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

FORM 10-K

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

For the fiscal year ended December 31, 2022.

OR

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

For the transition period from to .

Commission file number 001-36859

PayPal Holdings, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware		**47-2989869**
(State or Other Jurisdiction of Incorporation or Organization)		**(I.R.S. Employer Identification No.)**
2211 North First Street	**San Jose, California**	**95131**
(Address of Principal Executive Offices)		**(Zip Code)**

(408) 967-1000

(Registrant's telephone number, including area code)

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

Title of each class	*Trading Symbol(s)*	*Name of each exchange on which registered*
Common stock, $0.0001 par value per share	**PYPL**	**NASDAQ Global Select Market**

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

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 Exchange Act. Yes ☐ No ☒

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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

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

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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, 2022, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately $80.7 billion based on the closing sale price as reported on the NASDAQ Global Select Market.

As of February 3, 2023, there were 1,131,373,298 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its 2023 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2022.

TABLE OF CONTENTS

Trademarks, Trade Names and Service Marks

PayPal owns or has rights to use the trademarks, service marks, and trade names that it uses in conjunction with the operation of its business. Some of the more important trademarks that PayPal owns or has rights to use that appear in this Annual Report on Form 10-K include: PayPal®, PayPal Credit®, Braintree, Venmo, Xoom, Zettle, Hyperwallet, Honey, and Paidy, which may be registered or trademarked in the United States and other jurisdictions. PayPal's rights to some of these trademarks may be limited to select markets. This report contains additional trade names and trademarks of other companies. The use or display of other companies' trade names or trademarks does not imply our endorsement or sponsorship of, or a relationship with these companies.

PART I

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K ("Form 10-K") contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements that involve expectations, plans or intentions (such as those relating to future business, future results of operations or financial condition, new or planned features or services, mergers or acquisitions, or management strategies). These forward-looking statements can be identified by words such as "may," "will," "would," "should," "could," "expect," "anticipate," "believe," "estimate," "intend," "continue," "strategy," "future," "opportunity," "plan," "project," "forecast," and other similar expressions. These forward-looking statements involve risks and uncertainties that could cause our actual results and financial condition to differ materially from those expressed or implied in our forward-looking statements. Such risks and uncertainties include, among others, those discussed in "Item 1A. Risk Factors" of this Form 10-K, as well as in our consolidated financial statements, related notes, and the other information appearing in this report and our other filings with the Securities and Exchange Commission ("SEC"). We do not intend, and undertake no obligation except as required by law, to update any of our forward-looking statements after the date of this report to reflect actual results, new information, or future events or circumstances. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. You should read the information in this report in conjunction with the audited consolidated financial statements and the related notes that appear in this report.

ITEM 1. BUSINESS

OVERVIEW

PayPal Holdings, Inc. was incorporated in Delaware in January 2015 and is a leading technology platform that enables digital payments and simplifies commerce experiences on behalf of merchants and consumers worldwide. PayPal is committed to democratizing financial services to help improve the financial health of individuals and to increase economic opportunity for entrepreneurs and businesses of all sizes around the world. Our goal is to enable our merchants and consumers to manage and move their money anywhere in the world in the markets we serve, anytime, on any platform, and using any device when sending payments or getting paid, including person-to-person ("P2P") payments. Our core values of Inclusion, Innovation, Collaboration, and Wellness, reflected in our leadership principles, are the driving forces behind our mission and form the foundation of our operating philosophy. We believe that our core values help stimulate the creativity and engagement of our global workforce to deliver products and services designed to meet the diverse needs of our customers. We also believe that effective management of environmental, social, and governance ("ESG") risks and opportunities is essential to deliver on our mission and strategy. Unless otherwise expressly stated or the context otherwise requires, references to "we," "our," "us," "the Company," or "PayPal" refer to PayPal Holdings, Inc. and its consolidated subsidiaries.

pypl-20221231_g3.jpg

PayPal's payment solutions enable our customers to connect, transact, and send and receive payments, whether they are online or in person. We provide proprietary payment solutions accepted by merchants that enable the completion of payments on our platform on behalf of our customers. We operate a global, two-sided network at scale that connects merchants and consumers with 435 million active accounts (consisting of 400 million consumer active accounts and 35 million merchant active accounts) across more than 200 markets as of December 31, 2022.

We offer our customers the flexibility to use their PayPal or Venmo accounts to purchase and receive payments for goods and services, as well as the ability to transfer and withdraw funds. We enable consumers to exchange funds more safely with merchants using a variety of funding sources, which may include a bank account, a PayPal or Venmo account balance, PayPal and Venmo branded credit products including our installment products, a credit card, a debit card, certain cryptocurrencies, or other stored value products such as gift cards, and eligible rewards. Our PayPal, Venmo, and Xoom products also make it safer and simpler for friends and family to transfer funds to each other. We offer merchants an end-to-end payments solution that provides authorization and settlement capabilities, as well as instant access to funds and payouts. We also help merchants connect with their customers, process exchanges and returns, and manage risk. We help reduce the friction typically involved in cross-border commerce by offering consumers a simple payment experience and by enabling merchants to extend their reach to consumers in the global markets in which our services are available.

We earn revenues primarily by charging fees for completing payment transactions for our customers and other payment-related services, which are typically based on the volume of activity processed on our payments platform. We also generate revenue from customers on fees charged for foreign currency conversion, for instant transfers from their PayPal or Venmo account to their bank account or debit card, and to facilitate the purchase and sale of cryptocurrencies; however, we generally do not charge customers to fund or draw from their accounts. We also earn revenue by providing other value added services, which are comprised primarily of revenue earned through partnerships, interest and fees from our merchant and consumer credit products, interest earned on certain assets underlying customer balances, referral fees, subscription fees, and gateway services.

KEY PERFORMANCE METRICS

pypl-20221231_g4.jpg

We measure the scale of our platform and the relevance of our products and services to our customers through certain metrics, including total payment volume, payment transactions, and active accounts:

Total payment volume ("TPV") is the value of payments, net of payment reversals, successfully completed on our payments platform or enabled by PayPal via a partner payment solution, not including gateway-exclusive transactions.

Number of payment transactions are the total number of payments, net of payment reversals, successfully completed on our payments platform or enabled by PayPal via a partner payment solution, not including gateway-exclusive transactions.

An *active account* is an account registered directly with PayPal or a platform access partner that has completed a transaction on our platform, not including gateway-exclusive transactions, within the past 12 months. A platform access partner is a third party whose customers are provided access to PayPal's platform or services through such third-party's login credentials, including individuals and entities that utilize Hyperwallet's payout capabilities. A user may register on our platform to access different products and may register more than one account to access a product. Accordingly, a user may have more than one active account. The number of active accounts provides management with additional perspective on the overall scale of our platform, but may not have a direct relationship to our operating results.

OUR STRENGTHS

Our business is built on a strong foundation designed to drive growth and differentiate us from our competitors. A critical element of our overall growth strategy involves increasing the engagement of our active accounts, which we expect will contribute to growth in payment transactions, total payment volume, and net revenues. We believe that our competitive strengths include the following:

- *Two-sided network*—our payments platform connecting merchants and consumers enables PayPal to offer unique end-to-end product experiences while gaining valuable insights into how our customers use our platform. Our payments platform provides for digital and in-store (at the point of sale) transactions while being both technology and platform agnostic.

- *Merchant and consumer choice*—our branded and unbranded card processing payment solutions support an open ecosystem that provides choice to both merchants and consumers, enabling flexibility to make and receive payments using a wide variety of different funding options and digital wallet solutions.

- *Scale*—our global scale helps us to drive organic growth. As of December 31, 2022, we had 435 million active accounts, consisting of 400 million consumer active accounts and 35 million merchant active accounts in more than 200 markets around the world. A market is a geographic area or political jurisdiction, such as a country, territory, or protectorate, in which we offer some or all of our products and services. A country, territory, or protectorate is identified by a distinct set of laws and regulations. In 2022, we processed $1.36 trillion of TPV.

