stock options	161		288		208
Treasury stock activity	(453)		(1,255)		(153)
Dividends paid	(656)		(421)		(385)
Distribution to Brazilian Venture partner	_		(26)		(23)
Other financing activities, net	(50)	_	(15)		(40)
Net cash provided by (used in) financing activities	7,581	_	(1,236)		(2,480)
Effect of foreign currency exchange rate changes on cash	18	_	(51)		31
Net increase (decrease) in cash and cash equivalents	2,508		38		(18)
Cash and cash equivalents, beginning of year	703	_	665		683
Cash and cash equivalents. end of vear (see Note 2(b))	\$ 3.211	\$	703	\$	665
Supplemental cash flow information:					
Cash paid for interest	\$ 332	\$	298	\$	354
Cash paid for income taxes	\$ 321	\$	503	\$	545

Unless stated otherwise or the context otherwise requires, all references to "FIS," "we," the "Company" or the "registrant" are to Fidelity National Information Services, Inc., a Georgia corporation, and its subsidiaries.

(1) Basis of Presentation

FIS is a leading provider of technology solutions for merchants, banks and capital markets firms globally.

On March 17, 2019, FIS, Wrangler Merger Sub, Inc., a wholly owned subsidiary of FIS ("Merger Sub"), and Worldpay, Inc. ("Worldpay") entered into an Agreement and Plan of Merger (the "merger agreement") pursuant to which Merger Sub would merge with and into Worldpay (the "merger"), with Worldpay surviving the merger and becoming a wholly owned subsidiary of FIS (collectively, the "Worldpay acquisition"). On July 31, 2019, FIS completed the acquisition of Worldpay, and Worldpay's results of operations and financial position are included in the Consolidated Financial Statements from and after the date of acquisition.

As a result of the Company's acquisition of Worldpay, the Company reorganized its reportable segments and recast all prior-period segment information presented to align with the new reportable segments. The new segments are Merchant Solutions, Banking Solutions, and Capital Market Solutions, which are organized based on the markets and clients served aligned with the solutions they provide, as well as the Corporate and Other segment (see Note 22).

(2) Summary of Significant Accounting Policies

The following describes the significant accounting policies of the Company used in preparing the accompanying Consolidated Financial Statements.

(a) Principles of Consolidation

The Consolidated Financial Statements include the accounts of FIS, its wholly-owned subsidiaries and subsidiaries that are majority-owned. All significant intercompany profits, transactions and balances have been eliminated in consolidation.

(b) Cash and Cash Equivalents

The Company considers all cash on hand, money market funds and other highly liquid investments with original maturities of three months or less to be cash and cash equivalents. As part of the Company's payment processing business, the Company provides cash settlement services to financial institutions and state and local governments. These services involve the movement of funds between the various parties associated with automated teller machines ("ATM"), point-of-sale or electronic benefit transactions ("EBT"), and this activity results in a balance due to the Company at the end of each business day that it recoups over the next few business days. The in-transit balances due to the Company are included in Cash and cash equivalents on the Consolidated Balance Sheets. The carrying amounts reported in the Consolidated Balance Sheets for these instruments approximate their fair value. The Company records restricted cash in captions other than Cash and cash equivalents in the Consolidated Balance Sheets. The reconciliation between Cash and cash equivalents in the Consolidated Balance Sheets and the Consolidated Statements of Cash Flows is as follows (in millions):

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

December 31

	Deten	 •
	2019	2018
Cash and cash equivalents on the Consolidated Balance Sheets	\$ 1,152	\$ 703
Merchant float restricted cash (in Settlement deposits and merchant float) (see Note 2(f))	1,519	_
Other restricted cash (in Other noncurrent assets) (see Note 11)	 540	 _
Total Cash and cash equivalents per the Consolidated Statements of Cash Flows	\$ 3,211	\$ 703

(c) Fair Value Measurements

Fair Value of Assets Acquired and Liabilities Assumed in Business Combinations

FASB Accounting Standards Codification ("ASC") Topic 805, Business Combinations, requires an acquirer to recognize, separately from goodwill, the identifiable assets acquired, liabilities assumed, and any noncontrolling interest in the acquiree, and to measure these items generally at their acquisition date fair values. Goodwill is recorded as the residual amount by which the purchase price exceeds the fair value of the net assets acquired. Fair values are determined using the framework outlined below under Fair Value Hierarchy and the methodologies addressed in the individual subheadings. If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, we are required to report provisional amounts in the financial statements for the items for which the accounting is incomplete. Adjustments to provisional amounts initially recorded that are identified during the measurement period are recognized in the reporting period in which the adjustment amounts are determined. This includes any effect on earnings of changes in depreciation, amortization, or other income effects as a result of the change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. During the measurement period, we are also required to recognize additional assets or liabilities if new information is obtained about facts and circumstances that existed as of the acquisition date that, if known, would have resulted in the recognition of those assets and liabilities as of that date. The measurement period ends the sooner of one year from the acquisition date or when we receive the information we were seeking about facts and circumstances that existed as of the acquisition date or learn that more information is not obtainable. Contingent consideration liabilities or receivables recorded in connection with business acquisitions must also be adjusted for changes in fair value until settled.

Fair Value of Financial Instruments

The carrying amounts reported in the Consolidated Balance Sheets for receivables, accounts payable, and short-term borrowings approximate their fair values because of their immediate or short-term maturities. The fair value of the Company's long-term debt is based on quoted prices of our senior notes and trades of our debt in close proximity to year end, which are considered Level 2-type measurements. The Company also holds, or has held, certain derivative instruments, specifically interest rate swaps and foreign currency exchange forward contracts, which are also valued using Level 2-type measurements. These estimates are subjective in nature and involve uncertainties and significant judgment in the interpretation of current market data. Therefore, the values presented are not necessarily indicative of amounts the Company could realize or settle currently.

Fair Value Hierarchy

The authoritative accounting literature defines fair value, establishes a framework for measuring fair value, and establishes a fair value hierarchy based on the quality of inputs used to measure fair value.

The fair value hierarchy includes three levels that are based on the priority of the inputs to the valuation technique. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). If the inputs used to measure the fair

value fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the asset or liability. The three levels of the fair value hierarchy are described below.

Level 1. Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2. Inputs to the valuation methodology include the following:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3. Inputs to the valuation methodology are unobservable and significant to the fair value measurement. Unobservable inputs are inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

(d) Derivative Financial Instruments

The Company accounts for derivative financial instruments in accordance with FASB ASC Topic 815, Derivatives and Hedging. This guidance establishes accounting and reporting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities. All derivatives, whether designated in hedging relationships or not, are required to be recorded on the Consolidated Balance Sheets at fair value. During 2019, the Company entered into foreign currency forward contracts as well as treasury lock and interest rate swap contracts to reduce the volatility in the Company's cash flows during the period leading up to the Company's debt issuances related to the Worldpay transaction. The Company designated these treasury lock and interest rate swap contracts as cash flow hedges. During 2019 and 2018, the Company used cross-currency interest rate swaps to engage in hedging activities relating to its investment in foreign currency denominated operations. The Company designated these interest rate swaps as net investment hedges. Also during 2018, the Company used an interest rate swap to engage in hedging activities relating to changes in fair value of its foreign currency denominated debt. The Company designated this interest rate swap as a fair value hedge. During 2017, the Company engaged in hedging activities relating to its variable-rate debt through the use of interest rate swaps. The Company designated these interest rate swaps as cash flow hedges. The estimated fair values of the derivative instruments are determined using Level 2type measurements. The derivative instruments are recorded at fair value as assets or liabilities and are included in the accompanying Consolidated Balance Sheets in Prepaid expenses and other current assets; Other noncurrent assets; Accounts payable, accrued and other liabilities; or Other noncurrent liabilities, as appropriate. Changes in fair value are recorded as a component of Accumulated other comprehensive earnings (loss), net of tax, for all derivative instruments except the fair value hedge, which is recorded as an adjustment to long-term debt, and the foreign currency forward contracts, which are recorded through Other income (expense), net. The amounts included in Accumulated other comprehensive earnings (loss) for the cash flow hedges are recorded in interest expense as yield adjustments over the periods in which the related interest payments that were hedged are made. See Notes 13 and 20 for additional details.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Company also utilizes foreign currency denominated debt as non-derivative net investment hedges in order to reduce the volatility of the net investment value of its foreign currency denominated operations. The change in fair value of the net investment hedges due to remeasurement of the effective portion, net of tax, is recorded as a component of Accumulated other comprehensive earnings (loss). The ineffective portion of these hedging instruments impacts net earnings when the ineffectiveness occurs.

The Company also has used foreign currency forward contracts to manage our exposure to fluctuations in costs caused by variations in Indian Rupee ("INR") exchange rates. These INR forward contracts, which were terminated in 2017, were designated as cash flow hedges. The Company had no ineffectiveness related to its use of foreign currency forward contracts in connection with INR cash flow hedges.

(e) Trade Receivables

A summary of trade receivables, net, as of December 31, 2019 and 2018 is as follows (in millions):

	2019	2018
Trade receivables	\$ 3,302	\$ 1,489
Allowance for doubtful accounts	(60)	(17)
Total Trade receivables, net	\$ 3,242	\$ 1,472

The Company records allowance for doubtful accounts when it is probable that a trade receivable balance will not be collected. The Company writes-off a trade receivable balance when the likelihood of collection is considered remote.

A summary roll forward of the allowance for doubtful accounts for 2019, 2018 and 2017 is as follows (in millions):

Allowance for doubtful accounts as of December 31, 2016	\$ (41)
Bad debt expense	(26)
Write-offs, net of recoveries	 4
Allowance for doubtful accounts as of December 31, 2017	(63)
Bad debt expense	(13)
Write-offs, net of recoveries	 59
Allowance for doubtful accounts as of December 31, 2018	(17)
Bad debt expense	(53)
Write-offs, net of recoveries	15
Foreign currency adjustments	 (5)
Allowance for doubtful accounts as of December 31, 2019	\$ (60)

(f) Settlement Activity and Merchant Float

The payment solution services that give rise to the settlement balances described below are separate and distinct from those settlement activities referred to under (b) *Cash and Cash Equivalents*, where the services we provide primarily facilitate the movement of funds.

Banking Solutions

We manage certain payment services and programs and wealth management processes for our clients that require us to hold and manage client cash balances used to fund their daily settlement activity. Settlement deposits represent funds we hold that were drawn from our clients to facilitate settlement activities. Settlement receivables represent amounts funded by us. Settlement payables consist of settlement deposits from clients, settlement payables to third parties or clients, and outstanding checks related to our settlement activities for which the right of offset does not exist or we do not intend to exercise our right of offset. Our accounting policy for such outstanding checks is to include them in Settlement payables on the Consolidated Balance Sheets and operating cash flows on the Consolidated Statements of Cash Flows.

Merchant Solutions

Settlement deposits and merchant float, Settlement receivables, and Settlement payables represent intermediary balances arising from the settlement process which involves the transferring of funds between card issuers, merchants and various banks and financial institutions ("Sponsoring Members"). Funds are processed under two models, a sponsorship model and a direct member model. In the U.S., the Company operates under the sponsorship model, and outside the U.S., the Company operates under the direct membership model.

Under the sponsorship model, in order for the Company to provide electronic payment processing services, Visa, MasterCard and other payment networks require sponsorship by a member clearing bank. The Company has an agreement with Sponsoring Members to provide sponsorship services to the Company. Under the sponsorship agreements the Company is registered as a Visa Third-Party Agent and a MasterCard Service Provider. The sponsorship services allow us to route transactions under the Sponsoring Members' membership to clear card transactions through Visa, MasterCard and other networks. Under this model, the standards of the payment networks restrict us from performing funds settlement and as such require that these funds be in the possession of the Sponsoring Member until the merchant is funded. Accordingly, settlement receivables and settlement payables resulting from the submission of settlement files to the network or cash received from the network in advance of funding the network are the responsibility of the Sponsoring Member and are not recorded on the Company's Consolidated Balance Sheets.

Settlement receivables and settlement payables are also recorded in the U.S. as a result of intermediary balances due to/from the Sponsoring Member. The Company receives funds from certain networks which are owed to the Sponsoring Member for settlement. In other cases the Company transfers funds to the Sponsoring Member for settlement in advance of receiving funds from the network. These timing differences result in settlement receivables and settlement payables. The amounts are generally collected or paid the following one to three business days. Additionally, U.S. settlement receivables and settlement payables arise related to interchange expenses, merchant reserves and exception items.

Under the direct membership model, the Company is a direct member in Visa, MasterCard and other payment networks as third party sponsorship to the networks is not required. This results in the Company performing settlement between the networks and the merchant and requires adherence to the standards of the payment networks in which the Company is a direct member. Settlement deposits and merchant float, settlement receivables and settlement payables result when the Company submits the merchant file to the network or when funds are received by the Company in advance of paying the funds to the merchant. The amounts are generally collected or paid the following one to three business days.

Under the direct membership model, merchant float represents cash balances the Company holds on behalf of merchants when the incoming amount from the card networks precedes when the funding to merchants falls due. Merchant float funds held in segregated accounts in a fiduciary capacity are considered restricted cash (see Note 2(b)).

(g) Contract Related Balances

The payment terms and conditions in our customer contracts may vary. In some cases, customers pay in advance of our delivery of solutions or services; in other cases, payment is due as services are performed or in arrears following the delivery of the solutions or services. Differences in timing between revenue recognition and invoicing result in accrued trade receivables, contract assets, or deferred revenue on our Consolidated Balance Sheets. Receivables are accrued when revenue is recognized prior to invoicing but the right to payment is unconditional (i.e., only the passage of time is required). This occurs most commonly when software term licenses recognized at a point in time are paid for periodically over the license term. Contract assets result when amounts allocated to distinct performance obligations are recognized when or as control of a solution or service is transferred to the customer but invoicing is contingent on performance of other performance obligations or on completion of contractual milestones. Contract assets are transferred to receivables when the rights become unconditional, typically upon invoicing of the related performance obligations in the contract or upon achieving the requisite project milestone. Deferred revenue results from customer payments in advance of our satisfaction of the associated performance obligation(s) and relates primarily to prepaid maintenance or other recurring services. Deferred revenue is relieved as revenue is recognized. Contract assets and deferred revenue are reported on a contract-by-contract basis at the end of each reporting period. Changes in the contract assets and deferred revenue balances for the years ended December 31, 2019 and 2018 were not materially impacted by any factors other than those described above. Also, in some cases, signing bonuses are paid or credits are offered to customers in connection with the origination or renewal of customer contracts. These incentives are recorded as Other noncurrent assets on our Consolidated Balance Sheets and amortized on a straight-line basis as a reduction of revenue over the lesser of the useful life of the solution or the expected customer relationship period for new contracts or over the contract period for renewal contracts.

(h) Goodwill

Goodwill represents the excess of cost over the fair value of identifiable assets acquired and liabilities assumed in business combinations. FASB ASC Topic 350, *Intangibles - Goodwill and Other*, requires that goodwill and other intangible assets with indefinite useful lives not be amortized, but rather be tested for impairment annually, or more frequently if circumstances indicate potential impairment. The guidance allows an entity first to assess qualitatively whether it is more likely than not that a reporting unit's carrying amount exceeds its fair value, referred to as "step zero." If an entity concludes that it is more likely than not that a reporting unit's fair value is less than its carrying amount (that is, a likelihood of more than 50 percent), the "step one" quantitative assessment must be performed for that reporting unit. FASB ASC Topic 350 provides examples of events and circumstances that should be considered in performing the step zero qualitative assessment, including macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, events affecting a reporting unit or the entity as a whole and a sustained decrease in share price.

In applying the quantitative analysis, we determine the fair value of our reporting units based on a weighted average of multiple valuation techniques, principally a combination of an income approach and a market approach, which are Level 3- and Level 2-type measurements. The income approach calculates a value based upon the present value of estimated future cash flows, while the market approach uses earnings multiples of similarly situated guideline public companies. If the fair value of a reporting unit exceeds the carrying value of the reporting unit's net assets, goodwill is not impaired and further testing is not required.

The Company assesses goodwill for impairment on an annual basis during the fourth quarter or more frequently if circumstances indicate potential impairment. For each of 2019, 2018, and 2017, we began our assessment with the step zero qualitative assessment. In performing the step zero qualitative assessment for each year, examining those factors most likely to effect our valuations, we concluded that it remained more likely than not that the fair value of each of our reporting units continued to exceed their carrying amounts. Consequently, we did not perform a step one quantitative assessment for the purpose of our annual impairment test in any year presented in these financial statements.

(i) Long-Lived Assets

Long-lived assets and intangible assets with finite useful lives are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset, which are Level 3-type measurements. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset.

(j) Intangible Assets

The Company has intangible assets that consist primarily of customer relationships and trademarks (i.e., a collective term for trademarks, trade names, and related intellectual property rights) that are recorded in connection with acquisitions at their fair value based on the results of valuation analyses. Customer relationships and trademarks acquired in business combinations are generally valued using the multi-period excess earnings method and relief-from-royalty method, respectively, which are Level 3-type measurements. Customer relationships are amortized over their estimated useful lives using an accelerated method that takes into consideration expected customer attrition rates up to a 10-year period. Trademarks determined to have indefinite lives are not amortized. Trademarks with finite lives are amortized over periods ranging up to five years. Intangible assets with finite lives (principally customer relationships and certain trademarks) are reviewed for impairment in accordance with FASB ASC Subtopic 360-10-35, *Impairment or Disposal of Long-Lived Assets*, while certain trademarks determined to have indefinite lives are reviewed for impairment at least annually in accordance with FASB ASC Topic 350. Similar to the guidance for goodwill, ASC Topic 350 allows an organization to first perform a qualitative assessment of whether it is more likely than not that an indefinite-lived intangible asset has been impaired.