- *Trusted brands*—we have built and strengthened well-recognized and trusted brands, including PayPal, Braintree, Venmo, Xoom, Hyperwallet, PayPal Zettle, PayPal Honey, and Paidy. Our communications and marketing efforts across multiple geographies and demographic groups play an important role in building brand visibility, usage, and overall preference among customers.

- *Risk and compliance management*—our enterprise risk and compliance management program is designed to help secure customer information and to help ensure we process legitimate transactions around the world, while identifying and minimizing illegal, high-risk, or fraudulent transactions.

- *Regulatory licenses*—we believe that our regulatory licenses, which enable us to operate in markets around the world, are a distinct advantage and help support business growth.

MERCHANT AND CONSUMER PAYMENT SOLUTIONS

pypl-20221231_g5.jpg

During 2022, we reorganized our product organization to better align with merchants and consumers to help simplify decision making and enable our teams to innovate and launch new products and features more quickly and efficiently.

Merchant value proposition

We partner with our merchants to help grow and expand their businesses by providing global reach and powering all aspects of digital checkout. We offer alternative payment methods (including access to credit solutions), provide fraud prevention and risk management solutions, reduce merchant losses through proprietary protection programs, and offer tools and insights for utilizing data analytics to attract and engage customers and improve sales conversion. We employ a technology and platform agnostic approach intended to enable merchants of all sizes to quickly and easily provide digital checkout online, including through PayPal-branded checkout and unbranded card processing (primarily consisting of Braintree), as well as in-store at the point of sale, across all platforms and devices, and to securely and simply receive payments from their customers.

PayPal's payments platform enables merchants to accept all types of online and offline payments, including those made with the PayPal and Venmo digital wallets, our consumer credit products, credit cards and debit cards, and competing digital wallets, as well as other popular local payment methods. Our diversified suite of products and services is tailored to meet the needs of merchants regardless of their size or business complexity. We have expanded our merchant value proposition to enable payment acceptance at the point of sale through our PayPal and Venmo digital wallets and our PayPal Zettle point of sale solutions. We aim to offer a seamless, omni-channel solution that helps merchants manage and grow their business. Through our consumer-focused offerings, we provide simplified and personalized shopping experiences for consumers, including easier exchanges and returns, to help merchants drive increased conversion through higher consumer engagement.

We offer access to merchant finance products for certain small and medium-sized businesses through the PayPal Working Capital and PayPal Business Loan products, which we collectively refer to as our merchant finance offerings. The PayPal Working Capital product allows businesses to access a loan or cash advance for a fixed fee and based on their annual payment volume processed by PayPal. The PayPal Business Loan product provides businesses with short-term financing for a fixed fee based on an evaluation of both the applying business as well as the business owner. In the United States ("U.S."), these products are provided under a program agreement with an independent chartered financial institution. We believe that our merchant finance offerings enable us to deepen our engagement with our existing small and medium-sized merchants and expand services to new merchants by providing access to capital that may not be available from traditional banks or other lending providers.

We generate revenues from merchants primarily by charging fees for completing their payment transactions and other payment-related services. We also earn revenues from interest and fees earned on our merchant loans receivables.

Consumer value proposition

We focus on providing affordable, convenient, and secure consumer financial products and services intended to democratize the management and movement of money. We provide consumers with a digital wallet that enables them to send payments to merchants more safely using a variety of funding sources, which may include a bank account, a PayPal or Venmo account balance, our consumer credit products, a credit card, a debit card, certain cryptocurrencies, or other stored value products such as gift cards, and eligible rewards. Our goal is to create the simplest checkout experience possible for consumers both online and on mobile devices.

We also offer consumers P2P payment solutions through our PayPal, Venmo, and Xoom products and services. We enable both domestic and international P2P transfers across our payments platform. Our Venmo digital wallet in the U.S. is a leading mobile application used to move money between our customers and to make purchases at select merchants. Our Xoom international money transfer service enables our customers to send money to people around the world in a secure, fast, and cost-effective way. P2P is an important source of customer engagement and also serves as a customer acquisition channel that facilitates organic growth by enabling potential users to establish active accounts with PayPal or Venmo at the time they make or receive a P2P payment. We also focus on simplifying and personalizing shopping experiences for our consumers by offering tools for product discovery, price tracking, offers, convenient tracking and redemption options for their shopping rewards, and easier exchanges and returns, which help our merchants to increase consumer engagement and sales conversion.

We offer credit products to consumers in certain markets as a funding source at checkout, subject to approval of credit for the account holder. Our consumer credit offerings include our buy now, pay later products in the U.S., United Kingdom ("U.K."), France, and Germany, among others, and in Japan through Paidy. A key attribute of our buy now, pay later products is the absence of interest or consumer late fees for missed payments in most of the geographies where we offer them. Further, we offer consumer interest-bearing installment products for consumers in the U.S., issued by an independent chartered financial institution, and in Germany. In the U.S., consumers may apply for our PayPal- and Venmo-branded consumer credit cards and our PayPal Credit revolving consumer credit product, which are offered through a partnership with an independent chartered financial institution. We offer a PayPal-issued PayPal Credit product in the U.K. We believe that our consumer credit products help enable us to increase engagement with consumers and merchants on our two-sided network.

We have expanded our consumer value proposition through enhancements to the PayPal and Venmo digital wallets, which provide functionality to enable consumers to more easily checkout, explore deals and offers, track and redeem rewards, and to transact with cryptocurrencies, including buying, holding, selling, sending, and receiving them in certain markets. Our goal is to drive increased consumer engagement by providing consumers with a comprehensive set of services to manage their finances and enhance their ability to shop online and in person.

We generate revenue from consumers on: fees charged for foreign currency conversion, instant transfers from their PayPal or Venmo account to their bank account or debit card, and to facilitate the purchase and sale of cryptocurrencies; interest, fees, or other revenue from our credit products; and other miscellaneous fees.

PROTECTING MERCHANTS AND CONSUMERS

Protecting merchants and consumers on our payments platform from financial and fraud loss is important to successfully competing and sustainably growing our business. Fraudulent activities, such as account takeover, identity theft (including stolen financial information), and malicious activities by counterparties, represent a significant risk to merchants and consumers, as well as their payment partners. We provide merchants and consumers with protection programs for certain purchase transactions completed on our payments platform. We believe that these programs, which help protect both merchants and consumers from financial loss resulting from fraud and counterparty non-performance, are generally consistent with or broader than protections provided by other participants in the payments industry. Our protection programs are designed to promote confidence on both the part of consumers, who will only be required to pay in certain circumstances, such as receiving their purchased item in the condition significantly as described, and merchants, who will receive payment for delivering an item to the customer.

Our ability to help protect both merchants and consumers is based largely on our proprietary, end-to-end payments platform and our ability to utilize the data from both sides of transactions on our two-sided network, specifically from buyers and sellers and from senders and receivers of payments. Our ongoing investment in systems and processes is designed to enhance the safety and security of our products and reflects our goal of having PayPal recognized as one of the world’s most trusted payments brands.

COMPETITION

The global payments industry is highly competitive, dynamic, highly innovative, and increasingly subject to regulatory scrutiny and oversight. Many of the areas in which we compete evolve rapidly with innovative and disruptive technologies, shifting user preferences and needs, price sensitivity of merchants and consumers, and frequent introductions of new products and services. Competition also may intensify as new competitors emerge, businesses enter into business combinations and partnerships, and established companies in other segments expand to become competitive with various aspects of our business.

We compete with a wide range of businesses. Some of our current and potential competitors are or may be larger than we are, have larger customer bases, greater brand recognition, longer operating histories, a dominant or more secure position, broader geographic scope, volume, scale, resources, and market share than we do, or offer products and services that we do not offer. Other competitors are or may be smaller or younger companies that may be more agile in responding to regulatory and technological changes and customer preferences.

We differentiate ourselves to merchants through our ability to innovate and develop products and services that offer new payment experiences for our merchants, demonstrate that they may achieve incremental sales by using and offering our services to consumers, support transactions on our payments platform across varied technologies and payment methods, through the simplicity and transparency of our fee structure, our seller protection programs, analytics, and risk management, as well as other merchant services. In addition, we differentiate ourselves to consumers through the ability to use our products and services across multiple commerce channels, including e-commerce, mobile, and payments at the point of sale, and without sharing their financial information with the merchant or any other party they are paying; our customer service, dispute resolution, and purchase protection programs; and our ability to simplify and personalize shopping experiences. We invest resources towards improving our products and services, offering choice in payment options, providing excellent customer service, and building brands that merchants and consumers trust.

Our business faces competition from a wide range of businesses and from all forms of physical and electronic payments. We face competition from banks and financial institutions, which provide traditional payment methods (particularly credit cards and debit cards (collectively, “payment cards”), electronic bank transfers, and credit), payment networks that facilitate payments for payment cards or proprietary retail networks, payment card processors, and “card on file” services. We also face competition from providers offering a variety of payment products and services, including tokenized and contactless payment cards, digital wallets and mobile payments solutions, credit, installment or other buy now pay later methods, real-time payment systems, P2P payments and money remittance services, card readers and other devices or technologies for payment at point of sale, virtual currencies and distributed ledger technologies, and tools that simplify and personalize shopping experiences for consumers and merchants. Our products and services face competition from all forms of payments, which include paper-based payments (primarily cash and checks), credit cards, debit cards, electronic bank transfers, account-to-account payments, credit, installment methods, digital wallets and mobile payment solutions, contactless payments (including contactless cards, tokenized cards, Near Field Communication (NFC) based solutions, and Quick Response (QR) code-based solutions), and virtual currencies, such as cryptocurrencies and stablecoins.

In addition to the discussion in this section, see “Item 1A. Risk Factors” under the caption “*We face substantial and increasingly intense competition worldwide in the global payments industry”* for further discussion of the potential impact of competition on our business.

STRATEGY

Our ability to grow revenue is affected by, among other things, the macroeconomic environment and its impact on consumer spending patterns, merchant and consumer adoption of digital payment methods, the expansion of multiple commerce channels, the growth of mobile devices and merchant and consumer applications on those devices, the growth of consumers globally with internet and mobile access, the pace of transition from cash and checks to digital forms of payment, our share of the digital payments market, and our ability to innovate and introduce new products, services, and features that merchants and consumers value. Our strategy to drive growth in our business includes the following:

- *Growing our core business*: through expanding our global capabilities, customer base and scale, increasing our customers’ engagement and use of our products and services by better addressing their everyday needs to access, manage, and move money, creating seamless checkout experiences, and expanding the adoption of our solutions by merchants and consumers;

- *Expanding our value proposition for merchants and consumers*: by being technology and platform agnostic, partnering with our merchants to grow and expand their business online and in-store, and providing consumers with simple, secure, and flexible ways to manage and move money across different markets, merchants, and platforms, and simplifying their shopping experiences;

- *Forming and expanding strategic partnerships*: by building new strategic partnerships and deepening existing ones to provide better experiences for our customers, offer greater choice and flexibility, acquire new customers, and reinforce our role in the payments ecosystem; and

- *Seeking new areas of growth*: organically and through acquisitions and strategic investments in our existing and new international markets and focusing on innovation in both the digital and physical world.

ESG MANAGEMENT

PayPal is committed to creating a more inclusive global economy and advancing our core values of Inclusion, Innovation, Collaboration, and Wellness across our communities, workforce, and strategies. We manage priority ESG risks and opportunities organized across four key pillars: (1) employees and culture, (2) social innovation, (3) environmental sustainability, and (4) responsible business practices. We believe this integrated, enterprise-wide approach to managing our global business responsibly helps to enable us to create value for all our stakeholders, including our stockholders, employees, partners, and communities. We continue to advance and prioritize efforts to manage key non-financial factors critical to our long-term business, including progress on our science-based approach to reducing our climate change impacts, targeted investments and partnerships to address the racial wealth gap and empower underserved communities and businesses, ongoing programmatic development intended to foster an inclusive culture across the employee experience, and further enhancements to support the safety and security of our products and platform. We take this commitment seriously and endeavor to provide transparent disclosures on our progress through our annual Global Impact Report and other communications.

TECHNOLOGY

Our payments platform utilizes a combination of proprietary and third-party technologies and services intended to facilitate transactions efficiently and securely between millions of merchants and consumers worldwide across different channels, markets, and networks. Our payments platform connects with financial service providers around the world and allows consumers to make purchases using a wide range of payment methods, regardless of where a merchant is located. Consumers who use our payments platform can send payments in more than 200 markets around the world and in nearly 150 currencies, withdraw funds to their bank accounts in 56 currencies, and hold balances in their PayPal accounts in 25 currencies.

We have developed intuitive user interfaces, customer tools, transaction management databases, and payment network integrations on our platform designed to enable our customers to utilize our suite of products and services. Our payments platform, open application programming interfaces, and developer tools are designed to enable developers to innovate with ease and offer robust solutions to our global ecosystem of merchants and consumers, while at the same time helping to maintain the security of our customers' information.

The technology infrastructure supporting our payments platform is designed to simplify the storage and processing of large amounts of data and facilitate the deployment and operation of large-scale global products and services in both our own data centers and when hosted by third-party cloud service providers. Our technology infrastructure is designed around industry best practices intended to reduce downtime and help ensure the resiliency of our payments platform in the event of outages or catastrophic occurrences. Our payments platform incorporates multiple layers of protection for business continuity and system redundancy purposes and to help mitigate cybersecurity risks. We have a comprehensive cybersecurity program designed to protect our technology infrastructure and payments platform against cybersecurity threats, which includes regularly testing our systems to identify and address potential vulnerabilities. We strive to continually improve our technology infrastructure and payments platform to enhance the customer experience and to increase efficiency, scalability, and security.

For additional information regarding risks relating to our technology infrastructure and cybersecurity, see the information in "Item 1A. Risk Factors" under the captions "*Cyberattacks and security vulnerabilities could result in serious harm to our reputation, business, and financial condition*" and "*Business interruptions or systems failures may impair the availability of our websites, applications, products or services, or otherwise harm our business*."

RESEARCH AND DEVELOPMENT

Our total research and development expense was $1.7 billion, $1.6 billion, and $1.4 billion in 2022, 2021, and 2020, respectively.

INTELLECTUAL PROPERTY

The protection of our intellectual property, including our trademarks, copyrights, domain names, trade dress, patents, and trade secrets, is important to the success of our business. We seek to protect our intellectual property rights by relying on applicable laws, regulations, and administrative procedures in the U.S. and internationally. We have registered our core brands as domain names and as trademarks in the U.S. and many international jurisdictions. We also have an active program to secure and enforce trademarks and domain names that correspond to our brands in markets of interest. We have filed and continue to file patent applications in the U.S. and in international jurisdictions covering certain aspects of our proprietary technology and new innovations. We also rely on contractual restrictions to protect our proprietary rights when offering or procuring products and services. We routinely enter into confidentiality and invention assignment agreements with our employees and contractors, and non-disclosure agreements with parties with whom we conduct business to control access to, and use and disclosure of, our proprietary information.

For additional information regarding risks relating to our intellectual property, see the information in "Item 1A. Risk Factors" under the captions "*Third parties may allege that we are infringing their patents and other intellectual property rights*" and "*We may be unable to protect or enforce our intellectual property*."