The Company assesses indefinite-lived intangible assets for impairment on an annual basis during the fourth quarter or more frequently if circumstances indicate potential impairment. For each of 2019, 2018 and 2017, we performed a qualitative assessment examining those factors most likely to affect our valuations and concluded that it is more likely than not that our indefinite-lived intangible assets were not impaired. Consequently, we did not perform a quantitative impairment assessment for the purpose of our annual impairment tests for 2019, 2018 and 2017.

(k) Software

Software includes software acquired in business combinations, purchased software and capitalized software development costs. Software acquired in business combinations is generally valued using the relief-from-royalty method, a Level 3-type measurement. Purchased software is recorded at cost and amortized using the straight-line method over its estimated useful life and software acquired in business combinations is recorded at its fair value and amortized using straight-line or accelerated methods over its estimated useful life, ranging from one to 10 years.

The capitalization of software development costs is governed by FASB ASC Subtopic 985-20 if the software is to be sold, leased or otherwise marketed, or by FASB ASC Subtopic 350-40 if the software is for internal use. After the technological feasibility of the software has been established (for software to be marketed) or at the beginning of application development (for internal-use software), software development costs, which primarily include salaries and related payroll costs and costs of independent contractors incurred during development, are capitalized. Research and development costs incurred prior to the establishment of technological feasibility (for software to be marketed) or prior to application development (for internal-use software), are expensed as incurred. Software development costs are amortized on a product-by-product basis commencing on the date of general release (for software to be marketed) or the date placed in service (for internal-use software). Software development costs for software to be marketed are amortized using the greater of (1) the straight-line method over its estimated

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

useful life, which ranges from three to 10 years, or (2) the ratio of current revenue to total anticipated revenue over its useful life. The Company assesses the recorded value of software to be marketed for impairment on a regular basis by comparing the carrying value to the estimated future cash flows to be generated by the underlying software asset (i.e., a net realizable value analysis) and reviews internal-use software for recoverability pursuant to long-lived asset guidance discussed above.

(I) Deferred Contract Costs

The Company incurs costs as a result of both the origination and fulfillment of our contracts with customers. Origination costs relate primarily to the payment of sales commissions that are directly related to sales transactions. Fulfillment costs include the cost of implementation services related to software as a service ("SaaS") and other cloud-based arrangements when the implementation service is not distinct from the ongoing service. When origination costs and fulfillment costs that will be used to satisfy future performance obligations are directly related to the execution of our contracts with customers, and the costs are recoverable under the contract, the costs are capitalized as a deferred contract cost. Impairment losses are recognized if the carrying amounts of the deferred contract costs are not recoverable. There were no significant impairment losses recognized on deferred contract costs for 2019, 2018, or 2017.

Origination costs for contracts that contain a distinct software license recognized at a point in time are allocated between the license and all other performance obligations of the contract and amortized according to the pattern of performance for the respective obligations. Otherwise, origination costs are capitalized as a single asset for each contract or portfolio of similar contracts and amortized using an appropriate single measure of performance considering all of the performance obligations in the contracts. The Company amortizes origination costs over the expected benefit period to which the deferred contract cost relates. Origination costs related to initial contracts with a customer are amortized over the lesser of the useful life of the solution or the expected customer relationship period. Commissions paid on renewals are amortized over the renewal period. Capitalized fulfillment costs are amortized over the lesser of the useful life of the solution or the expected customer relationship period.

(m) Property and Equipment

Property and equipment is recorded at cost, less accumulated depreciation and amortization. Depreciation and amortization are computed primarily using the straight-line method based on the estimated useful lives of the related assets as follows: 30 years for buildings and three to seven years for furniture, fixtures and computer equipment. Leasehold improvements are amortized using the straight-line method over the lesser of the initial term of the applicable lease or the estimated useful lives of such assets.

(n) Income Taxes

The Company recognizes deferred income tax assets and liabilities for temporary differences between the financial reporting basis and the tax basis of the Company's assets and liabilities and expected benefits of using net operating loss and credit carryforwards. Deferred income tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The impact on deferred income taxes of changes in tax rates and laws, if any, is reflected in the Consolidated Financial Statements in the period enacted. A valuation allowance is established for any portion of a deferred income tax asset for which management believes it is more likely than not that the Company will not be able to realize the benefits of all or a portion of that deferred income tax asset.

(o) Leases

Change in Accounting Policy

The Company adopted Topic 842, *Leases*, with an initial application date of January 1, 2019. As a result, the Company has changed its accounting policy for leases. The accounting policy pursuant to Topic 842 for operating leases is disclosed below. The primary impact of adopting Topic 842 is the establishment of a right-of-use ("ROU") model that requires a lessee to recognize ROU assets and lease liabilities on the consolidated balance sheet for operating leases.

The Company applied Topic 842 using the effective date method; consequently, financial information was not updated and the disclosures required under the new standard were not provided for dates and periods before January 1, 2019. For transition purposes, the Company elected the "package of practical expedients," which permits the Company not to reassess under the new standard prior conclusions about lease identification, lease classification and initial direct costs. The Company also elected the practical expedient not to separate lease and non-lease components. The Company did not elect the use-of-hindsight practical expedient nor the short-term lease recognition exemption allowed under the new standard.

The adoption of ASC 842 resulted in the recognition of operating lease ROU assets and lease liabilities on the Company's Consolidated Balance Sheet of \$442 million and \$446 million, respectively, on January 1, 2019. The standard did not impact the Company's results of operations or cash flows.

Operating Leases

The Company leases certain of its property, primarily real estate, under operating leases. Operating lease ROU assets are included in Other noncurrent assets, and operating lease liabilities are included in Accounts payable, accrued and other liabilities and Other noncurrent liabilities on the Consolidated Balance Sheets. 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. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. Operating lease ROU assets also include any prepaid lease payments and exclude lease incentives received. The Company uses an incremental borrowing rate based on information available at commencement date in determining the present value of lease payments. Lease terms may include options to extend, generally ranging from one to five years, or to terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense is recognized on a straight-line basis over the lease term. Lease agreements may include lease and related non-lease components, which are accounted for as a single lease component. Additionally, for certain equipment leases, the Company applies a portfolio approach to effectively account for the operating lease ROU assets and liabilities.

(p) Revenue Recognition

The Company generates revenue in a number of ways, including from the delivery of account- or transaction-based processing, SaaS, business process as a service ("BPaaS"), cloud offerings, software licensing, software-related services and professional services.

The Company enters into arrangements with customers to provide services, software and software-related services such as maintenance, implementation and training either individually or as part of an integrated offering of multiple services. At contract inception, the Company assesses the solutions and services promised in its contracts with customers and identifies a performance obligation for each promise to transfer to the customer a solution or service (or bundle of solutions or services) that is distinct - i.e., if a solution or service is separately identifiable from other items in the bundled package and if a customer

can benefit from it on its own or with other resources that are readily available to the customer. To identify its performance obligations, the Company considers all of the solutions or services promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices. The Company recognizes revenue when or as it satisfies a performance obligation by transferring control of a solution or service to a customer.

Revenue is measured based on the consideration that the Company expects to receive in a contract with a customer. The Company's contracts with its customers frequently contain variable consideration. Variable consideration exists when the amount which the Company expects to receive in a contract is based on the occurrence or non-occurrence of future events, such as processing services performed under usage-based pricing arrangements or professional services billed on a time-and-materials basis. Variable consideration is also present in certain transactions in the form of discounts, credits, price concessions, penalties, and similar items. If the amount of a discount or rebate in a contract is fixed and not contingent, that discount or rebate is not variable consideration. The Company estimates variable consideration in its contracts primarily using the expected value method. In some contracts, the Company applies the most likely amount method by considering the single most likely amount in a limited range of possible consideration amounts. The Company develops estimates of variable consideration on the basis of both historical information and current trends. Variable consideration included in the transaction price is constrained such that a significant revenue reversal is not probable.

Taxes collected from customers and remitted to governmental authorities are not included in revenue. Postage costs associated with print and mail services are accounted for as a fulfillment cost and are included in cost of revenue.

Technology or service components from third parties are frequently embedded in or combined with our applications or service offerings. We are often responsible for billing the client in these arrangements and transmitting the applicable fees to the third party. The Company determines whether it is responsible for providing the actual solution or service as a principal, or for arranging for the solution or service to be provided by the third party as an agent. Judgment is applied to determine whether we are the principal or the agent by evaluating whether the Company has control of the solution or service prior to it being transferred to the customer. The principal versus agent assessment is performed at the performance obligation level. Indicators that the Company considers in determining if it has control include whether the Company is primarily responsible for fulfilling the promise to provide the specified solution or service to the customer, the Company has inventory risk and the Company has discretion in establishing the price the customer ultimately pays for the solution or service. Depending upon the level of our contractual responsibilities and obligations for delivering solutions to end customers, we have arrangements where we are the principal and recognize the gross amount billed to the customer and other arrangements where we are the agent and recognize the net amount retained.

Once the Company has determined the transaction price, the total transaction price is allocated to each performance obligation in a manner depicting the amount of consideration to which the Company expects to be entitled in exchange for transferring the solution(s) or service(s) to the customer (the "allocation objective"). If the allocation objective is met at contractual prices, no allocation adjustments from contract prices are made. Otherwise, the Company reallocates the transaction price to each performance obligation identified in the contract on a relative standalone selling price basis, except when the criteria are met for allocating variable consideration or a discount to one or more, but not all, performance obligations in the contract. The Company allocates variable consideration to one or more, but not all performance obligations when the terms of the variable payment relate specifically to the Company's efforts to satisfy the performance obligation (or transfer the distinct solution or service) and when such allocation is consistent with the allocation objective when considering all performance obligations in the contract. Determining whether the criteria for allocating variable consideration to one or more, but not all, performance obligations in the contract requires significant judgment and may affect the timing and amount of revenue recognized. The Company does not typically meet the requirements to allocate discounts to one or more, but not all, performance obligations in a contract.

In order to determine the standalone selling price of its promised solutions or services, the Company conducts a regular analysis to determine whether various solutions or services have an observable standalone selling price. If the Company does not have an observable standalone selling price for a particular solution or service, then standalone selling price for that particular solution or service is estimated using all information that is reasonably available and maximizing observable inputs with approaches including historical pricing, cost plus a margin, adjusted market assessment, and residual approach.

The following describes the nature of the Company's primary types of revenue and the revenue recognition policies and significant payment terms as they pertain to the types of transactions the Company enters into with its customers.

Transaction Processing and Services Revenue

Transaction processing and services revenue is primarily comprised of payment processing, data processing, application management, and outsourced services, including our SaaS, BPaaS and cloud offerings. Revenue from transaction processing and services is recurring and is typically volume- or activity-based depending on factors such as the number of payments, transactions, accounts or trades processed, number of users, number of hours of services or amount of computer resources used. Fees may include tiered pricing structures with the base tier representing a minimum monthly usage fee. Pricing within the tiers typically resets on a monthly basis, and minimum monthly volumes are generally met or exceeded. Contract lengths for processing services typically span one or more years; however, when distinct hosting services are offered, they are often cancelable without a significant penalty with 30-days' notice. Payment is generally due in advance or in arrears on a monthly or quarterly basis and may include fixed or variable payment amounts depending on the specific payment terms and activity in the period.

For processing services revenue, the nature of the Company's promise to the customer is to stand ready to provide continuous access to the Company's processing platforms and perform an unspecified quantity of outsourced and transaction-processing services for a specified term or terms. Accordingly, processing services are generally viewed as a stand-ready performance obligation comprised of a series of distinct daily services. The Company typically satisfies its processing services performance obligations over time as the services are provided. A time-elapsed output method is used to measure progress because the Company's efforts are expended evenly throughout the period given the nature of the promise is a stand-ready service. The Company has evaluated its variable payment terms related to its processing services revenue accounted for as a series of distinct days of service and concluded that they generally meet the criteria for allocating variable consideration entirely to one or more, but not all, performance obligations in a contract. Accordingly, when the criteria are met, variable amounts based on the number and type of services performed during a period are allocated to and recognized on the day in which the Company performs the related services. Fixed fees for processing services are generally recognized ratably over the contract period.

Processing revenue also includes network, interchange, and other pass-through fees. Pass-through fees generally represent variable consideration and are allocated to and recognized on the day on which the related services are performed. Pass-through fees are billed monthly. Network and interchange fees are presented on a net basis; other pass through fees may be recorded on either a gross or a net basis depending on whether the Company is acting as a principal or an agent.

Software Maintenance Revenue

Software maintenance is comprised of technical support services and unspecified software updates and upgrades provided on a when-and-if-available basis. Software maintenance revenue is generally based on fixed fees. Payment terms are typically annually, quarterly, or monthly in advance. Contract terms vary and can span multiple years. The Company generally satisfies its maintenance-related performance obligations evenly using a time-elapsed output method over the contract term given there is no discernible pattern of performance.

Other Recurring Revenue

Other recurring revenue is comprised primarily of services provided by dedicated personnel resources who work full time at client sites and under the client's direction. Revenue from dedicated resource agreements is generally based on fixed monthly fees per resource. Payment terms are typically annually, quarterly, or monthly in advance. Contract terms vary and can span multiple years. The Company generally satisfies its dedicated resource obligations evenly using a time-elapsed output method over the contract term given there is no discernible pattern of performance.

Software License Revenue

The Company's software licenses generally have significant stand-alone functionality to the customer upon delivery and are considered to be functional intellectual property. Additionally, the nature of the Company's promise in granting these software licenses to a customer is typically to provide the customer a right to use the Company's intellectual property. The Company's software licenses are generally considered distinct performance obligations. Revenue allocated to software licenses is typically recognized at a point in time upon delivery of the license and is non-recurring. Contracts that contain software licenses often have non-standard terms that require significant judgments that may affect the amount and timing of revenue recognized.

When a software license requires frequent updates that are integral to maintaining the utility of the license to the customer, the Company combines the software license and the maintenance into a single performance obligation, and revenue for the combined performance obligation is recognized in other recurring revenue as the maintenance is provided, consistent with the treatment described for maintenance above. When a software license contract also includes professional services that provide significant modification or customization of the software license, the Company combines the software license and professional services into a single performance obligation, and revenue for the combined performance obligation is recognized as the professional services are provided, consistent with the methods described below for professional services revenue.

The Company has contracts where the licensed software is offered in conjunction with hosting services. The licensed software may be considered a separate performance obligation from the hosting services if the customer can take possession of the software during the contractual term without incurring a significant penalty and if it is feasible for the customer to run the software on its own infrastructure or hire a third party to host the software. If the licensed software and hosting services are separately identifiable, license revenue is recognized when the hosting services commence and it is within the customer's control to obtain a copy of the software. If the software license is not separately identifiable from the hosting service, then the related revenue for the combined performance obligation is recognized ratably over the hosting period and classified as processing revenue.

Occasionally, the Company offers extended payment terms on its license transactions and evaluates whether any potential significant financing components exist. For certain of its business units, the Company will provide a software license through a rental model for customers who would prefer a periodic fee instead of a larger upfront payment. Revenue recognition under these arrangements follows the same recognition pattern as the arrangements outlined above; however, the customer generally pays for the software license and maintenance in monthly or quarterly installments as opposed to an upfront software license fee. Judgment is required to determine whether these arrangements contain a significant financing component. The Company evaluates whether there is a significant difference between the amount of promised consideration over the rental term and the cash selling price of the software license, and the overall impact of the time value of money on the transaction. Rental software license arrangements that include a significant financing component are adjusted for the time value of money at the Company's incremental borrowing rate by recording a contract asset and interest income. The Company does not adjust the promised amount of consideration for the effects of the time value of money if it is expected, at contract inception, that the period

between when the Company transfers a promised solution or service to a customer and when the customer pays for that solution or service will be one year or less.

Professional Services Revenue

Professional services revenue is comprised of implementation, conversion, and programming services associated with the Company's data processing and application management agreements and implementation or installation services related to licensed software. Although this revenue is non-recurring in nature, it is generally recognized over time, with service durations spanning from several weeks to several years, depending on the scope and complexity of the work. Payment terms for professional services may be based on an upfront fixed fee, fixed upon the achievement of milestones, or on a time-and-materials basis.

In assessing whether implementation services provided on data processing, application management or software agreements are a distinct performance obligation, the Company considers whether the services are both capable of being distinct (i.e., can the customer benefit from the services alone or in combination with other resources that are readily available to the customer) and distinct within the context of the contract (i.e., separately identifiable from the other performance obligations in the contract). Implementation services and other professional services are typically considered distinct performance obligations. However, when these services involve significant customization or modification of an underlying solution or offering, or if the services are complex and not available from a third-party provider and must be completed prior to a customer having the ability to benefit from a solution or offering, then such services and the underlying solution or offering will be accounted for as a combined performance obligation.