GOVERNMENT REGULATION

We operate globally and in a rapidly evolving regulatory environment characterized by a heightened focus by regulators globally on all aspects of the payments industry, including countering terrorist financing, anti-money laundering, privacy, cybersecurity, and consumer protection. The laws and regulations applicable to us, including those enacted prior to the advent of digital payments, continue to evolve through legislative and regulatory action and judicial interpretation. New or changing laws and regulations, including changes to their interpretation and implementation, as well as increased penalties and enforcement actions related to non-compliance, could have a material adverse impact on our business, results of operations, and financial condition. We monitor these areas closely and are focused on designing compliant solutions for our customers.

Government regulation impacts key aspects of our business. We are subject to the laws and regulations applicable to the payments industry in the markets we operate, which are subject to interpretation and change.

Payments regulation. Various laws and regulations govern the payments industry in the U.S. and internationally. In the U.S., PayPal, Inc. (a wholly-owned subsidiary) holds licenses to operate as a money transmitter (or its equivalent) in the states where such licenses are required, as well as in the District of Columbia and certain territories. These licenses include not only the PayPal-branded products and services offered in these locations, but also our Venmo, Hyperwallet, and Xoom products and services to the extent offered in these locations. As a licensed money transmitter, PayPal is subject to, among other requirements, restrictions with respect to the investment of customer funds, reporting requirements, bonding requirements, and inspection by state regulatory agencies. In certain cases, these licenses also generally cover PayPal's service enabling customers to buy, hold, transfer, and sell cryptocurrency directly from their PayPal or Venmo account. In the State of New York, PayPal holds a full Bitlicense issued by the New York Department of Financial Services to offer cryptocurrency services in the state.

Outside the U.S., we provide similar services customized for various countries and foreign jurisdictions through our foreign subsidiaries. The activities of those non-U.S. entities are, or may be, supervised by a financial regulatory authority in the jurisdictions in which they operate. Among other regulatory authorities, the Luxembourg Commission de Surveillance du Secteur Financier (the "CSSF"), the U.K. Financial Conduct Authority ("FCA"), the Australian Prudential Regulation Authority, the People's Bank of China, the Monetary Authority of Singapore, the Reserve Bank of India, the Central Bank of Russia, and the Central Bank of Brazil have asserted jurisdiction over some or all of our activities in their respective jurisdictions. This list is not exhaustive, and there are numerous other regulatory agencies which have asserted or may assert jurisdiction over our activities.

In addition, financial services regulators in various jurisdictions, including the U.S. and the European Union ("EU"), have implemented authentication requirements for banks and payment processors intended to reduce online fraud, which could impose significant costs, make it more difficult for new customers to open PayPal accounts, and reduce the ease of use of our products.

Banking agency supervision. We serve our customers in the EU and U.K. through PayPal (Europe) S.à.r.l. et Cie, S.C.A. ("PayPal (Europe)"), a wholly-owned subsidiary that is licensed and subject to regulation as a credit institution in Luxembourg by the CSSF. Under the U.K.'s Temporary Permissions Regime, PayPal is deemed to be authorized and regulated by the U.K. FCA as a result of Brexit. Consequently, we must comply with rules and regulations of the European banking industry, including those related to capitalization, funds management, corporate governance, anti-money laundering, disclosure, reporting, and inspection. We are, or may be, subject to banking-related regulations in other countries now or in the future related to our role in the financial industry. In addition, based on our relationships with our partner financial institutions, we are, or may be, subject to indirect regulation and examination by the regulators of these partner financial institutions.

Lending regulation. Our U.S. consumer short-term, interest-free, installment product is subject to federal and state laws governing consumer credit and debt collection. PayPal holds multiple state licenses as the lender of this product. Paidy, Inc. holds multiple licenses for the issuance of its consumer installment products in Japan and is registered with the Ministry of Economy, Trade and Industry as a Comprehensive Credit Purchase Intermediary. In Australia, PayPal Credit Pty Limited offers a consumer short-term, interest-free, installment product that is exempt from regulation by the primary consumer credit legislation, but is subject to other laws which cover the provision of financial services, credit reporting, debt collection, and privacy. PayPal's consumer short-term, interest-free, installment products in the U.K., France, Germany, Spain, and Italy are generally exempt from primary consumer credit legislation; however, certain consumer lending laws, consumer protection, and banking transparency regulations apply to this activity.

Our U.S. consumer interest-bearing installment product is subject to federal and state laws and is offered by an independent chartered financial institution. PayPal's interest-bearing installment product for consumers in Germany is subject to applicable local laws such as consumer (lending) laws, consumer protection, or banking transparency regulations. These loans are originated by PayPal (Europe).

PayPal and Venmo co-branded consumer credit cards and the PayPal Credit revolving consumer credit product are issued by an independent chartered financial institution in the U.S., and are subject to laws and regulations governing these programs. PayPal Credit in the U.K. is a regulated, revolving consumer credit product subject to applicable local laws and regulations.

Our U.S. merchant lending products are subject to federal and state regulations and are offered by an independent chartered financial institution. Our merchant lending products offered in Germany, France and the Netherlands are subject to the laws of Luxembourg and certain local laws, and our merchant lending product offered in the U.K. is subject to U.K. regulation. The loans offered to European and U.K. merchants are originated by PayPal (Europe). Our merchant lending product in Australia is subject to the laws of Australia and originated by PayPal Credit Pty Limited.

Consumer Financial Protection Bureau ("CFPB"). The CFPB has significant authority to regulate consumer financial products in the U.S., including consumer credit, deposits, payments, and similar products. As a large market participant of remittance transfers, the CFPB has direct supervisory authority over our business. The CFPB and similar regulatory agencies in other jurisdictions may have broad consumer protection mandates that could result in the promulgation and interpretation of rules and regulations that may affect our business.

Anti-money laundering, counter-terrorist financing, and sanctions. PayPal is subject to anti-money laundering ("AML") laws and regulations in the U.S. and other jurisdictions, as well as laws designed to prevent the use of the financial systems to facilitate terrorist activities. Our AML program is designed to prevent our payments platform from being used to facilitate money laundering, terrorist financing, and other illicit activities, or to do business in countries or with persons and entities included on designated country or person lists promulgated by the U.S. Department of the Treasury's Office of Foreign Assets Controls and equivalent authorities in other countries. Our AML and sanctions compliance programs, overseen by our AML/Bank Secrecy Act Officer, are composed of policies, procedures, and internal controls, and are designed to address these legal and regulatory requirements and assist in managing money laundering and terrorist financing risks.

Interchange fees. Interchange fees associated with four-party payments systems are being reviewed or challenged in various jurisdictions. For example, in the EU, the Multilateral Interchange Fee Regulation caps interchange fees for credit and debit card payments and provides for business rules to be complied with by any company dealing with payment card transactions, including PayPal. As a result, the fees that we collect in certain jurisdictions may become the subject of regulatory challenge.

Data protection and privacy. We are subject to a number of laws, rules, directives, and regulations ("privacy and data protection laws") relating to the collection, use, retention, security, processing, and transfer (collectively, "processing") of personally identifiable information about our customers, our merchants' customers, and employees ("personal data") in the countries where we operate. Our business relies on the processing of personal data in many jurisdictions and the movement of data across national borders. As a result, much of the personal data that we process, which may include certain financial information associated with individuals, is subject to one or more privacy and data protection laws in one or more jurisdictions. In many cases, these laws apply not only to third-party transactions, but also to transfers of information between or among us, our subsidiaries, and other parties with which we have commercial relationships.

Regulatory scrutiny of privacy, data protection, cybersecurity practices, and the processing of personal data is increasing around the world. Regulatory authorities are continuously considering numerous legislative and regulatory proposals and interpretive guidelines that may contain additional privacy and data protection obligations. Many jurisdictions in which we operate have adopted, or are in the process of adopting, or amending data privacy legislation or regulation aimed at creating and enhancing individual privacy rights. In addition, the interpretation and application of these privacy and data protection laws in the U.S., Europe, and elsewhere are subject to change and may subject us to increased regulatory scrutiny and business costs.

Anti-corruption. PayPal is subject to applicable anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, and similar laws in the jurisdictions in which we operate. Anti-corruption laws generally prohibit offering, promising, giving, accepting, or authorizing others to provide anything of value, either directly or indirectly, to or from 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. We have implemented policies, procedures, and internal controls that are designed to comply with these laws and regulations.

Additional regulatory developments. Various regulatory agencies continue to examine and implement laws governing a wide variety of issues, including virtual currencies, identity theft, account management guidelines, disclosure rules, cybersecurity, competition, and marketing, which may impact PayPal's business. Certain governments around the world are adopting laws and regulations pertaining to ESG performance, transparency, and reporting, including those related to general corporate ESG disclosures (e.g., the EU Corporate Sustainability Reporting Directive) as well as topical reporting and risk management requirements, such as obligations related to the management of climate-related risks.

For an additional discussion on governmental regulation affecting our business, please see "Item 1A. Risk Factors" and "Item 3. Legal Proceedings" included in this Form 10-K.

HUMAN CAPITAL

At PayPal, we consider the management of our global talent (human capital) to be essential to the ongoing success of our business. As of December 31, 2022, we employed approximately 29,900 people globally, with 44% in the Americas, 43% in Asia-Pacific, and 13% in Europe and the Middle East. Our global employees work predominantly full-time and represent nearly 150 nationalities, across 27 countries, including approximately 11,800 located in the U.S.

Attracting, recruiting, developing, and retaining diverse talent enables us to provide our customers with products and services that help them to thrive in the global economy, and serve our other stakeholders. In 2022, we developed 12 leadership principles based on our four core values that establish a common set of expectations for all employees. We began integrating these principles across our global talent strategy to help shape our programs throughout the employee lifecycle and achieve key business priorities. We also remain focused on promoting the physical, mental, and financial wellness of our employees, particularly as our workforce continues to navigate changes in where and how we work.

pypl-20221231_g6.jpg

Employee engagement

We use employee feedback to directly inform the ongoing development of our employee programs. In addition to administering an annual survey to gather input from our global workforce, we also conducted specific surveys to gather direct employee feedback on our internal communications approach and evolving workplace preferences. For our 2022 annual employee survey, we heard from 83% of our global employees. Our engagement score, which reflects employees that would recommend PayPal to their peers and/or are happy at PayPal was 79%. Our score measuring intent to stay was 78%, which reflects an employee's expectation to remain employed with the company in two years. Additionally, we observed improvements in employee scores regarding collaboration and manager support. In 2022, we enhanced our survey to incorporate viewpoints on the employee experience, diversity, inclusion, equity, and belonging ("DIE&B") efforts, and our leadership principles, including specific questions on working style and strategic direction. The detailed scores are shared across the organization and analyzed to understand differences by geography, demographics, business function, and job level, and to help identify opportunities for further improvement.

Talent acquisition, development, and retention

As a leading technology platform that enables digital payments and simplifies commerce experiences, we compete for top global talent around the world. We believe that a strong culture focused on employee experiences that enables advancement, learning, and individual career insights is essential to the successful acquisition, development, and retention of diverse talent. Accordingly, we have implemented programs focused on inclusive hiring practices and extending our talent pipeline through targeted partnerships, reimagined our career development program for individuals and managers, extended individual coaching and mentorship programs (particularly for underrepresented and technical talent), and advanced efforts for employees to grow through self-paced and community learning experiences.

Employee wellness

We remain focused on promoting the holistic well-being of our employees, including resources, programs, and services to support our employees' physical, mental, and financial wellness. In 2022, our initiatives included extending our Global Wellness Days for all employees to take time to rest and recharge, providing resources, trainings, and workshops to foster emotional well-being, preserving workplace flexibility through Crisis Leave and other programs, and strategically extending employee benefits to additional global markets. We also continued our efforts to strengthen employee financial wellness, including offering individual employee financial coaching, promoting the prioritization of employee financial health across the private sector through the Worker Financial Wellness Initiative, and improving our internal measurement and evaluation approaches to identify targeted opportunities for further enhancements. Through our global community impact program, we support our employees' individual passions and communities by matching eligible employee donations and volunteer time with non-profit organizations up to $2,500 annually per employee.

Diversity, inclusion, equity, and belonging

We believe that fostering DIE&B is critical to our global talent strategy and pivotal to building a culture that embraces individual characteristics, values diversity, minimizes barriers, and enhances feelings of security and support across the workplace. We are committed to equal pay for equal work, promoting enterprise-wide inclusive learning opportunities, and partnering with leading organizations to embed DIE&B considerations into our talent strategy. We believe that our strong commitment to DIE&B is evident at all levels of the organization from our Board of Directors to our executive leadership team to our global workforce. As of December 31, 2022, 50% of our Board and 64% of our senior leadership team identified as women and/or from a diverse ethnic group. Across our workforce, we reached 56% overall diverse workforce representation, including 44% global gender diversity (inclusive of self-identified women and non-binary employees), and 54% U.S. ethnic diversity, as of December 31, 2022. Additional U.S. workforce diversity metrics can be found in our public EEO-1 reports and annual Global Impact Report available at https://about.pypl.com/values-in-action/reporting/default.aspx.

Workforce representation is only one aspect of our broader DIE&B strategy. Through the leadership of our Global Head of DIE&B and dedicated DIE&B team, along with functional collaboration and accountability, we are focused on strengthening existing efforts and piloting new initiatives to promote an inclusive culture. In 2022, we continued our support for underrepresented communities and employees through activities such as enhanced strategic partnerships, new learning modules to promote effective sponsorship and inclusive performance management, and new tools and resources to incorporate DIE&B considerations across the business. We continue to evaluate DIE&B progress across the company and as part of the individual performance assessment under our 2022 annual incentive plan for our senior executives. In addition, we empower eight employee resource groups to promote community and belonging for employees that identify as Black, Latinx/Hispanic, women, interfaith, veterans, LGBTQ+, Asian, and disabled persons and their allies. These groups drive ongoing employee engagement around the world for all employees, regardless of background, to support and champion their peers and related causes.

Our evolving workplace

We remain focused on creating a culture of flexibility and community by designing ways to collaborate across diverse workplace models, whether working virtually, on-site, or using a hybrid approach. We empower functional leadership to determine the most appropriate workplace strategy for their teams to optimize employee productivity and engagement and deliver on business priorities. Across PayPal, we are focused on providing tools and resources to support our diverse and distributed teams. We believe this flexible approach has broadened our potential global talent pools.

As part of our annual ESG reporting, we provide additional information on our global talent strategy, including detailed representation metrics, in our Global Impact Report.

AVAILABLE INFORMATION

The address of our principal executive offices is PayPal Holdings, Inc., 2211 North First Street, San Jose, California 95131. Our website is located at www.paypal.com, and our investor relations website is located at https://investor.pypl.com. From time to time, we may use our investor relations site and other online and social media channels, including the PayPal Newsroom (https://newsroom.paypal-corp.com/), Twitter handles (@PayPal and @PayPalNews), LinkedIn page (https://www.linkedin.com/company/paypal), Facebook page (https://www.facebook.com/PayPalUSA/), YouTube channel (https://www.youtube.com/paypal), Dan Schulman's LinkedIn profile (https://www.linkedin.com/in/dan-schulman/), Gabrielle Rabinovitch's LinkedIn profile (https://www.linkedin.com/in/gabriellerabinovitch/), Dan Schulman's Facebook page (https://www.facebook.com/DanSchulmanPayPal/), and Dan Schulman's Instagram page (https://www.instagram.com/dan_schulman/) as a means of disclosing information about the Company, including information which could be deemed to be material to investors. Our Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports are available free of charge on our investor relations website as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at http://www.sec.gov. The content of our websites and information we may post on, provide to, or accessible through online and social media channels, including those mentioned above, are not incorporated by reference into this Form 10-K or in any other report or document we file with the SEC, and any references to our websites or online and social media channels are intended to be inactive textual references only.