The Company's professional services that are accounted for as distinct performance obligations and that are billed on a fixed fee basis are typically satisfied as services are rendered; thus, the Company uses a cost-based input method, such as cost-to-cost or efforts expended (labor hours), to provide a faithful depiction of the transfer of those services. For professional services that are distinct and billed on a time-and-materials basis, revenue is generally recognized using an output method that corresponds with the time and materials billed and delivered, which is reflective of the transfer of the services to the customer. Professional services that are not distinct from an associated solution or offering are recognized over the common measure of progress for the overall performance obligation (typically a time-elapsed output measure that corresponds to the period over which the solution or offering is made available to the customer).

Other Non-recurring Revenue

Other non-recurring revenue is comprised primarily of hardware, one-time card production, and early termination fees. The Company typically does not stock in inventory the hardware solutions sold but arranges for delivery of hardware from third-party suppliers. The Company determines whether hardware delivered from third-party suppliers should be recognized on a gross or net basis by evaluating whether the Company has control of the solution or service prior to it being transferred to the customer. Equipment and one-time card production revenue is generally recognized at a point in time upon delivery. Early contract terminations are treated as contract modifications. Early termination fees are added to a contract's transaction price once it becomes likely that liquidated damages will be charged to a customer, typically upon notification of early termination. Early termination fees are recognized over the remaining period of the related performance obligation(s).

Material Rights

Some of the Company's contracts with customers include options for the customer to acquire additional solutions or services in the future, including options to renew existing services. Options may represent a material right to acquire solutions or services if the discount is incremental to the range of discounts typically given for those solutions or services to that class of

customer in that geographical area or market, and the customer would not have obtained the option without entering into the contract. If deemed to be a material right, the Company will account for the material right as a separate performance obligation and determine the standalone selling price based on directly observable prices when available. If the standalone selling price is not directly observable, then the Company estimates the standalone selling price to be equal to the discount that the customer would obtain by exercising the option, as adjusted for any discount that the customer would receive without exercising the option and for the likelihood that the option will be exercised.

(q) Cost of Revenue and Selling, General and Administrative Expenses

Cost of revenue includes payroll, employee benefits, occupancy costs and other costs associated with personnel employed in customer service and service delivery roles, including program design and development and professional services. Cost of revenue also includes data processing costs, amortization of software, customer relationship and trademark intangible assets, and depreciation on operating assets.

Selling, general and administrative expenses include payroll, employee benefits, occupancy and other costs associated with personnel employed in sales, marketing, human resources, finance, risk management and other administrative roles. Selling, general and administrative expenses also include depreciation on non-operating corporate assets, advertising costs and other marketing-related programs.

(r) Stock-Based Compensation Plans

The Company accounts for stock-based compensation plans using the fair value method. Thus, compensation cost is measured based on the fair value of the award at the grant date and is recognized over the service period. Certain of our stock awards also contain performance conditions. In those circumstances, compensation cost is recognized over the service period when it is probable the outcome of that performance condition will be achieved. If the Company concludes at any point prior to completion of the requisite service period that it is not probable that the performance condition will be met, any previously recorded expense is reversed. Certain of our stock awards contain market conditions. In those circumstances, compensation cost is recognized over the service period and is not reversed even if the award does not become exercisable because the market condition is not achieved.

(s) Foreign Currency Translation

The functional currency for the foreign operations of the Company is either the U.S. Dollar or the local foreign currency. For foreign operations where the local currency is the functional currency, the translation into U.S. Dollars for consolidation is performed for balance sheet accounts using exchange rates in effect at the balance sheet date and for revenue and expense accounts using the average exchange rate during the period. The adjustments resulting from the translation are included in Accumulated other comprehensive earnings (loss) in the Consolidated Statements of Equity and Consolidated Statements of Comprehensive Earnings and are excluded from net earnings.

Gains or losses resulting from measuring foreign currency transactions into the respective functional currency are included in Other income (expense), net in the Consolidated Statements of Earnings.

(t) Management Estimates

The preparation of these Consolidated Financial Statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and

disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates.

(u) Net Earnings per Share

The basic weighted average shares and common stock equivalents for the years ended December 31, 2019, 2018 and 2017 are computed using the treasury stock method.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Net earnings and earnings per share for the years ended December 31, 2019, 2018 and 2017 are as follows (in millions, except per share data):

	 Year	ende	d Decem	ber 3	31,
	2019		2018		2017
Net earnings attributable to FIS common stockholders	\$ 298	\$	846	\$	1,261
Weighted average shares outstanding-basic	445		328		330
Plus: Common stock equivalent shares	 6		4		6
Weighted average shares outstanding-diluted	 451		332		336
Net earnings per share-basic attributable to FIS common stockholders	\$ 0.67	\$	2.58	\$	3.82
Net earnings per share-diluted attributable to FIS common stockholders	\$ 0.66	\$	2.55	\$	3.75

Options to purchase approximately 1 million, 1 million and 4 million shares of our common stock for the years ended December 31, 2019, 2018 and 2017, respectively, were not included in the computation of diluted earnings per share because they were anti-dilutive.

(v) Certain Reclassifications

Certain reclassifications have been made in the 2018 and 2017 Consolidated Financial Statements to conform to the classifications used in 2019.

(3) Worldpay Acquisition

On July 31, 2019, FIS completed the acquisition of Worldpay by acquiring 100 percent of Worldpay's equity pursuant to the merger agreement. Through its acquisition of Worldpay, FIS is now a global leader in technology, solutions and services for merchants, as well as banks and capital markets. The Worldpay acquisition brings an integrated technology platform with a comprehensive suite of products and services serving merchants and financial institutions. Through the Worldpay acquisition, FIS has enhanced global payment capabilities, robust risk and fraud solutions and advanced data analytics.

At the closing, Worldpay shareholders received approximately 289 million shares of FIS common stock and \$3.4 billion in cash, using an exchange ratio of 0.9287 FIS shares plus \$11.00 in cash for each share of Worldpay common stock. The acquisition-date fair value of the 289 million shares of the Company's common stock was determined based on the share price of \$133.69 per share, the closing price of the Company's common stock on the New York Stock Exchange on July 30, 2019, since the acquisition closed before the market opened on July 31, 2019. FIS also converted approximately 8 million outstanding Worldpay equity awards into corresponding equity awards with respect to shares of FIS common stock pursuant to an exchange ratio in the merger agreement designed to maintain the intrinsic value of the applicable award immediately prior to conversion. The fair value of the converted equity awards was approximately \$789 million based on a valuation as of the date of closing. The amounts attributable to services already rendered were included as an adjustment to the purchase price and the amounts attributable to future services will be expensed over the remaining vesting period. In connection with the Worldpay acquisition, FIS also repaid approximately \$7.5 billion of Worldpay debt, including \$5.7 billion for Worldpay debt that was not contractually assumed in the acquisition and was included as an adjustment to the purchase price. FIS funded the cash portion of the merger consideration, the pay-off of the indebtedness of Worldpay and the payment of transaction-related expenses through a combination of available cash-on-hand and proceeds from debt issuances, including proceeds from concurrent public offerings on May 21, 2019 of Euro-, Pound Sterling-, and U.S. Dollar-denominated senior unsecured notes and borrowings under the Euro-commercial paper program established on May 29, 2019. See Note 12 for further discussion of these debt issuances.

The total purchase price is as follows (in millions):

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Cash consideration	\$ 3,423
Value of FIS share consideration	38,635
Pay-off of Worldpay long-term debt not contractually assumed	5,738
Value of outstanding converted equity awards attributed to services already rendered	449
Total purchase price	\$ 48,245

The acquisition was accounted for as a business combination under FASB ASC Topic 805, *Business Combinations* ("Topic 805"). We recorded an allocation of the purchase price to Worldpay tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values as of July 31, 2019. The amounts for intangible assets were based on third-party valuations performed. Goodwill was recorded as the residual amount by which the purchase price exceeded the provisional fair value of the net assets acquired. Goodwill consists primarily of expected synergies of combining operations, the acquired workforce, and growth opportunities, none of which qualify as separately identifiable intangible assets. As of December 31, 2019, the Company has substantially completed its allocation of the purchase price. The principal open items relate to the valuation of certain income tax matters and contingencies as management is awaiting additional information to complete its assessment. Estimates have been recorded as of the acquisition date and updates to these estimates may increase or decrease goodwill.

Pursuant to Topic 805, the financial statements will not be retrospectively adjusted for any provisional amount changes that occur in subsequent periods. Rather, we will recognize any provisional amount adjustments during the reporting period in which the adjustments are determined. We will also be required to record, in the same period's financial statements, the effect on earnings of changes in depreciation, amortization, or other income effects, if any, as a result of any change to the provisional amounts, calculated as if the accounting had been completed at the acquisition date. We expect to finalize the purchase price allocation as soon as practicable, but no later than one year from the acquisition date.

The purchase price allocation as of December 31, 2019, is as follows (in millions):

Cash acquired	\$ 305
Settlement deposits and merchant float (1)	2,445
Trade receivables	1,599
Goodwill	38,068
Intangible assets	13,682
Software	1,297
Other noncurrent assets (2)	1,569
Accounts payable, accrued and other liabilities	(1,055)
Settlement payables	(3,167)
Deferred income taxes	(2,828)
Long-term debt, subsequently repaid	(1,805)
Other liabilities and noncontrolling interest (3)	(1,865)
Total purchase price	\$ 48,245

- (1) Includes \$1,693 million of merchant float.
- (2) Includes \$534 million of other restricted cash.
- (3) Includes \$542 million of noncurrent tax receivable agreement liability (see Note 16) and \$819 million contingent value rights liability (see Note 11).

The gross contractual amount of trade receivables acquired was approximately \$1,646 million. The difference between that total and the amount reflected above represents our best estimate at the acquisition date of the contractual cash flows not

expected to be collected. This difference was derived using Worldpay's historical bad debts, sales allowances and collection trends.

Intangible assets primarily consist of software, customer relationship assets and trademarks with weighted average estimated useful lives of seven years, ten years and five years, respectively, and fair value amounts assigned of \$1,297 million, \$13,272 million and \$410 million, respectively.

See Note 16 for acquired contingencies resulting from the Worldpay acquisition.

Unaudited Supplemental Pro Forma Results Giving Effect to the Worldpay Acquisition

Worldpay's revenue and pre-tax loss of \$1,880 million and \$436 million, respectively, which include the impact of purchase accounting adjustments, are included in the Consolidated Statements of Earnings for the period from July 31, 2019 through December 31, 2019.

Pursuant to ASC 805, unaudited supplemental pro forma results of operations for the years ended December 31, 2019 and 2018, assuming the acquisition had occurred as of January 1, 2018, are presented below (in millions, except per share amounts):

		rears ended	Decem	ber 31,
		2019	_	2018
Revenue	\$	12,724	\$	12,373
Net earnings (loss) attributable to FIS common stockholders	\$	254	\$	(57)
Net earnings (loss) per share-basic attributable to FIS common stockholders	\$	0.41	\$	(0.09)
Net earnings (loss) per share-diluted attributable to FIS common stockholders	\$	0.41	\$	(0.09)

The unaudited pro forma results include certain pro forma adjustments to revenue and net earnings that were directly attributable to the acquisition, assuming the acquisition had occurred on January 1, 2018, including the following:

- additional amortization expense that would have been recognized relating to the acquired intangible assets;
- adjustment to interest expense to reflect the removal of Worldpay debt and the additional borrowings of FIS in conjunction with the acquisition; and
- a reduction in expenses for the year ended December 31, 2019 of \$260 million and an increase in expenses for the year ended December 31, 2018 of \$267 million for acquisition-related transaction costs and other one-time non-recurring costs.

(4) Revenue

Disaggregation of Revenue

In the following tables, revenue is disaggregated by primary geographical market and type of revenue. The tables also include a reconciliation of the disaggregated revenue with the Company's reportable segments. Prior-period amounts have been reclassified to conform to the new reportable segment presentation as discussed in Note 22.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

For the year ended December 31, 2019 (in millions):

	Reportable Segments									
		lerchant olutions		Banking olutions		Capital Market Solutions		orporate d Other		Total
Primary Geographical Markets:										
North America	\$	1,409	\$	4,940	\$	1,510	\$	_	\$	7,859
All others		604		933		937				2,474
Total	\$	2,013	\$	5,873	\$	2,447	\$		\$	10,333
Type of Revenue:										
Recurring revenue:										
Transaction processing and services	\$	1,951	\$	4,298	\$	1,109	\$	_	\$	7,358
Software maintenance		2		360		482				844
Other recurring		37		177		106				320
Total recurring		1,990		4,835		1,697		_		8,522
Software license		8		150		341		_		499
Professional services		1		587		406		_		994
Other non-recurring		14		301		3				318
Total	\$	2,013	\$	5,873	\$	2,447	\$		\$	10,333

For the year ended December 31, 2018 (in millions):

	Reportable Segments										
		erchant lutions		Banking olutions		Capital Market Solutions		rporate d Other		Total	
Primary Geographical Markets:											
North America	\$	208	\$	4,546	\$	1,485	\$	44	\$	6,283	
All others		68		1,166		906				2,140	
Total	\$	276	\$	5,712	\$	2,391	\$	44	\$	8,423	
Type of Revenue:											
Recurring revenue:											
Transaction processing and services	\$	263	\$	4,340	\$	1,084	\$	44	\$	5,731	
Software maintenance		3		351		480		_		834	
Other recurring				207		114		_		321	
Total recurring		266		4,898		1,678		44		6,886	
Software license		4		101		311				416	
Professional services		1		567		402		_		970	
Other non-recurring		5		146				_		151	
Total	\$	276	\$	5,712	\$	2,391	\$	44	\$	8,423	

Reportable Segments

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

For the year ended December 31, 2017 (in millions):

	Reportable Segments										
		erchant lutions		Banking solutions		Capital Market Solutions		rporate d Other		Total	
Primary Geographical Markets:											
North America	\$	198	\$	4,376	\$	1,616	\$	106	\$	6,296	
All others		63		1,176		1,133				2,372	
Total	\$	261	\$	5,552	\$	2,749	\$	106	\$	8,668	
Type of Revenue:											
Recurring revenue:											
Transaction processing and services	\$	243	\$	4,201	\$	1,111	\$	84	\$	5,639	
Software maintenance		3		348		464		12		827	
Other recurring				188		189				377	
Total recurring		246		4,737		1,764		96		6,843	
Software license		11		95		285		1		392	
Professional services		1		608		700		7		1,316	
Other non-recurring		3		112				2		117	
Total	\$	261	\$	5,552	\$	2,749	\$	106	\$	8,668	

Contract Balances

The Company recognized revenue of \$762 million, \$740 million and \$741 million, during the years ended December 31, 2019, 2018 and 2017, respectively, that was included in the corresponding deferred revenue balance at the beginning of the period.

Transaction Price Allocated to the Remaining Performance Obligations

As of December 31, 2019, approximately \$20.5 billion of revenue is estimated to be recognized in the future from the Banking Solutions and Capital Market Solutions segments' remaining unfulfilled performance obligations, which are primarily comprised of recurring account- and volume-based processing services. This excludes the amount of anticipated recurring renewals not yet contractually obligated. The Company expects to recognize approximately 35% of the Banking Solutions and Capital Market Solutions segments' remaining performance obligations over the next 12 months, approximately another 25% over the next 13 to 24 months, and the balance thereafter.

As permitted by ASC 606, Revenue from Contracts with Customers, the Company has elected to exclude from this disclosure an estimate for the Merchant Solutions segment, which is primarily comprised of contracts with an original duration of one year or less or variable consideration that meet specific criteria. This segment's core performance obligations consist of variable consideration under a stand-ready series of distinct days of service, and revenue from the segment's products and service arrangements are generally billed and recognized as the services are performed. The aggregate fixed consideration portion of customer contracts with an initial contract duration greater than one year is not material.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(5) Property and Equipment

Property and equipment as of December 31, 2019 and 2018 consists of the following (in millions):

	2019				
Land	\$	34	\$	31	
Buildings		275		235	
Leasehold improvements		163		135	
Computer equipment		1,382		1,047	
Furniture, fixtures, and other equipment		323		197	
		2,177		1,645	
Accumulated depreciation and amortization		(1,277)		(1,058)	
Total Property and equipment, net	\$	900	\$	587	

During the years ended December 31, 2019 and 2018, the Company entered into other financing obligations of \$215 million and \$91 million, respectively, for certain hardware and software. The assets are included in property and equipment and software and the other financing obligations are classified as Long-term debt on our Consolidated Balance Sheets. Periodic payments are included in repayment of borrowings on the Consolidated Statements of Cash Flows.

Depreciation and amortization expense on property and equipment amounted to \$201 million, \$184 million and \$180 million for the years ended December 31, 2019, 2018 and 2017, respectively.

(6) Goodwill

Changes in goodwill during the years ended December 31, 2019 and 2018 are summarized below (in millions). Priorperiod amounts have been reclassified to conform to the new reportable segment presentation as discussed in Note 22.

	 lerchant olutions	Banking Solutions	Capital Market Solutions		orporate nd Other	Total
Balance, December 31, 2017	\$ 383	\$ 8,905	\$ 4,399	\$	43	\$ 13,730
Goodwill distributed through sale of businesses		(14)	(24)		(43)	(81)
Brazilian Venture impairment		(25)	_		_	(25)
Foreign currency adjustments	(5)	 (14)	(60)			 (79)
Balance, December 31, 2018	 378	8,852	4,315			13,545
Goodwill attributable to acquisitions (1)	34,657	3,414	_	-		38,071
Foreign currency adjustments	618	(3)	11			626
Balance, December 31, 2019	\$ 35,653	\$ 12,263	\$ 4,326	\$		\$ 52,242

⁽¹⁾ The amount of goodwill attributable to the Worldpay acquisition, including its allocation to reportable segments, is provisional and subject to change. See Note 3 for additional discussion.

Effective August 31, 2018, FIS sold substantially all the assets of the Certegy Check Services business unit in North America, resulting in a pre-tax loss of \$54 million, including goodwill distributed through the sale of business of \$43 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(7) Intangible Assets

Intangible assets as of December 31, 2019 consist of the following (in millions):

	Cost Accumulated Amortization			Net
Customer relationships and other	\$ 18,018	\$	(2,681) \$	15,337
Finite-lived trademarks	503		(85)	418
Indefinite-lived trademarks	43		<u> </u>	43
Total Intangible assets, net	\$ 18,564	\$	(2,766) \$	15,798

Intangible assets as of December 31, 2018 consist of the following (in millions):

	 Cost Accumulated Amortization			Net
Customer relationships and other	\$ 6,011	\$	(2,944) \$	3,067
Finite-lived trademarks	68		(46)	22
Indefinite-lived trademarks	 43		<u> </u>	43
Total Intangible assets, net	\$ 6,122	\$	(2,990) \$	3,132

Amortization expense for intangible assets with finite lives, including the contract intangible in our Brazilian Venture, which was amortized as a reduction of revenue until impaired during the third quarter of 2018 (see Note 19), was \$1,444 million, \$659 million and \$670 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Estimated amortization of intangible assets for the next five years is as follows (in millions):

2020	\$ 2,382
2021	2,308
2022	2,155
2023	1,967
2024	1,773

(8) Software

Software as of December 31, 2019 and 2018 consists of the following (in millions):

	 2019		2018
Software from acquisitions	\$ 1,959	\$	1,116
Capitalized software development costs	2,258		1,624
Purchased software	 603		363
	 4,820		3,103
Accumulated amortization	 (1,616)		(1,308)
Total Software, net	\$ 3,204	\$	1,795

During the year ended December 31, 2019, the Company recorded pre-tax asset impairments of \$87 million, primarily related to certain software resulting from the Company's net realizable value analysis.

Amortization expense for software was \$616 million, \$468 million and \$436 million for the years ended December 31, 2019, 2018 and 2017, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(9) Deferred Contract Costs

Origination and fulfillment costs from contracts with customers capitalized as of December 31, 2019 and 2018 consists of the following (in millions):

	2	2019		2019		018
Contract costs on implementations in progress	\$	138	\$	93		
Contract origination costs on completed implementations, net		352		219		
Contract fulfillment costs on completed implementations, net		177		163		
Total Deferred contract costs, net	\$	667	\$	475		

For the years ended December 31, 2019, 2018 and 2017, amortization of deferred contract costs on completed implementations was \$184 million, \$123 million and \$102 million.

(10) Accounts Payable, Accrued and Other Liabilities

Accounts payable, accrued and other liabilities as of December 31, 2019 and 2018 consists of the following (in millions):

	2019	2018	
Salaries and incentives	\$ 414	\$ 218	
Accrued benefits and payroll taxes	116	66	
Trade accounts payable and other accrued liabilities	1,386	687	
Accrued interest payable	109	71	
Taxes other than income tax	220	57	
Operating lease liabilities	129	_	
Total Accounts payable, accrued and other liabilities	\$ 2,374	\$ 1,099	

(11) Other Noncurrent Assets and Liabilities

Other noncurrent assets as of December 31, 2019 and 2018 consists of the following (in millions):

	 2019	2018
Visa Europe and contingent value rights ("CVR") related assets	\$ 940	\$ —
Operating lease ROU assets (1)	564	
Other noncurrent assets	 799	503
Total Other noncurrent assets	\$ 2,303	\$ 503

Other noncurrent liabilities as of December 31, 2019 and 2018 consists of the following (in millions):

	 2019	2018
CVR liability	\$ 838	\$ _
Tax Receivable Agreement liability (2)	532	
Operating lease liabilities (1)	466	_
Other noncurrent liabilities	 570	326
Total Other noncurrent liabilities	\$ 2,406	\$ 326

- (1) See Note 14, Operating Leases
- (2) See Note 16, Commitments and Contingencies

Visa Europe and Contingent Value Rights

As part of the Worldpay acquisition, the Company acquired certain assets and liabilities related to the June 2016 Worldpay Group plc ("Legacy Worldpay") disposal of its ownership interest in Visa Europe to Visa Inc. As part of the disposal, Legacy Worldpay received consideration from Visa Inc. in the form of cash and convertible Visa Inc. Series B preferred stock ("preferred stock"), the value of which may be reduced by settlement of potential liabilities relating to ongoing interchange-related litigation involving Visa Europe. Also in connection with the disposal, Legacy Worldpay agreed to pay former Legacy Worldpay owners 90% of the net-of-tax proceeds from the disposal, known as contingent value rights ("CVR"), pending the finalization of the proceeds from disposal, which is expected to occur no later than June 2028, at which time the preferred stock is subject to mandatory conversion into Visa Inc. Class A common stock.

The Company has elected the fair value option under ASC 825, *Financial Instruments* ("ASC 825"), for measuring its preferred stock asset and related CVR liability. The estimated fair value of the preferred stock and related CVR liability are determined using Level 3-type measurements. Significant inputs into the valuation of the preferred stock include the Visa Inc. Class A common stock price per share and the conversion ratio, which are observable, and an estimate of potential losses that will result from the ongoing litigation involving Visa Europe, which is unobservable. The Company engaged third-party valuation specialists and external counsel to assist management in making the fair value determination for the preferred stock. The fair value of the preferred stock is \$400 million at December 31, 2019, recorded in Other noncurrent assets on the Consolidated Balance Sheet.

The fair value of the CVR liability is determined based on 90% of the net-of-tax proceeds from the disposal, including the preferred stock and the cash consideration. The portion of the cash consideration that is payable as part of the CVR liability is segregated pursuant to contractual provisions and reflected as restricted cash in the amount of \$540 million at December 31, 2019 (see Note 2(b)) and is recorded in Other noncurrent assets on the Consolidated Balance Sheet. The fair value of the CVR liability is \$838 million at December 31, 2019, recorded in Other noncurrent liabilities on the Consolidated Balance Sheet. Pursuant to ASC 825, the Company remeasures the fair value of the preferred stock and related CVR liability each reporting period after the initial recognition at fair value as of the Worldpay acquisition date. The net change in fair value was \$5 million for the year ended December 31, 2019, recorded in Other income (expense), net on the Consolidated Statement of Earnings.

(12) **Debt**

Long-term debt as of December 31, 2019 and 2018 consists of the following (in millions):

December 31, 2019 Weighted Average Interest Interest December 31, 2018 Maturities Fixed Rate Notes Senior USD Notes 3.00% - 5.00% 3.83% 2023 - 2048 \$ 4,938 \$ 6,950 0.13% - 2.95% Senior Euro Notes 1.06% 2021 - 2039 8,694 1,144 Senior GBP Notes 1.70% - 3.36% 2.65% 2022 - 2031 2,440 382 Senior Euro Floating Rate Notes 0.00% 2021 561 Revolving Credit Facility (1) 2.80% 2023 600 208 Other 136 34 17,369 8,718 Total long-term debt, including current portion Current portion of long-term debt (140)(48)17,229 \$ 8,670 Long-term debt, excluding current portion

⁽¹⁾ Interest on the Revolving Credit Facility is generally payable at LIBOR plus an applicable margin of up to 1.625% plus an unused commitment fee of up to 0.225%, each based upon the Company's corporate credit ratings. The weighted average interest rate on the Revolving Credit Facility excludes fees.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Short-term borrowings as of December 31, 2019 and 2018, consists of the following (in millions):

	Deceml	ber 31, 2019			
	Weighted Average				
	Interest		 Decen	iber 3	1,
	Rate	Maturities	 2019		2018
Euro-commercial paper notes ("ECP Notes")	(0.21)%	Up to 183 days	\$ 2,523	\$	_
U.S. commercial paper notes ("USCP Notes")	2.05 %	Up to 397 days	200		250
Other			100		17
Total Short-term borrowings			\$ 2,823	\$	267

As of December 31, 2019, the weighted average interest rate of the Company's outstanding debt was 1.66%, including the impact of interest rate swaps (see Note 13).

The obligations of FIS under the Revolving Credit Facility, ECP Notes and USCP Notes, and all of its outstanding senior notes rank equal in priority and are unsecured.

During March 2019, concurrent with the execution of the Worldpay merger agreement (see Note 3), we secured \$9.5 billion of bridge financing commitments to ensure our ability to fund the cash requirements related to the Worldpay transaction. The bridge financing commitments were terminated in full in May 2019 following the (a) amendment of the Restated Credit Agreement to modify certain provisions and covenants of the Revolving Credit Facility and (b) the issuance of the senior notes discussed below.

The following summarizes the aggregate maturities of our long-term debt, including other financing obligations for certain hardware and software, based on stated contractual maturities, excluding the fair value of the interest rate swap discussed below and net unamortized non-cash bond premiums and discounts of \$36 million as of December 31, 2019 (in millions):

	 Total
2020	\$ 140
2021	1,743
2022	1,556
2023	2,729
2024	979
Thereafter	 10,369
Total principal payments	 17,516
Debt issuance costs, net of accumulated amortization	 (111)
Total long-term debt	\$ 17,405

There are no mandatory principal payments on the Revolving Credit Facility and any balance outstanding on the Revolving Credit Facility will be due and payable at its scheduled maturity date, which occurs at September 21, 2023.

Senior Notes

In December 2019, pursuant to cash tender offers (the "Any and All Tender Offer" and the "Maximum Tender Offer") FIS purchased certain Senior USD Notes. Under the Any and All Tender Offer, FIS purchased Senior USD Notes with an aggregate principal amount of \$1,342 million, interest rates ranging from 2.25% to 4.50% and maturities ranging from 2020 to 2022 (the

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

"Any and All Notes"). FIS called for redemption all of the remaining Any and All Notes that were not tendered and not accepted for purchase in the Any and All Tender Offer for the remaining aggregate principal amount of \$858 million. Under the Maximum Tender Offer, FIS purchased Senior USD Notes with an aggregate principal amount of \$812 million, interest rates ranging from 4.50% to 5.00% and maturities ranging from 2025 to 2048 (the "Maximum Tender Offer Notes"). Collectively between the Any and All Notes and the Maximum Tender Offer Notes, FIS purchased and redeemed an aggregate principal amount of \$3.0 billion in Senior USD Notes, resulting in a pre-tax charge of approximately \$217 million relating to tender premiums and fees as well as the write-off of previously capitalized debt issuance costs. The Company funded the purchase and redemption of the Any and All Notes and the Maximum Tender Offer Notes with proceeds on borrowings from the issuance and sale of Euro- and Pound Sterling-denominated senior notes on December 3, 2019.

On December 3, 2019, FIS completed the issuance and sale of senior notes, consisting of Senior Euro Notes of $\[\in \]$ 2.25 billion in aggregate principal amount with interest rates ranging from 0.13% to 1.00% and maturities ranging from 2022 to 2028 and Senior GBP Notes of £300 million in aggregate principal amount with an interest rate of 2.25% and maturity of 2029. The proceeds from the debt issuances were subsequently used to purchase and redeem the Any and All Notes and the Maximum Tender Offer Notes as noted above.

On May 21, 2019, FIS completed the issuance and sale of Euro- and Pound Sterling-denominated senior notes, consisting of Senior Euro Floating Rate Notes of €500 million with maturity of 2021, Senior Euro Notes of €4.5 billion in aggregate principal amount with interest rates ranging from 0.13% to 2.95% and maturities ranging from 2021 to 2039, Senior GBP Notes of £1.25 billion in aggregate principal amount with interest ranging from 2.60% to 3.36% and maturities ranging from 2025 to 2031 and Senior USD Notes of \$1.0 billion in aggregate principal amount with an interest rate of 3.75% and maturity of 2029. The proceeds of the debt issuances were subsequently used to pay the cash portion of the purchase price and certain of the costs and expenses of the Worldpay transaction and to repay the outstanding Worldpay bank debt and notes.

On July 25, 2017, pursuant to cash tender offers, FIS repurchased approximately \$2.0 billion in aggregate principal amount of Senior USD Notes with a weighted average coupon of approximately 4.0% and maturities ranging from 2020 to 2025. The Company funded the cash tender offers with proceeds from a European bond offering and borrowings on its Revolving Credit Facility, approximately \$469 million of which were almost immediately repaid with proceeds from the sale of a majority ownership stake in the Capco consulting business and risk and compliance consulting business, which was completed on July 31, 2017 (see Note 19). FIS paid approximately \$150 million in tender premiums to purchase the notes and incurred a pre-tax charge upon extinguishment of approximately \$171 million, in tender premiums, the write-off of previously capitalized debt issuance costs and other direct costs.

On March 15, 2017, FIS redeemed 100% of the outstanding aggregate principal amount of its \$700 million 5.00% Senior USD Notes due 2022. On February 1, 2017, the Company also paid down the outstanding balance on its syndicated term loan agreement due 2018 ("Term Loans"). The redemption of the USD Senior Notes and the repayment of the Term Loans were funded by borrowings under the Revolving Credit Facility and cash proceeds from the sale of the PS&E business (see Note 19). As a result of the redemption of the USD Senior Notes and the repayment of the Term Loans, FIS incurred a pre-tax charge of approximately \$25 million consisting of the call premium on the USD Senior Notes and the write-off of previously capitalized debt issuance costs.

FIS may redeem the Senior USD Notes, Senior Euro Notes and Senior GBP Notes (collectively, the "Senior Notes") at its option in whole or in part, at any time and from time to time, at a redemption price equal to the greater of 100% of the principal amount to be redeemed and a make-whole amount calculated as described in the related indenture in each case plus accrued and unpaid interest to, but excluding, the date of redemption, provided no make-whole amount will be paid for redemptions of the Senior Notes during the period described in the related indenture (ranging from one to six months) prior to their maturity.

The Senior Notes are subject to customary covenants, including, among others, customary events of default.

Commercial Paper

On May 29, 2019, FIS established a Euro-commercial paper ("ECP") program for the issuance and sale of senior, unsecured commercial paper notes, up to a maximum aggregate amount outstanding at any time of \$4.7 billion (or its equivalent in other currencies). The incremental borrowings under the ECP program were used to pay for certain of the costs and expenses of the Worldpay transaction. The ECP program is also expected to be used for general corporate purposes.

On September 21, 2018, FIS established a U.S. commercial paper ("USCP") program for the issuance and sale of senior, unsecured commercial paper notes, up to a maximum aggregate amount outstanding at any time of \$4.0 billion. On May 29, 2019, FIS increased the capacity on the USCP program to \$5.5 billion. The USCP program has been and is expected to be used for general corporate purposes.

Revolving Credit Facility

On September 21, 2018, FIS entered into a Seventh Amendment and Restatement Agreement ("Credit Facility Agreement"), which amended and restated FIS' existing credit agreement (as amended, the "Restated Credit Agreement"). The Credit Facility Agreement increased the revolving credit commitments outstanding under the Revolving Credit Facility ("Revolving Credit Facility") existing under the Restated Credit Agreement from \$3.0 billion to \$4.0 billion and extended the term of the Restated Credit Agreement to September 21, 2023. On May 29, 2019, FIS entered into an amendment to the Restated Credit Agreement to increase the revolving credit commitments outstanding under the Revolving Credit Facility from \$4.0 billion to \$5.5 billion. Borrowing under the Revolving Credit Facility will generally be used for general corporate purposes, including backstopping any notes that FIS may issue under the USCP and ECP programs described above. As of December 31, 2019, the outstanding principal balance of the Revolving Credit Facility was \$600 million, with \$4,897 million of borrowing capacity remaining thereunder (net of \$3 million in outstanding letters of credit issued under the Revolving Credit Facility).

The Revolving Credit Facility is subject to customary covenants, including, among others, customary events of default, a provision allowing for financing related to the acquisition of Worldpay and limitations on the payment of dividends by FIS.

We monitor the financial stability of our counterparties on an ongoing basis. The lender commitments under the undrawn portions of the Revolving Credit Facility are comprised of a diversified set of financial institutions, both domestic and international. The failure of any single lender to perform its obligations under the Revolving Credit Facility would not adversely impact our ability to fund operations.

Fair Value of Debt

The fair value of the Company's long-term debt is estimated to be approximately \$900 million and \$140 million higher than the carrying value, excluding the fair value of the interest rate swap and unamortized discounts, as of December 31, 2019 and 2018, respectively.

(13) Financial Instruments

Forward Contracts

During the second quarter of 2019, the Company entered into foreign currency forward contracts to reduce the volatility in the Company's cash flows due to foreign exchange rate fluctuations during the period leading up to the Company's Euro- and Pound Sterling-denominated debt issuances related to the Worldpay transaction (see Note 12 for further discussion of these debt issuances). These forward contracts were settled on July 31, 2019, resulting in a net pre-tax loss of \$14 million during the year ended December 31, 2019. As of December 31, 2019 and 2018, the Company had no significant forward contracts outstanding.