ITEM 1A. RISK FACTORS

You should carefully consider the risks and uncertainties described below, in addition to other information appearing in this Form 10-K, including our consolidated financial statements and related notes, for important information regarding risks and uncertainties that could affect us. These risk factors do not identify all risks we face, and additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business. If any of the following risks actually occur, our business, financial condition, results of operations, future prospects, and the trading price of our common stock could be materially and adversely affected.

CYBERSECURITY AND TECHNOLOGY RISKS

Cyberattacks and security vulnerabilities could result in serious harm to our reputation, business, and financial condition.

The techniques used to attempt to obtain unauthorized or illegal access to systems and information (including customers' personal data), disable or degrade service, exploit vulnerabilities, or sabotage systems are constantly evolving. In some circumstances, these attempts may not be recognized or detected until after they have been launched against a target. Unauthorized parties will continue to attempt to gain access to our systems or facilities through various means, including through hacking into our systems or facilities or those of our customers, partners, or vendors, and attempting to fraudulently induce users of our systems (including employees, vendor and partner personnel and customers) into disclosing user names, passwords, payment card information, multi-factor authentication application access or other sensitive information used to gain access to such systems or facilities. This information may, in turn, be used to access our customers' confidential personal or proprietary information and financial instrument data that are stored on or accessible through our information technology systems and those of third parties with whom we partner. This information may also be used to execute fraudulent transactions or otherwise engage in fraudulent actions. Numerous and evolving cybersecurity threats, including advanced and persisting cyberattacks, cyberextortion, distributed denial-of-service attacks, ransomware, spear phishing and social engineering schemes, the introduction of computer viruses or other malware, and the physical destruction of all or portions of our information technology and infrastructure and those of third parties with whom we partner, are becoming increasingly sophisticated and complex, may be difficult to detect, and could compromise the confidentiality, availability, and integrity of the data in our systems, as well as the systems themselves.

We believe that cybercriminals may target PayPal due to our name, brand recognition, types of data (including sensitive payments- and identity-related data) that customers provide to us, and the widespread adoption and use of our products and services. We have experienced from time to time, and may experience in the future, breaches of our security measures due to human error, deception, malfeasance, insider threats, system errors, defects, vulnerabilities, or other irregularities. For example, in November 2017, we suspended the operations of TIO Networks ("TIO") (acquired in July 2017) as part of an investigation of security vulnerabilities of the TIO platform, and in December 2017, we announced that we had identified evidence of unauthorized access to TIO's network and the potential compromise of personally identifiable information for approximately 1.6 million TIO customers.

Any cyberattacks or data security breaches affecting the information technology or infrastructure of companies we acquire or of our customers, partners, or vendors (including data center and cloud computing providers) could have similar negative effects.

Under payment card network rules and our contracts with our payment processors, if there is a breach of payment card information stored by us or our direct payment card processing vendors, we could be liable to the payment card issuing banks, including for their cost of issuing new cards and related expenses. Cybersecurity breaches and other exploited security vulnerabilities could subject us to significant costs and third-party liabilities, result in improper disclosure of data and violations of applicable privacy and other laws, require us to change our business practices, cause us to incur significant remediation costs, lead to loss of customer confidence in, or decreased use of, our products and services, damage our reputation and brands, divert the attention of management from the operation of our business, result in significant compensation or contractual penalties from us to our customers and their business partners as a result of losses to or claims by them, or expose us to litigation, regulatory investigations, and significant fines and penalties. While we maintain insurance policies intended to help offset the financial impact we may experience from these risks, our coverage may be insufficient to compensate us for all losses caused by security breaches and other damage to or unavailability of our systems.

Business interruptions or systems failures may impair the availability of our websites, applications, products or services, or otherwise harm our business.

Our systems and operations and those of our service providers and partners have experienced from time to time, and may experience in the future, business interruptions or degradation of service because of distributed denial-of-service and other cyberattacks, insider threats, hardware and software defects or malfunctions, human error, earthquakes, hurricanes, floods, fires, and other natural disasters, public health crises (including pandemics), power losses, disruptions in telecommunications services, fraud, military or political conflicts, terrorist attacks, computer viruses or other malware, or other events. The frequency and intensity of weather events related to climate change are increasing, which could increase the likelihood and severity of such disasters as well as related damage and business interruption. Our corporate headquarters are located in the San Francisco Bay Area, a seismically active region in California. A catastrophic event that could lead to a disruption or failure of our systems or operations could result in significant losses and require substantial recovery time and significant expenditures to resume or maintain operations. Further, some of our systems, including those of companies that we have acquired, are not fully redundant and any failure of these acquired systems, including due to a catastrophic event, may lead to operational outages or delays. While we engage in disaster recovery planning and testing intended to mitigate risks from outages or delays, our planning and testing may not be sufficient for all possible outcomes or events. As a provider of payments solutions, we are also subject to heightened scrutiny by regulators that may require specific business continuity, resiliency and disaster recovery plans, and rigorous testing of such plans, which may be costly and time-consuming to implement, and may divert our resources from other business priorities. Any of the foregoing risks could have a material adverse impact on our business, financial condition, and results of operations.

We have experienced, and expect to continue to experience, system failures, cyberattacks, unplanned outages, and other events or conditions from time to time that have and may interrupt the availability, or reduce or adversely affect the speed or functionality, of our products and services and result in loss of revenue. A prolonged interruption of, or reduction in, the availability, speed, or functionality of our products and services could materially harm our business. Frequent or persistent interruptions in our services could permanently harm our relationship with our customers and partners and our reputation. If any system failure or similar event results in damage to our customers or their business partners, they could seek significant compensation or contractual penalties from us for their losses. These claims, even if unsuccessful, would likely be time-consuming and costly for us to address.

We continue to undertake system upgrades and re-platforming efforts designed to improve the availability, reliability, resiliency, and speed of our payments platform. These efforts are costly and time-consuming, involve significant technical complexity and risk, may divert our resources from new features and products, and may ultimately not be effective. Frequent or persistent site interruptions could lead to regulatory scrutiny, significant fines and penalties, and mandatory and costly changes to our business practices, and ultimately could cause us to lose existing licenses that we need to operate or prevent or delay us from obtaining additional licenses that may be required for our business.

We also rely on facilities, components, applications, software, and services supplied by third parties, including data center facilities and cloud data storage and processing services. From time to time, we have experienced interruptions in the provision of such facilities and services provided by these third parties. If these third parties experience operational interference or disruptions (including a cybersecurity incident), fail to perform their obligations, or breach their agreements with us, our operations could be disrupted or otherwise negatively affected, which could result in customer dissatisfaction, regulatory scrutiny, and damage to our reputation and brands, and materially and adversely affect our business. While we maintain insurance policies intended to help offset the financial impact we may experience from these risks, our coverage may be insufficient to compensate us for all losses caused by interruptions in our service due to systems failures and similar events.

In addition, any failure to successfully implement new information systems and technologies, or improvements or upgrades to existing information systems and technologies in a timely manner could adversely impact our business, internal controls, results of operations, and financial condition.

If we cannot keep pace with rapid technological developments to provide new and innovative products and services, the use of our products and services and, consequently, our revenues, could decline.

Rapid, significant, and disruptive technological changes impact the industries in which we operate, including payment technologies (including real-time payments, payment card tokenization, virtual currencies, distributed ledger and blockchain technologies, and proximity payment technology such as Near Field Communication and other contactless payments); internet browser technologies, that enable users to easily store their payment card information for use on any retail or e-commerce website; artificial intelligence and machine learning; developments in technologies supporting our regulatory and compliance obligations; and in-store, digital, and social commerce.