Cash Flow Hedges

During the second quarter of 2019, the Company entered into treasury lock and forward-starting interest rate swap contracts with total notional amounts of €1,500 million, £500 million, and \$500 million to reduce the volatility in the Company's cash flows due to changes in the benchmark interest rates during the period leading up to the Company's fixed-rate debt issuances related to the Worldpay transaction (see Note 12 for further discussion of these debt issuances). The Company designated these derivatives as cash flow hedges for accounting purposes. During May 2019, in conjunction with the debt issuances, the Company terminated these contracts for an aggregate cash settlement payment of \$17 million, which was recorded as a component of Other comprehensive earnings (loss) on the Consolidated Statement of Comprehensive Earnings.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The amounts in Other comprehensive earnings (loss) are reclassified as an adjustment to interest expense on the Consolidated Statement of Earnings over the respective periods during which the related hedged interest payments are recognized in income, which range from four to 12 years. Settlement cash flows related to these contracts were recorded as Other financing activities, net on the Consolidated Statement of Cash Flows.

The amount of gain (loss) recognized in Other comprehensive earnings (loss) related to cash flow hedges was \$(17) million, \$0 million and \$0 million during the years ended December 31, 2019, 2018 and 2017, respectively. The amount of gain (loss) reclassified from Other comprehensive earnings into income was \$(2) million, \$(1) million and \$(1) million during the years ended December 31, 2019, 2018 and 2017, respectively. As of December 31, 2019 and 2018, the Company had no outstanding cash flow hedge contracts.

Fair Value Hedge

During the fourth quarter of 2018, the Company entered into an interest rate swap with a €500 million notional value converting the interest rate exposure on the Company's Senior Euro Notes due 2024 from fixed to variable. We designated this interest rate swap as a fair value hedge for accounting purposes. The fair value of the interest rate swap was a \$10 million asset and \$(1) million liability at December 31, 2019 and 2018, respectively, reflected as an increase (decrease) in the hedged debt balance.

Net Investment Hedges

The purpose of the Company's net investment hedges, as discussed below, is to reduce the volatility of FIS' net investment value in its Euro- and Pound Sterling- denominated operations due to changes in foreign currency exchange rates.

The Company recorded net investment hedge aggregate gain (loss), net of tax, for the change in fair value as Foreign currency translation adjustments, within Other comprehensive earnings (loss) on the Consolidated Statements of Comprehensive Earnings of \$(229) million, \$59 million and \$(63) million, during the years ended December 31, 2019, 2018 and 2017. No ineffectiveness was recorded on the net investment hedges.

Foreign Currency Denominated Debt Designations

During 2019, in conjunction with the closing of the Worldpay acquisition in the third quarter and in conjunction with the foreign currency denominated debt issuances in the fourth quarter, the Company designated certain foreign currency denominated debt as net investment hedges of its investment in Euro- and Pound Sterling-denominated operations. This is in addition to the Company's designation during the third quarter of 2017 of its foreign currency denominated debt outstanding. As of December 31, 2019, an aggregate €10,509 million was designated as a net investment hedge of the Company's investment in Euro-denominated operations related to the Senior Euro Floating Rate Notes, Senior Euro Notes with maturities ranging from 2021 to 2039 and ECP Notes, and an aggregate £864 million was designated as a net investment hedge of the Company's Pound Sterling-denominated operations related to the Senior GBP Notes with maturities ranging from 2022 to 2031.

Cross-Currency Interest Rate Swap Designations

During the fourth quarters of 2019 and 2018, the Company entered into cross-currency interest rate swaps that were designated as net investment hedges of its investment in Euro- and Pound Sterling- denominated operations. As of December 31, 2019, an aggregate notional amount of €2,006 million was designated as a net investment hedge of the Company's investment in Euro-denominated operations and an aggregate notional amount of £1,536 million was designated as

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

a net investment hedge of the Company's Pound Sterling-denominated operations. The fair value of the cross-currency interest rate swaps was a net \$(167) million liability and \$2 million asset at December 31, 2019 and 2018, respectively.

(14) Operating Leases

The classification of the Company's operating lease ROU assets and liabilities in the Consolidated Balance Sheet as of December 31, 2019 is as follows (in millions):

	Classification	Decemb	oer 31, 2019
Operating lease ROU assets	Other noncurrent assets	\$	564
Operating lease liabilities	Accounts payable, accrued and other liabilities	\$	129
	Other noncurrent liabilities		466
Total operating lease liabilities		\$	595

Operating lease cost was \$145 million and variable lease cost was \$34 million for the year ended December 31, 2019. Cash paid for amounts included in the measurement of operating lease liabilities included in operating cash flows was \$139 million for the year ended December 31, 2019. Operating lease ROU assets obtained in exchange for operating lease liabilities was \$112 million for the year ended December 31, 2019. The weighted average remaining operating lease term was 5.9 years, and the weighted average operating lease discount rate was 3.7% as of December 31, 2019.

Maturities of operating lease liabilities, as of December 31, 2019 are as follows (in millions):

2020	\$ 151
2021	135
2022	104
2023	77
2024	59
Thereafter	 138
Total lease payments	664
Less: Imputed interest	 (69)
Total operating lease liabilities	\$ 595

Aggregate future minimum operating lease payments for each of the years in the five years ending December 31, 2023, and thereafter, as of December 31, 2018 consists of the following (in millions):

2019	\$ 121
2020	104
2021	80
2022	51
2023	38
Thereafter	 86
Total	\$ 480

(15) Income Taxes

Income tax expense (benefit) attributable to continuing operations for the years ended December 31, 2019, 2018 and 2017 consists of the following (in millions):

	 2019	2018	 2017
Current provision:			
Federal	\$ 53	\$ 169	\$ 476
State	46	50	81
Foreign	116	 105	127
Total current provision	\$ 215	\$ 324	\$ 684
Deferred provision (benefit):			
Federal	\$ (47)	\$ (95)	\$ (979)
State	7	(11)	(24)
Foreign	(75)	 (10)	 (2)
Total deferred provision (benefit)	(115)	(116)	(1,005)
Total Provision (benefit) for income taxes	\$ 100	\$ 208	\$ (321)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The provision for income taxes is based on pre-tax income from continuing operations, which is as follows for the years ended December 31, 2019, 2018 and 2017 (in millions):

	 2019	 2018	 2017
United States	\$ 220	\$ 744	\$ 530
Foreign	 193	360	446
Total	\$ 413	\$ 1,104	\$ 976

Total income tax expense for the years ended December 31, 2019, 2018 and 2017 is allocated as follows (in millions):

	 2019	 2018	 2017
Tax expense (benefit) per statement of earnings	\$ 100	\$ 208	\$ (321)
Tax expense (benefit) attributable to discontinued operations	 	(1)	
Unrealized (loss) gain on foreign currency translation	240		_
Unrealized gain (loss) on interest rate swaps	(41)	_	_
Other components of other comprehensive earnings (loss)	(3)	 1	(11)
Total income tax expense (benefit) allocated to other comprehensive income	196	1	(11)
Total income tax expense (benefit)	\$ 296	\$ 208	\$ (332)

A reconciliation of the federal statutory income tax rate to the Company's effective income tax rate for the years ended December 31, 2019, 2018 and 2017 is as follows:

	2019	2018	2017
Federal statutory income tax rate	21.0%	21.0%	35.0 %
State income taxes	2.5	3.0	2.4
Federal benefit of state taxes	(0.5)	(0.6)	(0.8)
Foreign rate differential	(1.7)		(5.1)
Non-deductible executive compensation	10.6		_
Tax benefit from stock-based compensation	(8.1)	(5.2)	(6.7)
State tax rate adjustment	5.1		_
Foreign-derived intangible income deduction	(3.3)	(1.8)	_
Research and development credit	(2.4)	(0.9)	(0.9)
Unrecognized tax benefits	(1.4)	(0.3)	
Book basis in excess of tax basis for dispositions	_	3.0	18.5
Tax Cuts and Jobs Act of 2017	_	_	(73.1)
Other	2.4	0.6	(2.2)
Effective income tax rate	24.2%	18.8%	(32.9)%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The significant components of deferred income tax assets and liabilities as of December 31, 2019 and 2018 consist of the following (in millions):

	2019	2018
Deferred income tax assets:		
Net operating loss carryforwards	\$ 177 \$	108
Employee benefit accruals	177	58
Other deferred tax assets	 142	105
Total gross deferred income tax assets	496	271
Less valuation allowance	 (178)	(116)
Total deferred income tax assets	318	155
Deferred income tax liabilities:		
Amortization of goodwill and intangible assets	(4,123)	(1,291)
Foreign currency translation adjustment	(208)	_
Deferred contract costs	(125)	(109)
Other deferred tax liabilities	 (105)	(83)
Total deferred income tax liabilities	 (4,561)	(1,483)
Net deferred income tax liability	\$ (4,243) \$	(1,328)

Deferred income taxes are classified in the Consolidated Balance Sheets as of December 31, 2019 and 2018 as follows (in millions):

	2019	2018
Noncurrent assets (included in Other noncurrent assets)	\$ 3	8 \$ 32
Total deferred income tax assets	3	8 32
Noncurrent liabilities	(4,28	1) (1,360)
Total deferred income tax liabilities	(4,28	1) (1,360)
Net deferred income tax liability	\$ (4,24)	3) \$ (1,328)

We believe that based on our historical pattern of taxable income, projections of future income, tax planning strategies and other relevant evidence, the Company will produce sufficient income in the future to realize its deferred income tax assets. A valuation allowance is established for any portion of a deferred income tax asset for which we believe it is more likely than not that the Company will not be able to realize the benefits of all or a portion of that deferred income tax asset. We also receive periodic assessments from taxing authorities challenging our positions that must be taken into consideration in determining our tax accruals. Resolving these assessments, which may or may not result in additional taxes due, may require an extended period of time. Adjustments to the valuation allowance will be made if there is a change in our assessment of the amount of deferred income tax asset that is realizable.

As of December 31, 2019 and 2018, the Company had net income taxes receivable of \$174 million and \$30 million, respectively. These amounts are included in Other receivables and Accounts payable, accrued and other liabilities as of December 31, 2019 and 2018, in the Consolidated Balance Sheets.

As of December 31, 2019 and 2018, the Company has federal, state and foreign net operating loss carryforwards resulting in deferred tax assets of \$177 million and \$108 million, respectively. The federal and state net operating losses result in deferred tax assets as of December 31, 2019 and 2018 of \$68 million and \$42 million, respectively, which expire between 2021

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

and 2039. The Company has a valuation allowance related to these deferred tax assets for net operating loss carryforwards in the amounts of \$48 million and \$36 million as of December 31, 2019 and 2018. The Company has foreign net operating loss carryforwards resulting in deferred tax assets as of December 31, 2019 and 2018 of \$110 million and \$66 million, respectively. The Company has a full valuation allowance against the foreign net operating losses as of December 31, 2019 and December 31, 2018.

The Company participates in the IRS' Compliance Assurance Process ("CAP"), which is a real-time continuous audit. The IRS has completed its review for years through 2017. Currently, we believe the ultimate resolution of the IRS examinations will not result in a material adverse effect to the Company's financial position or results of operations. Substantially all material foreign income tax return matters have been concluded through 2012. Substantially all state income tax returns have been concluded through 2012.

As of December 31, 2019 and 2018, the Company had gross unrecognized tax benefits of \$45 million and \$61 million of which \$38 million and \$52 million would favorably impact our income tax rate in the event that the unrecognized tax benefits are recognized.

The following table reconciles the gross amounts of unrecognized tax benefits at the beginning and end of the period (in millions):

	Gros	s Amount
Amounts of unrecognized tax benefits as of January 1, 2018	\$	75
Amount of decreases due to lapse of the applicable statute of limitations		(4)
Amount of decreases due to settlements		(12)
Increases as a result of tax positions taken in the current period		1
Increases as a result of tax positions taken in a prior period		1
Amount of unrecognized tax benefit as of December 31, 2018		61
Amount of decreases due to lapse of the applicable statute of limitations		(5)
Amount of decreases due to settlements		(17)
Increases as a result of tax positions taken in the current period		1
Assumed in Worldpay acquisition		5
Amount of unrecognized tax benefit as of December 31, 2019	\$	45

The total amount of interest expense recognized in the Consolidated Statements of Earnings for unpaid taxes is \$3 million, \$4 million and \$5 million for the years ended December 31, 2019, 2018 and 2017, respectively. The total amount of interest and penalties included in the Consolidated Balance Sheets is \$19 million and \$24 million as of December 31, 2019 and 2018, respectively. Interest and penalties are recorded as a component of income tax expense in the Consolidated Statements of Earnings.

Due to the expiration of various statutes of limitation in the next 12 months, an estimated \$1 million of gross unrecognized tax benefits may be recognized during that 12-month period.

On December 22, 2017, H.R. 1, originally known as the Tax Cuts and Jobs Act (the "Act") was signed into law. The Act included significant changes to the Internal Revenue Code. Changes impacting the Company were the decrease in the corporate Federal rate from 35% to 21%, the transition to a territorial system of taxation from a worldwide system, and a one-time tax on the deemed repatriation of cumulative foreign earnings and profits. In 2017, the Company recorded amounts for certain enactment-date effects of the Act by applying the guidance in SEC Staff Accounting Bulletin No. 118 ("SAB 118").

Due to 2017 tax reform, the Company provided for U.S. income tax on its deemed repatriation of accumulated foreign earnings. Those historic earnings are indefinitely reinvested offshore, however, those undistributed earnings could still be subject to additional income tax if repatriated. It is not practicable to determine the unrecognized deferred tax liability on a hypothetical distribution of those earnings.

(16) Commitments and Contingencies

Reliance Trust Claims

Reliance Trust Company ("Reliance"), the Company's subsidiary, is named as a defendant in a class action arising out of its provision of services as the discretionary trustee for a 401(k) Plan (the "Plan") for one of its customers. Plaintiffs in the action filed in 2015 seek damages and attorneys' fees, as well as equitable relief, on behalf of Plan participants for alleged breaches of fiduciary duty under the Employee Retirement Income Security Act of 1974 against Reliance and the Plan's sponsor and record-keeper. Reliance is vigorously defending the action and believes it has meritorious defenses. Pre-trial discovery has been completed and the matter has been set for trial. Reliance contends that no breaches of fiduciary duty or prohibited transactions occurred and that the Plan suffered no damages. Plaintiffs allege damages of approximately \$115 million against all defendants. While we are unable at this time to estimate more precisely the potential loss or range of loss because of unresolved questions of fact and law, we believe that the ultimate resolution of the matter will not have a material impact on our financial condition. We do not believe a liability for this action is probable and, therefore, have not recorded a liability for this action.

Brazilian Tax Authorities Claims

In 2004, Proservvi Empreendimentos e Servicos, Ltda., the predecessor to Fidelity National Servicos de Tratamento de Documentos e Informatica Ltda. ("Servicos"), a subsidiary of Fidelity National Participacoes Ltda., our former item processing and remittance services operation in Brazil, acquired certain assets and employees and leased certain facilities from the Transpev Group ("Transpev") in Brazil. Transpev's remaining assets were later acquired by Prosegur, an unrelated third party. When Transpev discontinued its operations after the asset sale to Prosegur, it had unpaid federal taxes and social contributions owing to the Brazilian tax authorities. The Brazilian tax authorities brought a claim against Transpev and beginning in 2012, brought claims against Prosegur and Servicos on the grounds that Prosegur and Servicos were successors in interest to Transpev. To date, the Brazilian tax authorities filed 13 claims against Servicos asserting potential tax liabilities of approximately \$14 million. There are potentially 25 additional claims against Transpev/Prosegur for which Servicos is named as a co-defendant or may be named but for which Servicos has not yet been served. These additional claims amount to approximately \$50 million, making the total potential exposure for all 38 claims approximately \$64 million. We do not believe a liability for these 38 total claims is probable and, therefore, have not recorded a liability for any of these claims.

Acquired Contingencies - Worldpay

The Company assumed in the Worldpay acquisition a Tax Receivable Agreement ("TRA") under which the Company agreed to make payments to Fifth Third Bank ("Fifth Third") of 85% of the federal, state, local and foreign income tax benefits realized by the Company as a result of certain tax deductions. In December 2019, the Company entered into a Tax Receivable Purchase Addendum (the "Amendment") that provides written call and put options (collectively "the options") to terminate certain estimated obligations under the TRA in exchange for fixed cash payments.

The remaining obligations under the TRA not subject to the Amendment or for which the options are not exercised are based on the cash savings realized by the Company by comparing the actual income tax liability of the Company to the amount

of such taxes the Company would have been required to pay had there been no deductions related to the tax attributes. Under the TRA, in certain specified circumstances, such as certain changes of control, the Company may be required to make payments in excess of such cash savings.

Concurrent with the Amendment, the Company and Fifth Third entered into a Mutual Release Agreement, in which Fifth Third waived its claim that the acquisition of Worldpay by the Company triggered provisions in the TRA that would remove the contingency that adequate taxable income be earned to realize tax savings. As a consequence, Fifth Third also dismissed its related declaratory judgment action.

Obligations recorded in our financial statements pursuant to the TRA are based on estimates of future deductions and future tax rates. The timing and/or amount of aggregate payments due under the TRA may vary based on a number of factors, including the exercise of options, the amount and timing of taxable income the Company generates in the future and the tax rate then applicable, the use of loss carryforwards and amortizable basis. Each reporting period, the Company evaluates the assumptions underlying the TRA obligations. Based on an evaluation by the Company of the Amendment, the provisional TRA obligations recorded as of the Worldpay acquisition were adjusted through purchase accounting to reflect management's expectation that the options will be exercised. In addition, in January 2020, the Company exercised its first call option pursuant to the Amendment, which will result in fixed cash payments to Fifth Third under the TRA of \$42 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The Consolidated Balance Sheet as of December 31, 2019 includes a total liability of \$564 million relating to the TRA. The following table summarizes our estimated payment obligation timing under the TRA as of December 31, 2019 (in millions):

							ıts I	Oue in				
Type of Obligation		Total	I	Less than 1 year		1-3 Years		3-5 Years		ore than 5 Years		
Obligations under TRA	\$	564	\$	32	\$	267	\$	252	\$	13		

Indemnifications and Warranties

The Company generally indemnifies its clients, subject to certain limitations and exceptions, against damages and costs resulting from claims of patent, copyright, or trademark infringement associated solely with its customers' use of the Company's software applications or services. Historically, the Company has not made any material payments under such indemnifications, but continues to monitor the conditions that are subject to the indemnifications to identify whether it is probable that a loss has occurred, and would recognize any such losses when they are estimable. In addition, the Company warrants to customers that its software operates substantially in accordance with the software specifications. Historically, no material costs have been incurred related to software warranties and no accruals for warranty costs have been made.

Purchase Commitments

The Company has agreements with various vendors, generally with one- to five-year-remaining terms, principally for software, maintenance support, telecommunication and network services. Additionally, we have agreements with third-party processors to provide gateway authorization and other processing services. The Company's estimated aggregate contractual obligation remaining under these agreements is approximately \$807 million as of December 31, 2019. However, this amount could be more or less depending on various factors such as the inflation rate, foreign exchange rates, the introduction of significant new technologies, or changes in the Company's processing needs. The foregoing amounts do not include obligations of the Company under operating leases.

(17) Employee Benefit Plans

Stock Purchase Plan

FIS employees participate in an Employee Stock Purchase Plan ("ESPP"). Eligible employees may voluntarily purchase, at current market prices, shares of FIS' common stock through payroll deductions. Pursuant to the ESPP, employees may contribute an amount between 3% and 15% of their base salary and certain commissions. Shares purchased are allocated to employees based upon their contributions. The Company contributes a matching amount as specified in the ESPP of 25% of the employee's contribution. The Company recorded expense of \$15 million, \$14 million, and \$14 million, respectively, for the years ended December 31, 2019, 2018 and 2017, relating to the participation of FIS employees in the ESPP.

401(k) Profit Sharing Plans

The Company's U.S. employees are covered by a qualified 401(k) plan. Eligible employees may contribute up to 40% of their pre-tax annual compensation, up to the amount allowed pursuant to the Internal Revenue Code. The Company generally matches 50% of each dollar of employee contribution up to 6% of the employee's total eligible compensation. The Company recorded expense of \$91 million, \$82 million and \$80 million, respectively, for the years ended December 31, 2019, 2018 and 2017, relating to the participation of FIS employees in the 401(k) plan.

Stock Compensation Plans

In 2008, the Company adopted the FIS 2008 Omnibus Incentive Plan ("FIS Plan"). In May 2013, the FIS Plan was combined with a plan assumed in conjunction with the 2009 Metavante acquisition ("FIS Restated Plan"). The restatement authorized an additional 6 million shares for issuances, which was approved by stockholders in 2013. In May 2015, another 12 million shares were authorized for issuance under the FIS Restated Plan and approved by stockholders.

On November 30, 2015, in conjunction with the SunGard acquisition, the Company registered an additional 10 million shares, representing the remaining shares available for issuance under the SunGard 2005 Management Incentive Plan ("the SG Plan"), as amended immediately prior to the consummation of the SunGard acquisition. These shares are available for grant under the FIS Restated Plan for legacy SunGard employees and FIS employees hired after the SunGard acquisition.

On July 31, 2019, in conjunction with the Worldpay acquisition, the Company registered an additional 24 million shares, representing the remaining shares available for issuance under the Worldpay Inc. 2012 Equity Incentive Plan ("Worldpay Plan"), as amended immediately prior to the consummation of the Worldpay acquisition. These shares are available for grant under the FIS Restated Plan for legacy Worldpay employees and FIS employees hired after the Worldpay acquisition.

Also on July 31, 2019, in conjunction with the Worldpay acquisition, the Company registered up to 7 million shares of FIS common stock on a Post-Effective Amendment on Form S-8, reserved for issuance with respect to converted outstanding awards issued under the Worldpay Plan to individuals employed by Worldpay at the effective time of the merger.

During 2019, in conjunction with the Worldpay acquisition, the Company converted outstanding Worldpay equity awards into corresponding FIS equity awards, pursuant to the terms of the merger agreement. The converted equity awards are subject to time-based vesting criteria and include change in control provisions allowing for acceleration of unvested awards in the event of termination of employment without cause or for good reason. See Note 3 for additional information about the Worldpay equity awards conversion.

Stock options granted under the FIS Restated Plan for the years ended December 31, 2019, 2018 and 2017 are subject to time-based vesting criteria. Restricted stock shares granted under the FIS Restated Plan for the year ended December 31, 2019, are subject to time-based vesting criteria as well as performance and/or market conditions for certain grants. The grants with performance and market conditions are subject to the achievement of certain financial performance measures. Participants have the right to earn 0% to 300% of the target number of shares of the Company's common stock, determined by the level of the financial performance measures achieved during the performance period. The restricted stock shares granted under the FIS Restated Plan for the year ended December 31, 2018, are subject to time-based vesting criteria as well as market conditions for certain grants. Restricted stock shares granted under the FIS Restated Plan for the year ended December 31, 2017, are subject to time-based vesting as well as performance conditions for certain grants.

The number of shares available for future grants under the FIS Restated Plan was 36 million as of December 31, 2019.

Stock Options

The Company grants stock options to certain key employees, which typically vest annually over three years. All stock options are non-qualified stock options and the stock options granted by the Company expire on the seventh anniversary of the grant date and the stock options converted through the Worldpay acquisition expire on the tenth anniversary of the grant date.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table summarizes stock option activity for the year ended December 31, 2019 (in millions except for per share amounts):

XX7-1-1-4-3

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Vears)	gregate nsic Value
Balance, December 31, 2018	10	70.03	4.1	\$ 337
Options converted through the Worldpay acquisition	3	63.40		
Granted	1	113.48		
Exercised	(3)	56.26		\$ 189
Cancelled		89.07		
Balance, December 31, 2019	11	\$ 76.01	4.4	\$ 745
Options exercisable at December 31, 2019	8	\$ 66.13	3.4	\$ 554

The intrinsic value of options exercised during the years ended December 31, 2019, 2018 and 2017 was \$189 million, \$257 million and \$196 million, respectively. The intrinsic value of the outstanding options and options exercisable is based on a closing stock price as of December 31, 2019 of \$139.09. The Company issues authorized but unissued shares or share from treasury stock to settle stock options exercised.

The number of options granted for the years ended December 31, 2019, 2018 and 2017 was 1 million, 1 million and 4 million, respectively. The weighted average exercise price was \$113.48, \$96.49 and \$80.05 for the years ended December 31, 2019, 2018 and 2017, respectively.

The weighted average fair value of options granted during the years ended December 31, 2019, 2018 and 2017 was \$19.25, \$16.07 and \$12.78, respectively, using the Black-Scholes option pricing model with the assumptions below:

	2019	2018	2017
Risk free interest rate	2.2%	2.5%	1.8%
Volatility	20.1%	19.2%	20.1%
Dividend yield	1.2%	1.3%	1.4%
Weighted average expected life (years)	4.1	4.2	4.2

The options converted through the Worldpay acquisition had a weighted average fair value of \$71.05, a weighted average risk free interest rate of 1.9%, a weighted volatility of 18.6%, a weighted average dividend yield of 1.0% and a weighted average expected life of 3.9 years.

The Company estimates future forfeitures at the time of grant and revises those estimates in subsequent periods if actual forfeitures differ significantly from those estimates. The Company bases the risk-free interest rate that is used in the Black-Scholes model on U.S. Treasury securities issued with maturities similar to the expected term of the options. The expected stock volatility factor is determined using historical daily price of the option and the impact of any expected trends. The dividend yield assumption is based on the current dividend yield at the grant date or management's forecasted expectations. The expected life assumption is determined by calculating the average term from the Company's historical stock option activity and considering the impact of future trends.

Restricted Stock Shares

The Company issues restricted stock shares, which typically vest annually over three years. The grant date fair value of the restricted stock shares is based on the fair market value of our common stock on the grant date. The number of restricted stock shares granted during the years ended December 31, 2019, 2018 and 2017 was 2 million, 1 million and 1 million, respectively. The weighted average grant date fair value of these awards granted during the years ended December 31, 2019, 2018 and 2017 was \$124.72, \$96.50 and \$80.12, respectively. Certain restricted stock shares granted in 2019 and 2017 are also subject to performance-based vesting criteria. Certain of the restricted stock shares granted in 2019 and 2018 are also subject to market conditions. The total fair value of restricted stock shares that vested was \$169 million, \$97 million and \$142 million in 2019, 2018 and 2017, respectively.

The following table summarizes the restricted stock shares activity for the year ended December 31, 2019 (in millions except for per share amounts):

	Quantity	hted Average Fair Value
Balance, December 31, 2018	1	\$ 87.98
Shares converted through the Worldpay acquisition	4	\$ 133.69
Granted	2	\$ 124.72
Vested	(1)	\$ 108.84
Forfeited		\$ 117.04
Balance, December 31, 2019	6	\$ 127.23

Stock Compensation Cost

The Company has provided for total stock compensation expense of \$402 million, \$84 million and \$107 million for the years ended December 31, 2019, 2018 and 2017, respectively, which is included in Selling, general, and administrative expenses in the Consolidated Statements of Earnings. Stock compensation expense recorded related to the grants with performance conditions is based on management's expected level of achievement of the financial performance measures during the performance period and is adjusted as appropriate throughout the performance period based on the shares expected to be earned at that time.

As of December 31, 2019 and 2018, the total unrecognized compensation cost related to non-vested stock awards is \$343 million and \$106 million, respectively, which is expected to be recognized in pre-tax income over a weighted average period of 1.9 years and 1.5 years, respectively.

(18) Related Party Transactions

Cardinal Holdings

On July 31, 2017, FIS closed on the sale of a majority ownership stake in its Capco consulting business and risk and compliance consulting business to Clayton, Dubilier & Rice L.P., by and through certain funds that it manages ("CD&R"). CD&R acquired a 60% interest in the entity, Cardinal Holdings, L.P. ("Cardinal"), and FIS obtained the remaining 40% interest, in each case before equity issued to management (see Note 19). Cardinal became a related party effective July 31, 2017.

Upon closing on the sale of the Capco consulting business and risk and compliance consulting business, FIS and Cardinal entered into a short-term Transition Services Agreement, whereby FIS provided various agreed-upon services to Cardinal during 2018 and 2017. FIS also provides ongoing management consulting services and other services to Cardinal. Amounts transacted through these agreements were not significant to the 2019, 2018 and 2017 periods presented.

Capco provided Banco Bradesco with consulting services. Capco revenue from Banco Bradesco through the July 31, 2017 closing are included below under Brazilian Venture revenue from Banco Bradesco.

Brazilian Venture

The Company operated the Brazilian Venture with Banco Bradesco in which FIS owned a 51% controlling interest through December 31, 2018, and provided comprehensive, fully outsourced transaction processing, call center, cardholder support and collection services to multiple card issuing clients in Brazil, including Banco Bradesco. The original accounting for the Brazilian Venture transaction resulted in the establishment of a contract intangible asset and a liability for amounts payable to the original partner banks upon final migration of their respective card portfolios and achieving targeted volumes.

FIS closed a transaction with Banco Bradesco on December 31, 2018 to unwind the Brazilian Venture pursuant to the agreement entered into September 28, 2018 (see Note 19). Banco Bradesco was a related party through December 31, 2018. During the third quarter of 2018, FIS incurred impairment charges of \$95 million related to the disposal, including impairments of its contract intangible asset, goodwill and its assets held for sale to fair value less cost to sell. The carrying value of the noncontrolling interest as of December 31, 2018 was \$0 million as a result of the transaction.

The board of directors for the Brazilian Venture declared dividends during the years ended December 31, 2018 and 2017, resulting in payments to Banco Bradesco of \$26 million and \$23 million, respectively.

The Company recorded revenue of \$332 million and \$329 million during the years ended December 31, 2018 and 2017, respectively, from Banco Bradesco. Revenue from Banco Bradesco included \$46 million of unfavorable currency impact during the year ended December 31, 2018 resulting from foreign currency exchange rate fluctuations between the U.S. Dollar and Brazilian Real in 2018 as compared to 2017.

(19) Divestitures

On September 28, 2018, FIS entered into an agreement with Banco Bradesco to unwind the Brazilian Venture. The transaction closed on December 31, 2018. As a result of the transaction, the Brazilian Venture spun-off certain assets of the business that also provide services to non-Bradesco clients to a new wholly-owned FIS subsidiary. The subsidiary entered into a long-term commercial agreement to provide current and new services to Banco Bradesco effective January 1, 2019 that include software licensing, maintenance, application management, card portfolio migration, business process outsourcing, fraud management and professional services. As a result of the transaction, Banco Bradesco owns 100% of the entity that previously held the Brazilian Venture and its remaining assets that relate to card processing for Banco Bradesco, which Banco Bradesco will perform internally. During the third quarter of 2018, FIS incurred impairment charges of \$95 million related to the expected disposal, including \$42 million for the Brazilian Venture contract intangible asset, \$25 million for goodwill, and \$28 million for assets held for sale. Upon closing of the transaction, FIS recorded an additional pre-tax loss of \$12 million related to the business divested, removed FIS' noncontrolling interest balance of \$90 million, and recorded a \$57 million increase to additional paid in capital for the business spun-off into the new wholly-owned FIS subsidiary. The impairment loss and pre-tax loss on disposal were recorded in the Corporate and Other segment. The Brazilian Venture business divested was included within the Capital Market Solutions segment as part of the consolidated Brazilian Venture results recorded by FIS through the transaction date. The transaction did not meet the standard necessary to be reported as discontinued operations; therefore, the impairment loss, pre-tax loss and related prior period earnings remain reported within earnings from continuing operations.

On July 31, 2017, FIS closed on the sale of a majority ownership stake in its Capco consulting business and risk and compliance consulting business to CD&R, for cash proceeds of approximately \$469 million, resulting in a pre-tax loss of approximately \$41 million. The divestiture is consistent with our strategy to focus on our intellectual property-led businesses. CD&R acquired preferred units convertible into 60% of the common units of Cardinal, and FIS obtained common units representing the remaining 40%, in each case before equity was issued to management. The preferred units are entitled to a quarterly dividend at an annual rate of 12%, payable in cash (if available) or additional preferred units at FIS' option. The businesses sold were included within the Capital Market Solutions and Banking Solutions segments. The sale did not meet the standard necessary to be reported as discontinued operations; therefore, the pre-tax loss and related prior period earnings remain reported within earnings from continuing operations. Prior to the sale, the Capco consulting business and risk and compliance consulting business' pre-tax earnings (loss), excluding certain unallocated corporate costs, for the period ended December 31, 2017 was \$14 million.

FIS' ownership stake in Cardinal was initially valued at \$172 million and is recorded as an equity method investment included within Other noncurrent assets on the Consolidated Balance Sheet. After the sale on July 31, 2017, FIS began to recognize after-tax equity method investment earnings (loss) outside of operating income and segment Adjusted EBITDA. FIS' ownership stake in Cardinal at December 31, 2019 and 2018 was 37% and 38%, respectively. The carrying value of this equity method investment as of December 31, 2019 and 2018 was \$142 million and \$151 million, respectively. For periods prior to July 31, 2017, the Capco consulting business and risk and compliance consulting business were included within operating income and segment Adjusted EBITDA.

On February 1, 2017, the Company closed on the sale of the PS&E business for \$850 million, resulting in a pre-tax gain of \$85 million. The transaction included all PS&E solutions, which provided a comprehensive set of technology solutions to

address public safety and public administration needs of government entities as well as the needs of K-12 school districts. The divestiture is consistent with our strategy to serve the financial services markets. Cash proceeds were used to reduce outstanding debt. Net cash proceeds after payment of taxes and transaction-related expenses were approximately \$500 million. The PS&E business was included in the Corporate and Other segment. The sale did not meet the standard necessary to be reported as discontinued operations; therefore, the gain and related prior period earnings remain reported within earnings from continuing operations. Prior to the sale, PS&E's pre-tax earnings, excluding certain unallocated corporate costs, for the period ended December 31, 2017 was \$3 million.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

(20) Components of Other Comprehensive Earnings (Loss)

The following table shows Accumulated other comprehensive earnings (loss) attributable to FIS by component, net of tax, for the years ended December 31, 2019, 2018 and 2017 (in millions):

Total
(331)
(1)
(332)
(98)
(430)
395
2
(33)

⁽¹⁾ Includes the minimum pension liability adjustment and the cash settlement payment on treasury lock and forward-starting interest rate swap contracts associated with financing activities. Treasury lock and forward-starting interest rate swap related amounts will be amortized as an adjustment to interest expense over the periods in which the related interest payments that were hedged are recognized in income.

See Note 15 for the tax provision associated with each component of other comprehensive income.