We expect that new technologies applicable to the industries in which we operate will continue to emerge and may be superior to, or render obsolete, the technologies we currently use in our products and services. We cannot predict the effects of technological changes on our business, which technological developments or innovations will become widely adopted, and how those technologies may be regulated. Developing and incorporating new technologies into new and existing products and services may require significant investment, take considerable time, and may not ultimately be successful. We rely in part on third parties, including some of our competitors, for the development of and access to new or evolving technologies. These third parties may restrict or prevent our access to, or utilization of, those technologies, as well as their platforms or products. Our ability to develop, provide or incorporate new technologies and adapt our existing products and services or develop future and new products and services using new technologies may be limited or restricted by industry-wide standards, platform providers, payments networks, changes to laws and regulations, changing customer expectations, third-party intellectual property rights, and other factors. If we are unable to develop and incorporate new technologies and adapt to technological changes and evolving industry standards in a timely or cost-effective manner, our business could be harmed.

LEGAL, REGULATORY AND COMPLIANCE RISKS

Our business is subject to extensive government regulation and oversight. Our failure to comply with extensive, complex, overlapping, and frequently changing rules, regulations, and legal interpretations could materially harm our business.

Our business is subject to complex and changing laws, rules, regulations, policies, and legal interpretations in the markets in which we offer services directly or through partners, including those governing: banking, credit, deposit taking, cross-border and domestic money transmission, prepaid access, foreign currency exchange, privacy, data protection, data governance, cybersecurity, banking secrecy, digital payments, cryptocurrency, payment services (including payment processing and settlement services), fraud detection, consumer protection, antitrust and competition, economic and trade sanctions, anti-money laundering, and counter-terrorist financing.

Regulators globally are increasingly exercising regulatory authority, oversight, and enforcement in a manner that impacts our business. Further, as we introduce new products and services and expand into new markets (including through acquisitions) and expand and localize our international activities, we expect to become subject to additional regulations, restrictions, and licensing requirements. In addition, because we facilitate sales of goods and provide services to customers worldwide, one or more jurisdictions may claim that we or our customers are required to comply with their laws, which may impose different, more specific, or conflicting obligations on us, as well as broader liability.

Any failure or alleged failure to comply with existing or new laws, regulations, or orders of any government authority (including changes to their interpretation) may subject us to significant fines and penalties, criminal and civil lawsuits, forfeiture of significant assets, and enforcement actions; result in additional compliance and licensure requirements; cause us to lose existing licenses or prevent or delay us from obtaining additional licenses that may be required for our business; increase regulatory scrutiny of our business; restrict or cease our operations; force us to make changes to our business practices, products or operations; lead to increased friction for customers; require us to engage in remediation activities; delay planned transactions, product launches or other activities, or divert management's time and attention from our business. The complexity of United States ("U.S.") federal and state and international regulatory and enforcement regimes, coupled with the global scope of our operations and the evolving global regulatory environment, could result in one or more events prompting a large number of overlapping investigations and legal and regulatory proceedings by multiple government authorities in different jurisdictions. While we have implemented policies and procedures designed to help ensure compliance with applicable laws and regulations, there can be no assurance that our employees, contractors, and agents will not violate such laws and regulations. Any of the foregoing could, individually or in the aggregate, harm our reputation, damage our brands and business, and adversely affect our results of operations and financial condition.

Payments Regulation

In the U.S., PayPal, Inc. (a wholly-owned subsidiary) holds licenses to operate as a money transmitter (or its equivalent) in the states where such licenses are required, as well as in the District of Columbia and certain territories. If we fail to comply with applicable laws or regulations required to maintain our licenses, we could be subject to liability and/or additional restrictions, forced to cease doing business with residents of certain states or territories, forced to change our business practices, or required to obtain additional licenses or regulatory approvals, which could impose substantial costs and harm our business.

While we currently allow our customers to send payments from approximately 200 markets, we allow customers in only approximately half of those markets (including the U.S.) to also receive payments, in some cases with significant restrictions on the manner in which customers can hold balances or withdraw funds. These restrictions may limit our ability to grow our business.

Outside of the U.S., we principally provide our services to customers in the European Economic Area ("EEA") and the United Kingdom ("U.K.") through PayPal (Europe), our wholly-owned subsidiary that is licensed and subject to regulation as a credit institution in Luxembourg. PayPal (Europe) may be subject to enforcement actions and significant fines if it violates applicable requirements. Additionally, compliance with applicable laws and regulations could become more costly and operationally difficult to manage due to potentially inconsistent interpretations and domestic regulations by various countries in the region. Applicable regulation relating to payments, anti-money laundering and digital services, which are key focus areas of regulators and subject to extensive new regulation, could subject us to additional and complex obligations, risks and associated costs. If the business activities of PayPal (Europe) exceed certain thresholds, or if the European Central Bank ("ECB") so determines, PayPal (Europe) may be deemed a significant supervised entity and certain activities of PayPal (Europe) would become directly supervised by the ECB, rather than by the Luxembourg Commission de Surveillance du Secteur Financier, which could subject us to additional requirements and would likely increase compliance costs. PayPal (Europe) is also subject to regulation by the ECB under the oversight framework for electronic payment instruments, schemes and arrangements (PISA), which may also lead to increased compliance obligations and costs.

In many of the other markets outside the U.S. in which we do business, we serve our customers through PayPal Pte. Ltd., our wholly-owned subsidiary based in Singapore. PayPal Pte. Ltd. is supervised by the Monetary Authority of Singapore ("MAS"). The Payment Services Act came into effect in Singapore in January 2020. PayPal Pte. Ltd. has submitted an application for a Major Payment Institution license to the MAS to continue to provide payments services, and is operating under an exemption from holding a license within a statutory transition period while the application is pending. Upon PayPal Pte. Ltd. obtaining this license, we will be required to comply with new regulatory requirements, which will result in increased operational complexity and costs for our Singapore and international operations.

In many of the markets outside the U.S. (other than Singapore) served by PayPal Pte. Ltd. or by local branches or subsidiaries subject to local regulatory supervision or oversight, as the case may be, there may be uncertainty whether our Singapore-based service is subject only to Singapore law or also to other local laws, and whether such local laws might require a payment processor like us to be licensed as a payments service, bank, financial institution, or otherwise.

There are substantial costs and potential product and operational changes involved in maintaining and renewing licenses, certifications, and approvals, and we could be subject to enforcement actions, fines, and litigation if we are found to violate any of these requirements. There can be no assurance that we will be able to (or decide to) continue to apply for or obtain any licenses, renewals, certifications, and approvals in any jurisdiction. In certain markets, we may need to rely on local banks or other partners to process payments and conduct foreign currency exchange transactions in local currency, and local regulators may use their authority over such local partners to prohibit, restrict, or limit us from doing business. Any of the foregoing could, individually or in the aggregate, result in substantial additional costs, delay or preclude planned transactions, product launches or improvements, require significant and costly operational changes, impose restrictions, limitations, or additional requirements on our business, products and services, or prevent or limit us from providing our products or services in a given market.

Cryptocurrency Regulation and Related Risks

Our current and planned customer cryptocurrency offerings could subject us to additional regulations, licensing requirements, or other obligations. Within the U.S., we are regulated by the New York Department of Financial Services as a virtual currency business, which does not qualify us to engage in securities brokerage or dealing activities. The regulatory status of particular cryptocurrencies is unclear under existing law. For example, if the SEC were to assert that any of the cryptocurrencies we support are securities, the SEC could assert that our activities involving that cryptocurrency require securities broker-dealer registration or other obligations under the federal securities laws. The rapidly evolving regulatory landscape with respect to cryptocurrency may subject us to additional licensing and regulatory obligations or to inquiries or investigations from the SEC, other regulators and governmental authorities, and require us to make product changes, restrict or discontinue product offerings, implement additional and potentially costly controls, or take other actions. If we fail to comply with regulations, requirements, prohibitions or other obligations applicable to us, we could face regulatory or other enforcement actions, potential fines, and other consequences.