(21) Concentration of Risk

The Company generates a significant amount of revenue from large clients; however, no individual client accounted for 10% or more of total revenue in the years ended December 31, 2019, 2018 and 2017.

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash equivalents and trade receivables. The Company places its cash equivalents with high credit-quality financial institutions and, by policy, limits the amount of credit exposure with any one financial institution. Concentrations of credit risk with respect to trade receivables are limited because a large number of geographically diverse clients make up the Company's client base, thus spreading the trade receivables credit risk. The Company controls credit risk through monitoring procedures.

(22) Segment Information

As a result of the Company's acquisition of Worldpay, the Company reorganized its reportable segments and recast all prior-period segment information presented to align with the new reportable segments. The new segments are Merchant Solutions, Banking Solutions, and Capital Market Solutions, which are organized based on the markets and clients served aligned with the solutions they provide, as well as the Corporate and Other segment. The reorganization primarily consisted of adding a new Merchant Solutions segment, renaming the former Integrated Financial Solutions segment to Banking Solutions and the former Global Financial Solutions segment to Capital Market Solutions, and moving certain of the Company's existing business lines to align with these new segments. Below is a summary of each segment.

Merchant Solutions ("Merchant")

The Merchant segment is focused on serving merchants of all sizes globally, enabling them to accept electronic payments, including credit, debit and prepaid payments originated at a physical point of sale as well as in card-not-present environments such as eCommerce and mobile. Merchant services include all aspects of payment processing, including authorization and settlement, customer service, chargeback and retrieval processing, reporting for electronic payment transactions and network fee and interchange management. Merchant also includes value-added services, such as security and fraud prevention solutions, advanced data analytics and information management solutions, foreign currency management and numerous funding options. Merchant serves clients in over 140 countries. Our Merchant clients are highly-diversified, including non-discretionary everyday spend categories, such as grocery and pharmacy, and include national retailers, as well as global enterprises and small- to medium-sized businesses. The Merchant segment utilizes broad and varied distribution channels, including direct sales forces and multiple referral partner relationships that provide us with a growing and diverse client base.

Banking Solutions ("Banking")

The Banking segment is focused on serving all sizes of financial institutions for core processing and ancillary applications solutions; digital solutions; fraud, risk management and compliance solutions; electronic funds transfer and network services solutions; payment solutions; wealth and retirement solutions; item processing and output services solutions; and services capitalizing on the continuing trend to outsource these solutions. Clients in this segment include global financial institutions, U.S. regional and community banks, credit unions and commercial lenders, as well as government institutions, and other commercial organizations. Banking serves clients in more than 130 countries. Our applications include core processing software, which clients use to maintain the primary records of their customer accounts, and complementary applications and services that interact directly with the core processing applications. We provide our clients integrated solutions characterized by multi-year processing contracts that generate highly recurring revenue. The predictable nature of cash flows generated from the Banking segment provides opportunities for further investments in innovation, integration, information and security, and compliance in a cost-effective manner. The results in this segment included the Reliance Trust Company of Delaware business through its divestiture on December 31, 2018, the Company's Brazilian Venture business through its divestiture as part of the joint venture unwinding transaction on December 31, 2018 and the risk and compliance consulting business through its divestiture on July 31, 2017 (see Note 19).

Capital Market Solutions ("Capital Markets")

The Capital Markets segment is focused on serving global financial services clients with a broad array of buy- and sell-side solutions. Clients in this segment operate in more than 100 countries and include asset managers, buy-and sell-side securities, brokerage and trading firms, insurers, private equity firms, and other commercial organizations. Our buy- and sell-side solutions include a variety of mission critical applications for record keeping, data and analytics, trading, financing and risk management. Capital Markets clients purchase our solutions and services in various ways including licensing and managing technology "in-house," using consulting and third-party service providers, as well as fully outsourced end-to-end solutions. We have long-established relationships with many of these financial and commercial institutions that generate significant recurring revenue. We have made, and continue to make, investments in modern platforms; advanced technologies, such as cloud delivery, open APIs, machine learning and artificial intelligence; and regulatory technology to support our Capital Markets clients. The business solutions in this segment included the Capco consulting business through its divestiture on July 31, 2017 (see Note 19).

Corporate and Other

The Corporate and Other segment consists of corporate overhead expense, certain leveraged functions and miscellaneous expenses that are not included in the operating segments, as well as certain non-strategic businesses. The overhead and leveraged costs relate to corporate marketing, corporate finance and accounting, human resources, legal, and amortization of acquisition-related intangibles and other costs, such as acquisition and integration expenses, that are not considered when management evaluates revenue-generating segment performance. The Corporate and Other segment also includes the impact on revenue for 2018 and 2017 of adjusting deferred revenue to fair value from the SunGard acquisition. Additionally, the Corporate and Other segment also included the Certegy Check Services business unit in North America divested on August 31, 2018 (see Note 6) and the PS&E business divested on February 1, 2017 (see Note 19).

During 2019 the Company recorded acquisition and integration costs primarily related to the Worldpay acquisition and certain other costs associated with data center consolidation activities totaling \$704 million. During 2018, the Company recorded acquisition and integration costs primarily related to the SunGard acquisition and certain other costs including those associated with data center consolidation activities totaling \$156 million. During 2017, the Company recorded acquisition and integration costs primarily related to the SunGard acquisition totaling \$178 million.

Adjusted EBITDA

This measure is reported to the chief operating decision maker for purposes of making decisions about allocating resources to the segments and assessing their performance. For this reason, Adjusted EBITDA, as it relates to our segments, is presented in conformity with FASB ASC Topic 280, *Segment Reporting*. Adjusted EBITDA is defined as EBITDA (defined as net earnings (loss) before net interest expense, income tax provision (benefit) and depreciation and amortization) plus certain non-operating items. The non-operating items affecting the segment profit measure generally include acquisition accounting adjustments; acquisition, integration and certain other costs; and asset impairments. These costs and adjustments are recorded in the Corporate and Other segment for the periods discussed below. Adjusted EBITDA for the respective segments excludes the foregoing costs and adjustments.

Summarized financial information for the Company's segments is shown in the following tables. The Company does not evaluate performance or allocate resources based on segment asset data; therefore, such information is not presented.

As of and for the year ended December 31, 2019 (in millions):

	Merchant Solutions	 Banking Solutions	Capital Market Solutions	 Corporate and Other	Total
Revenue	\$ 2,013	\$ 5,873	\$ 2,447	\$ _	\$ 10,333
Operating expenses	1,137	3,942	1,535	2,750	9,364
Depreciation and amortization (including purchase accounting amortization)	 118	 523	217	 1,586	2,444
EBITDA	994	2,454	1,129	(1,164)	3,413
Acquisition, integration and other costs	_	_	_	704	704
Asset impairments	_	_	_	87	87
Adjusted EBITDA	\$ 994	\$ 2,454	\$ 1,129	\$ (373)	\$ 4,204
EBITDA					\$ 3,413
Interest expense, net					337
Depreciation and amortization					809
Purchase accounting amortization					1,635
Other income (expense) unallocated					(229)
Provision (benefit) for income taxes					100
Net earnings attributable to noncontrolling interest					5
Net earnings attributable to FIS common stockholders					\$ 298
Capital expenditures (1)	\$ 144	\$ 617	\$ 269	\$ 13	\$ 1,043

⁽¹⁾ Capital expenditures include \$215 million in other financing obligations for certain hardware and software.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

As of and for the year ended December 31, 2018 (in millions):

	Merchant Solutions	_	Banking Solutions	Capital Market Solutions		Corporate and Other	Total
Revenue	\$ 276	\$	5,712 \$	2,391	\$	44	\$ 8,423
Operating expenses	227		3,950	1,468		1,320	6,965
Depreciation and amortization (including purchase accounting amortization)	 10	_	494	158	_	758	1,420
EBITDA	59		2,256	1,081		(518)	2,878
Acquisition deferred revenue adjustment	_		_	_		4	4
Acquisition, integration and other costs	_		_	_		156	156
Asset impairments	 		_	_		95	 95
Adjusted EBITDA	\$ 59	\$	2,256 \$	1,081	\$	(263)	\$ 3,133
EBITDA							\$ 2,878
Interest expense, net							297
Depreciation and amortization							688
Purchase accounting amortization							732
Other income (expense) unallocated							(72)
Provision (benefit) for income taxes							208
Net earnings attributable to noncontrolling interest							 35
Net earnings attributable to FIS common stockholders							\$ 846
Capital expenditures (1)	\$ 11	\$	485 \$	206	\$	11	\$ 713

⁽¹⁾ Capital expenditures include \$91 million in other financing obligations for certain hardware and software.

As of and for the year ended December 31, 2017 (in millions):

	erchant lutions	 Banking Solutions	Capital Market Solutions	Corporate and Other	Total
Revenue	\$ 261	\$ 5,552	\$ 2,749	\$ 106	\$ 8,668
Operating expenses	201	3,884	1,820	1,331	7,236
Depreciation and amortization (including purchase accounting amortization)	8	433	151	775	1,367
EBITDA	 68	2,101	1,080	(450)	2,799
Acquisition deferred revenue adjustment	_	_	_	7	7
Acquisition, integration and other costs	_	_	_	178	178
Adjusted EBITDA	\$ 68	\$ 2,101	\$ 1,080	\$ (265)	2,984
EBITDA					\$ 2,799
Interest expense, net					337
Depreciation and amortization					636
Purchase accounting amortization					731
Other income (expense) unallocated					(122)
Provision (benefit) for income taxes					(321)
Net earnings attributable to noncontrolling interest					33
Net earnings attributable to FIS common stockholders					\$ 1,261
Capital expenditures (1)	\$ 14	\$ 475	\$ 198	\$ 10	\$ 697

⁽¹⁾ Capital expenditures include \$84 million in other financing obligations for certain hardware and software.

Clients in the United Kingdom, Germany, Brazil, India and Australia accounted for the majority of the revenue from clients based outside of North America for all periods presented. FIS conducts business in over 140 countries, with no individual

country outside of North America accounting for more than 10% of total revenue for the years ended December 31, 2019, 2018 and 2017.

Long-term assets, excluding goodwill and other intangible assets, located outside of the United States totaled \$1,646 million and \$560 million as of December 31, 2019 and 2018, respectively. These assets are predominantly located in the United Kingdom, India, France, Belgium, Germany and Brazil.

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

None.

Item 9A. Controls and Procedures

As of the end of the year covered by this report, we carried out an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined in Rule 13a-15 (e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is (a) recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms and (b) accumulated and communicated to management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

We completed the Worldpay acquisition on July 31, 2019 (see Note 3 of the Notes to Consolidated Financial Statements). The scope of management's assessment of the effectiveness of the Company's disclosure controls and procedures did not include the internal controls over financial reporting of Worldpay. This exclusion is in accordance with the SEC Staff's general guidance that an assessment of a recently acquired business may be omitted from the scope of management's assessment for one year following the acquisition. Worldpay represented approximately 18% of our gross revenue for the year ended December 31, 2019. Total assets of the acquired business as of December 31, 2019, represented approximately 73% of total consolidated assets, consisting principally of goodwill and other intangible assets. We are in the process of integrating Worldpay into our overall internal controls over financial reporting program. Other than this ongoing integration, there have been no changes in our internal control over financial reporting that occurred during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting. Management has adopted the framework in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on our evaluation under this framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2019. KPMG LLP, an independent registered public accounting firm, has issued an attestation report on our internal control over financial reporting as set forth in Item 8.

Item 9B. Other Information

None.

PART III

Items 10-14.

Within 120 days after the close of its fiscal year, the Company intends to file with the Securities and Exchange Commission a definitive proxy statement pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended, which will include the matters required by these items.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(1) Financial Statement Schedules: All schedules have been omitted because they are not applicable or the required information is included in the Consolidated Financial Statements or Notes to Consolidated Financial Statements.

Exhibits: The following is a complete list of exhibits included as part of this report, including those incorporated by reference. A list of those documents filed with this report is set forth on the Exhibit Index appearing elsewhere in this report and is incorporated by reference.

		In				
Exhibit No.	Exhibit Description	Form	SEC File Number	Exhibit	Filing Date	Filed/ Furnished Herewith
2.1	Agreement and Plan of Merger, dated as of March 17, 2019, by and among Fidelity National Information Services, Inc., Worldpay Inc. and Wrangler Merger Sub.	8-K	001-16427	2.1	3/18/2019	
3.1	Amended and Restated Articles of Incorporation of Fidelity National Information Services, Inc.	8-K	001-16427	3.1	2/6/2006	
3.2	Amendment To Articles of Incorporation of Fidelity National Information Services, Inc.	10-K	001-16427	3.2	2/26/2013	
3.3	Amendment To Articles of Incorporation of Fidelity National Information Services, Inc.	10-Q	001-16427	3.1	8/7/2014	
3.4	Articles of Amendment to the Articles of Incorporation of Fidelity National Information Services, Inc., Effective as of July 31, 2019.	8-K	001-16427	3.1	7/31/2019	
3.5	Fourth Amended and Restated Bylaws of Fidelity National Information Services, Inc.	8-K	001-16427	3.1	1/27/2017	
4.1	Form of certificate representing Fidelity National Information Services, Inc. Common Stock.	S-3ASR	333-131593	4.3	2/6/2006	
4.2	Indenture, dated as of April 15, 2013, among FIS, the Guarantors and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.1	4/15/2013	
4.3	Fourth Supplemental Indenture, dated as of June 3, 2014, among FIS, each of the Guarantors and the Bank of New York Mellon Trust Company, N.A. a national banking association, as trustee.	8-K	001-16427	4.2	6/3/2014	
4.4	Eighth Supplemental Indenture, dated as of October 20, 2015 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.4	10/20/2015	
4.5	Tenth Supplemental Indenture, dated as of August 16, 2016 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.2	8/16/2016	
4.6	Eleventh Supplemental Indenture, dated as of August 16, 2016 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.3	8/16/2016	

		PARI V				
Exhibit			SEC File			Filed/
No.	Exhibit Description	Form	Number	Exhibit	Filing Date	Furnished Herewith
4.7	1	8-K	001-16427	4.1	7/11/2017	
4.8	Thirteenth Supplemental Indenture, dated as of July 10, 2017 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.2	7/11/2017	
4.9	Fourteenth Supplemental Indenture, dated as of July 10, 2017 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.3	7/11/2017	
4.10	Fifteenth Supplemental Indenture, dated as of May 16, 2018 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.1	5/16/2018	
4.11	Sixteenth Supplemental Indenture, dated as of May 16, 2018 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.2	5/16/2018	
4.12	Seventeenth Supplemental Indenture, dated as of May 21, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.1	5/21/2019	
4.13	Eighteenth Supplemental Indenture, dated as of May 21, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.2	5/21/2019	
4.14	Nineteenth Supplemental Indenture, dated as of May 21, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.3	5/21/2019	
4.15	Twentieth Supplemental Indenture, dated as of May 21, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.4	5/21/2019	
4.16	Twenty-First Supplemental Indenture, dated as of May 21, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.5	5/21/2019	

		PAKI V				
4.17	Twenty-Second Supplemental Indenture, dated as of May 21, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.6	5/21/2019	
4.18	Twenty-Third Supplemental Indenture, dated as of May 21, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.7	5/21/2019	
4.19	Twenty-Fourth Supplemental Indenture, dated as of May 21, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.8	5/21/2019	
4.20	Twenty-Fifth Supplemental Indenture, dated as of May 21, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.9	5/21/2019	
4.21	Twenty-Sixth Supplemental Indenture, dated as of December 3, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.1	12/3/2019	
4.22	Twenty-Seventh Supplemental Indenture, dated as of December 3, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.2	12/3/2019	
4.23	Twenty-Eighth Supplemental Indenture, dated as of December 3, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.3	12/3/2019	
4.24	Twenty-Ninth Supplemental Indenture, dated as of December 3, 2019 between FIS and The Bank of New York Mellon Trust Company, N.A., a national banking association, as trustee.	8-K	001-16427	4.4	12/3/2019	
4.25	Description of the Company's Common Stock registered pursuant to Section 12 of the Securities Exchange Act of 1934.					*
4.26	Description of the Company's 0.400% Senior Notes due 2021, 1.700% Senior Notes due 2022 and 1.100% Senior Notes due 2024 registered pursuant to Section 12 of the Securities Exchange Act of 1934.					*

		Incorporated by Reference							
Exhibit No.	Exhibit Description	Form	SEC File Number	Exhibit	Filing Date	Filed/ Furnished Herewith			
4.27	Description of the Company's 0.125% Senior Notes Due 2021, 0.750% Senior Notes Due 2023, 1.500% Senior Notes Due 2027, 2.000% Senior Notes Due 2030, 2.950% Senior Notes Due 2039, Floating					*			
4.28	Description of the Company's 0.125% Senior Notes Due 2022, 0.625% Senior Notes Due 2025, 1.000% Senior Notes Due 2028 and 2.250% Senior Notes Due 2029, registered pursuant to Section 12 of the Securities Exchange Act of 1934.					*			

		Incorporated by Reference				
Exhibit			SEC File	5 1 1 1 1 1		Filed/ Furnished
No.	Exhibit Description Certegy Inc. Deferred Compensation Plan,	Form 10-K405	Number 001-16427	Exhibit 10.25	Filing Date 3/25/2002	Herewith
10.1	effective as of June 15, 2001. (1)	10-K403	001-10427	10.23	3/23/2002	
10.2	Certegy Inc. Executive Life and Supplemental Retirement Benefit Plan Split Dollar Life Insurance Agreement, effective as of November 7, 2003. (1)	10-K	001-16427	10.40	2/17/2004	
10.3	Grantor Trust Agreement, dated as of July 8, 2001, between Certegy Inc. and Wachovia Bank, N.A. (1)	10-K405	001-16427	10.15	3/25/2002	
10.4	Grantor Trust Agreement, dated as of July 8, 2001 and amended and restated as of December 5, 2003, between Certegy Inc. and Wachovia Bank, N.A. (1)	10-K	001-16427	10.15(a)	2/17/2004	
10.5	Second Amendment Agreement, dated as of April 5, 2019, by and among Fidelity National Information Services, Inc., the financial institutions party thereto as lenders and JPMorgan Chase Bank, N.A., as administrative agent.	8-K	001-16427	10.1	4/11/2019	
10.6	Third Amendment and Joinder Agreement, dated as of May 29, 2019, by and among Fidelity National Information Services, Inc., the financial institutions party thereto as lenders and JPMorgan Chase Bank, N.A., as administrative agent.	8-K	001-16427	10.1	6/4/2019	
10.7	Fidelity National Information Services, Inc. Employee Stock Purchase Plan, effective as of March 16, 2006. (1)	S-4/A	333-135845	Annex C	9/19/2006	
10.8	Fidelity National Information Services, Inc. Annual Incentive Plan, effective as of October 23, 2006. (1)	S-4/A	333-135845	Annex D	9/19/2006	
10.9	Amended and Restated Employment Agreement, effective as of December 29, 2009, by and among Fidelity National Information Services, Inc. and Gary A. Norcross. (1)	8-K	001-16427	10.1	12/29/2009	
10.10	Amendment No. 1 to Amended and Restated Employment Agreement, effective as of March 30, 2012, by and among Fidelity National Information Services, Inc., and Gary A. Norcross. (1)	10-Q	001-16427	10.4	5/4/2012	
10.11	Amendment to Employment Agreement, effective as of January 1, 2015, by and among Fidelity National Information Services, Inc., and Gary A. Norcross. (1)	10-K	001-16427	10.31	2/27/2015	

10.12	Amendment to Employment Agreement, effective as of February 23, 2016, by and among Fidelity National Information Services, Inc., and Gary A. Norcross. (1)	10-K	001-16427	10.33	2/26/2016	
10.13	Amendment to Employment Agreement, effective as of May 5, 2018, by and among Fidelity National Information Services, Inc., and Gary A. Norcross. (1)	10-K	001-16427	10.14	2/21/2019	

		Incorporated by Reference				
		Incorporated by Reference			Filed/	
Exhibit			SEC File			Furnished
No.	Exhibit Description	Form	Number	Exhibit	Filing Date	Herewith
10.14	Amendment to Employment Agreement, effective as of May 21, 2019, by and among Fidelity National Information Services, Inc., and Gary A. Norcross. (1)	10-Q	001-16427	10.3	8/6/2019	
10.15	Employment Agreement, effective as of October 1, 2009, by and among Fidelity National Information Services, Inc. and James W. Woodall. (1)	8-K	001-16427	10.13	10/2/2009	
10.16	Amendment to Employment Agreement, effective as of January 29, 2013, by and between Fidelity National Information Services, Inc., and James W. Woodall. (1)	10-K	001-16427	10.51	2/28/2014	
10.17	Second Amendment to Employment Agreement, effective as of March 15, 2013, by and between Fidelity National Information Services, Inc., and James W. Woodall. (1)	10-K	001-16427	10.52	2/28/2014	
10.18	Amendment to Employment Agreement, effective as of February 23, 2016, by and between Fidelity National Information Services, Inc., and James W. Woodall. (1)	10-K	001-16427	10.37	2/26/2016	
10.19	Amendment to Employment Agreement, effective as of May 5, 2018, by and between Fidelity National Information Services, Inc., and James W. Woodall. (1)	10-K	001-16427	10.19	2/21/2019	
10.20	Employment Agreement, effective as of April 16, 2012, by and among Fidelity National Information Services, Inc., and Gregory G. Montana. (1)	10-K	001-16427	10.81	2/26/2013	
10.21	Amendment to Employment Agreement, effective as of February 23, 2016 by and among Fidelity National Information Services, Inc., and Gregory G. Montana. (1)	10-K	001-16427	10.43	2/26/2016	
10.22	Employment Agreement, effective as of February 1, 2018 by and between Fidelity National Information Services, Inc. and Marc Mayo. (1)	10-K	001-16427	10.34	2/22/2018	
10.23	Employment Agreement, effective as of February 1, 2018 by and between Fidelity National Information Services, Inc. and Bruce Lowthers. (1)	10-K	001-16427	10.35	2/22/2018	
10.24	Employment Agreement, effective as of February 1, 2018 by and between Fidelity National Information Services, Inc. and Denise Williams. (1)	10-K	001-16427	10.36	2/22/2018	

10.25	Terms and Conditions of Employment, effective as of April 2, 2018, by and among FIS Systems (U.K.) Limited. and Martin Boyd. (1)	10-Q	001-16427	10.4	8/6/2019	
10.26	Letter Agreement, effective as of August 1, 2019, by and among Fidelity National Information Services, Inc., and Charles Drucker. (1)	10-Q	001-16427	10.5	8/6/2019	

		Ir	ncorporated by	Reference		
		11	leorporated by	Kelefelice		Filed/
Exhibit			SEC File			Furnished
No.	Exhibit Description	Form	Number	Exhibit	Filing Date	Herewith
10.27	Employment Agreement, effective as of August 1, 2019, by and between Fidelity National Information Services, Inc., and Mark Heimbouch. (1)	10-Q	001-16427	10.6	8/6/2019	
10.28	Employment Agreement, effective as of August 1, 2019, by and between Fidelity National Information Services, Inc., and Stephanie Ferris. (1)	10-Q	001-16427	10.7	8/6/2019	
10.29	Consulting Agreement, effective as of August 1, 2019, by and among Fidelity National Information Services, Inc., and Stephan A. James. (1)	10-Q	001-16427	10.8	8/6/2019	
10.30	Form of Non-Statutory Stock Option Award under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2014. (1)	10-K	001-16427	10.60	2/26/2016	
10.31	Form of Non-Statutory Stock Option Award under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2015. (1)	10-K	001-16427	10.63	2/26/2016	
10.32	Form of Non-Statutory Stock Option Award under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2016. (1)	10-K	001-16427	10.62	2/23/2017	
10.33	Form of Restricted Stock Grant for Directors under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2017. (1)	10-K	001-16427	10.46	2/21/2019	
10.34	Form of Non-Statutory Stock Option Grant for Directors under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2017. (1)	10-K	001-16427	10.47	2/21/2019	
10.35	Form of Restricted Stock Grant for Employees under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2017. (1)	10-K	001-16427	10.48	2/21/2019	
10.36	Form of Non-Statutory Stock Option Grant for Employees under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2017. (1)	10-K	001-16427	10.49	2/21/2019	

10.37	Form of Restricted Stock Unit Grant for Directors under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2018. (1)	10-K	001-16427	10.50	2/21/2019	
10.38	Form of Stock Option Grant for Employees under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2018. (1)	10-K	001-16427	10.51	2/21/2019	

		PART V	corporated by	Reference		
		1111	corporated by	Reference		Filed/
Exhibit			SEC File			Furnished
No.	Exhibit Description	Form	Number	Exhibit	Filing Date	Herewith
10.39	Form of Restricted Stock Unit Grant for Employees under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2018. (1)	10-K	001-16427	10.52	2/21/2019	
10.40	Form of Performance Stock Unit Grant for Employees under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in 2018. (1)	10-K	001-16427	10.53	2/21/2019	
10.41	Seventh Amendment and Restatement Agreement, dated as of September 21, 2018, by and among Fidelity National Information Services, Inc., each lender party thereto and JP Morgan Chase Bank N.A., as Administrative Agent.	8-K	001-16427	10.1	9/24/2018	
10.42	Fidelity National Information Services, Inc. 2008 Omnibus Incentive Plan, as amended and restated effective May 30, 2018. (1)	DEF 14A	001-16427	Annex A	4/20/2018	
10.43	Form of Stock Option Grant under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in March 2019. (1)					*
10.44	Form of Restricted Stock Unit Grant under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in March 2019. (1)					*
10.45	Form of Restricted Stock Unit Grant to Director under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in May 2019. (1)					*
10.46	Form of Performance Stock Unit Grant under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in March 2019. (1)					*
10.47	Form of Restricted Stock Unit Grant to Director under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in August 2019. (1)					*

10.48	Form of Performance Stock Unit Grant under Fidelity National Information Services, Inc. amended and restated 2008 Omnibus Incentive Plan for grants made in August 2019. (1)			*
10.49	Form of Performance Share Unit Award for United Kingdom Employees under Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2019. (1)			*

		PART V	ncorporated by	Reference		
Exhibit			SEC File			Filed/ Furnished
No.	Exhibit Description	Form	Number	Exhibit	Filing Date	Herewith
10.50	Form of Performance Share Unit Award for United States Employees under Worldpay. Inc. 2012 Equity Incentive Plan for grants made in 2019. (1)					*
10.51	Form of Stock Option Grant for United States Employees under Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2019. (1)					*
10.52	Form of Stock Option Grant for United Kingdom Employees under Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2019. (1)					*
10.53	Form of Restricted Stock Unit Award for United Kingdom Employees under Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2019. (1)					*
10.54	Form of Restricted Stock Unit Award for United States Employees under Worldpay. Inc. 2012 Equity Incentive Plan for grants made in 2019. (1)					*
10.55	Form of Stock Option Grant Notice and Option Agreement under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2013 through 2017. (1)	10-Q	001-35462	10.1	5/6/2013	
10.56	Form of Restricted Stock Unit Grant Notice and Restricted Stock Unit Agreement under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2015 through 2017. (1)	10-Q	001-35462	10.2	5/6/2013	
10.57	Form of Restricted Share Grant Notice and Restricted Share Agreement under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2015 through 2017. (1)	10-Q	001-35462	10.3	4/30/2015	
10.58	Form of Performance Share Unit Award Notice and Performance Share Unit Agreement under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2017. (1)	10-Q	001-35462	10.3	5/6/2013	
10.59	Revised Form of Performance Share Award Notice and Performance Share Agreement under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2017. (1)	10-K	001-35462	10.12.7	2/10/2016	
10.60	Form of Performance Share Unit Acquisition Award Notice and Performance Share Unit Acquisition Award Agreement for U.S. Employees (Co-CEO under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2018. (1)	10-K	001-35462	10.16.7	2/28/2018	

10.61	Form of Performance Share Unit	10-K	001-35462	10.16.9	2/28/2018	
	Acquisition Award Notice and Performance					
	Share Unit Acquisition Award Agreement					
	for U.S. Employees under the Worldpay,					
	Inc. 2012 Equity Incentive Plan for grants					
	made in 2018. (1)					

		Incorporated by Reference				
Exhibit			SEC File		F.11. B	Filed/ Furnished
No. 10.62	Exhibit Description Form of Restricted Stock Unit Grant	Form 10-K	Number 001-35462	Exhibit 10.16.12	Filing Date 2/28/2018	Herewith
	Notice and Restricted Stock Unit Agreement for U.S. Employees under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2018 and 2019. (1)					
10.63	Form of Stock Option Grant Notice and Stock Option Award Agreement for U.S. Employees under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2018 and 2019. (1)	10-K	001-35462	10.16.14	2/28/2018	
10.64	Form of Performance Share Unit Award Notice and Performance Share Unit Award Agreement for U.S. Employees under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2018 and 2019. (1)	10-K	001-35462	10.16.16	2/28/2018	
10.65	Form of Performance Share Unit Award Notice for United States Executives under the Worldpay, Inc. 2012 Equity Incentive Plan for grants made in 2019. (1)	10-K	001-35462	10.40	2/26/2019	
21.1	Subsidiaries of the Registrant.					*
23.1	Consent of Independent Registered Public Accounting Firm (KPMG LLP).					*
31.1	Certification of Gary A. Norcross, Chief Executive Officer of Fidelity National Information Services, Inc., pursuant to rule 13a-14(a) or 15d-14(a) of the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					*
31.2	Certification of James W. Woodall, Chief Financial Officer of Fidelity National Information Services, Inc., pursuant to rule 13a-14(a) or 15d-14(a) of the Exchange Act, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					*
32.1	Certification of Gary A. Norcross, Chief Executive Officer of Fidelity National Information Services, Inc., pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					*
32.2	Certification of James W. Woodall, Chief Financial Officer of Fidelity National Information Services, Inc., pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002.					*

101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tages are embedded within the Inline XBRL document.			*
101.SCH	Inline XBRL Taxonomy Extension Schema Document.			*

		In	corporated by	Reference		
Exhibit No.	Exhibit Description	Form	SEC File Number	Exhibit	Filing Date	Filed/ Furnished Herewith
	Inline XBRL Taxonomy Extension Calculation Linkbase Document.	TOTH	rumoer	Exmor	Timig Bute	*
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).					*

⁽¹⁾ Management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary

None.

^{*}Filed or furnished herewith

⁺ Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files on Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

FIDELITY NATIONAL INFORMATION SERVICES, INC.

Date: February 20, 2020 By: /s/ GARY A. NORCROSS

Gary A. Norcross

President, Chief Executive Officer and Chairman of the Board

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

Date:	February 20, 2020	By: /s/ JAMES W. WOODALL
		James W. Woodall
		Chief Financial Officer
		(Principal Financial Officer)
Date:	February 20, 2020	By: /s/ CHRISTOPHER THOMPSON
		Christopher Thompson
		Chief Accounting Officer
		(Principal Accounting Officer)
Date:	February 20, 2020	By: /s/ GARY A. NORCROSS
		Gary A. Norcross
		President, Chief Executive Officer and Chairman of the Board
Date:	February 20, 2020	By: /s/ CHARLES D. DRUCKER
		Charles D. Drucker
		Director
Date:	February 20, 2020	By: /s/ LEE ADREAN
		Lee Adrean
		Director
Date:	February 20, 2020	By: /s/ ELLEN R. ALEMANY
		Ellen R. Alemany
		Director
Date:	February 20, 2020	By: /s/ LISA A. HOOK
		Lisa A. Hook
		Director
Date:	February 20, 2020	By: /s/ KEITH W. HUGHES
		Keith W. Hughes
		Director
Date:	February 20, 2020	By: /s/ DAVID K. HUNT
		David K. Hunt
		Director
Date:	February 20, 2020	By: /s/ GARY L. LAUER
		Gary L. Lauer
		Director

Date: February 20, 2020

By: /s/ LOUISE M. PARENT

Louise M. Parent
Director

Date: February 20, 2020

By: /s/ BRIAN T. SHEA

Brian T. Shea
Director

Date: February 20, 2020

By: /s/ JAMES B. STALLINGS, JR.

James B. Stallings, Jr.
Director

Date: February 20, 2020 By: /s/ JEFFREY E. STIEFLER

Jeffrey E. Stiefler Director

PUBLICATIONS

The company's Annual Report on Form 10-K and quarterly reports on Form 10-Q are available on the Investor Relations section of the company's website at www.fisglobal.com.

CERTIFICATIONS

FIS filed the Chief Executive Officer and Chief Financial Officer certifications required by Section 302 of the Sarbanes-Oxley Act of 2002 as exhibits to its Annual Report on Form 10-K for the fiscal year ended December 31, 2019. FIS submitted the required annual CEO certification to the New York Stock Exchange (NYSE) in accordance with Section 303A.12 of the NYSE Listed Company Manual.

AUDIT COMMITTEE

Louise M. Parent, Chair

Lee Adrean Ellen R. Alemany Lisa A. Hook David K. Hunt

RISK AND TECHNOLOGY COMMITTEE

Lisa A. Hook, Chair

Lee Adrean Keith W. Hughes Brian T. Shea James B. Stallings Jr.

COMPENSATION COMMITTEE

Keith W. Hughes, Chair

David K. Hunt Gary L. Lauer James B. Stallings, Jr. Jeffrey E. Stiefler

CORPORATE GOVERNANCE AND NOMINATING COMMITTEE

Ellen R. Alemany, Chair

Gary L. Lauer Louise M. Parent Brian T. Shea Jeffrey E. Stiefler

EXECUTIVE COMMITTEE

Gary A. Norcross

Jeffrey E. Stiefler Louise M. Parent Lisa A. Hook Keith W. Hughes Ellen R. Alemany

ANNUAL MEETING OF SHAREHOLDERS

The Annual Meeting of Shareholders will be held at 10:00 a.m. Eastern time on May 28, 2020, at the FIS corporate headquarters at 601 Riverside Avenue, Jacksonville, FL 32204.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

KPMG LLP

501 Riverside Avenue, Suite 500 Jacksonville, FL 32202

STOCK EXCHANGE LISTING

Fidelity National Information Services, Inc.'s common stock is listed on the New York Stock Exchange under the trading symbol "FIS".

INVESTOR RELATIONS

Nathan Rozof, CFA

Executive Vice President 513.900.5372 nathan.rozof@fisglobal.com

SHAREHOLDER RELATIONS

Computershare

P.O. Box 30170 College Station, TX 77842-3170 800 568 3476

Jennifer Lane

Director, Shareholder Services 407.551.8315 jennifer.lane@fisglobal.com