We hold our customers' cryptocurrency assets through a third-party custodian. Financial and third-party risks related to our customer cryptocurrency offerings, such as inappropriate access to, theft, or destruction of cryptocurrency assets held by our custodian, insufficient insurance coverage by the custodian to reimburse us for all such losses, the custodian's failure to maintain effective controls over the custody and settlement services provided to us, the custodian's inability to purchase or liquidate cryptocurrency holdings, and defaults on financial or performance obligations by the custodian, or counterparty financial institutions, could expose our customers and us to loss, and therefore significantly harm our business, financial performance, and reputation.

We have selected a custodian partner, and may in the future select additional custodian partners, that are subject to regulatory oversight, capital requirements, maintenance of audit and compliance industry certifications, and cybersecurity procedures and policies. Nevertheless, operational disruptions at any such custodian, or such custodian's failure to safeguard cryptocurrency holdings could result in losses of customer assets, expose us to customer claims, reduce consumer confidence and materially impact our operating results and our cryptocurrency product offerings.

Custodial arrangements to safeguard cryptocurrency assets involve unique risks and uncertainties in the event of the custodian's bankruptcy. While other types of assets and some custodied cryptocurrencies have been deemed not to be part of the custodian's bankruptcy estate under various regulatory regimes, bankruptcy courts have not yet definitively determined the appropriate treatment of custodial holdings of digital assets in a bankruptcy proceeding. In the event of our custodian's bankruptcy, the lack of precedent and the highly fact-dependent nature of the determination could delay or preclude the return of custodied cryptocurrency assets to us or to our customers. Although, we contractually require our custodian to segregate our customer assets and not commingle them with proprietary or other assets, we cannot be certain that these contractual obligations, even if duly observed by the custodian, will be effective in preventing such assets from being treated as part of the custodian's estate under bankruptcy or other insolvency law. In that event, our claim on behalf of such customers against the custodian's estate for our customers' cryptocurrency assets could be treated as a general unsecured claim against the custodian, in which case our customers could seek to hold us liable for any resulting losses.

In addition, our cryptocurrency product offerings could have the effect of heightening or exacerbating many of the risk factors described in this "Risk Factors" section.

Lending Regulation

We hold a number of U.S. state lending licenses for our U.S. consumer short-term installment loan product, which is subject to federal and state laws governing consumer credit and debt collection. While the consumer short-term installment loan products that we offer outside the U.S. are generally exempt from primary consumer credit legislation, certain consumer lending laws, consumer protection or banking transparency regulations continue to apply to these products. Increased global regulatory focus on short-term installment products and consumer credit more broadly could result in laws or regulations requiring changes to our policies, procedures, operations, and product offerings, and restrict or limit our ability to offer credit products, and we could be subject to enforcement action, fines, and litigation if we are found to violate any aspects of applicable law or regulations.

Consumer Protection

Violations of federal and state consumer protection laws and regulations, including the Electronic Fund Transfer Act ("EFTA") and Regulation E as implemented by the Consumer Financial Protection Bureau ("CFPB"), could result in the assessment of significant actual damages or statutory damages or penalties (including treble damages in some instances) and plaintiffs' attorneys' fees. We are subject to, and have paid amounts in settlement of, lawsuits containing allegations that our business violated the EFTA and Regulation E or otherwise advance claims for relief relating to our business practices (e.g., that we improperly held consumer funds or otherwise improperly limited consumer accounts).

In addition, the CFPB, pursuant to its market-monitoring authority, may require us to provide extensive information on our products and offerings from time to time. In 2021, we received separate orders from the CFPB pursuant to such market-monitoring authority requiring us to provide, among other items, extensive information on our payment products, including with respect to the collection, use of, and access to data and consumer protections, as well as our Buy Now, Pay Later offerings.

PayPal principally offers its services in the EEA countries through a "passport" notification process through PayPal (Europe)'s Luxembourg regulator to regulators in other EEA member states in accordance with European Union ("EU") regulations, as well as in the U.K. through the Temporary Permissions Regime. Regulators in these countries could notify us of and seek to enforce local consumer protection laws that apply to our business, in addition to Luxembourg consumer protection laws, or seek to persuade the local regulator to order PayPal to conduct its activities in the local country directly or through a branch office. These or similar actions by these regulators could impose additional obligations and costs and impact our ability to expand our business in Europe and the U.K.

Anti-Money Laundering and Counter-Terrorist Financing; Economic and Trade Sanctions

Regulators globally continue to increase standards and expectations regarding anti-money laundering and counter-terrorist financing, and to expand the scope of existing laws and regulations to emerging products and markets, which may require us to further revise or expand our compliance program globally and/or in specific jurisdictions, including the procedures we use to verify the identity of our customers and to monitor international and domestic transactions. Such changes could have the effect of making compliance more costly and operationally difficult to manage, lead to increased friction for customers, and result in a decrease in business. Regulators regularly re-examine the transaction volume thresholds at which we must obtain and keep applicable records or the circumstances in which we must verify identities of customers, and any change to such obligations could result in greater compliance costs and impact our business. We are also required to comply with economic and trade sanctions administered by the U.S., the EU and its member states, the U.K., and other jurisdictions in which we operate. Non-compliance with anti-money laundering laws and regulations or economic and trade sanctions may subject us to significant fines, penalties, lawsuits, and enforcement actions, result in regulatory sanctions and additional compliance requirements, increase regulatory scrutiny of our business, restrict our operations, and damage our reputation and brands. Our compliance history may be considered by OFAC and other regulators as part of any potential future investigation of our sanctions regulation.

Privacy and Protection of Customer Data

The legal and regulatory environment relating to privacy and data protection laws continues to develop and evolve in ways we cannot predict, including with respect to technologies such as cloud computing, artificial intelligence, machine learning, cryptocurrency, and blockchain technology. Any failure or alleged failure by us to comply with our privacy policies as communicated to customers or with privacy and data protection laws could result in proceedings or actions against us by data protection authorities, other government agencies, or others, which could subject us to significant fines, penalties, judgments, and negative publicity, require us to change our business practices, increase the costs and complexity of compliance, result in reputational harm, and materially harm our business. Compliance with inconsistent privacy and data protection laws may also restrict or limit our ability to provide products and services to our customers.

PayPal relies on a variety of compliance methods to transfer personal data of EEA individuals to the U.S., including Binding Corporate Rules for internal transfers of certain types of personal data and Standard Contractual Clauses ("SCCs") as approved by the European Commission for transfers to and from third parties. In June 2021, the European Commission imposed new SCC requirements which impose certain contract and operational requirements on PayPal, its merchants, and vendors to adhere to certain affirmative duties, including requirements related to government access transparency, enhanced data subject rights, and broader third-party assessments to ensure safeguards necessary to protect personal data exported from PayPal's EEA customers and/or employees to countries outside the EEA. To the extent we rely on SCCs, we will potentially need to enter into new contractual arrangements reflecting the updated SCC requirements to avoid limitations on PayPal's ability to process EEA data in countries outside of the EEA.

Many jurisdictions in which we operate globally have enacted, or are in the process of enacting, data privacy legislation or regulations aimed at creating and enhancing individual privacy rights. For example, numerous U.S. states have enacted or are in the process of enacting state level data privacy laws and regulations governing the collection, use, and retention of their residents' personal information. The continued proliferation of privacy laws in the jurisdictions in which we operate is likely to result in a disparate array of privacy rules with unaligned or conflicting provisions, accountability requirements, individual rights, and national or local enforcement powers, which may subject us to increased regulatory scrutiny and business costs, and could lead to unintended consumer confusion.

We are subject to regulatory scrutiny and may be subject to legal proceedings under antitrust and competition laws.

We are subject to scrutiny by various government agencies regarding antitrust and competition laws and regulations in the U.S. and internationally, including in connection with proposed or implemented business combinations, acquisitions, investments, partnerships, commercial agreements and business practices. Some jurisdictions also provide private rights of action for competitors or consumers to assert claims of anticompetitive conduct. Companies and government agencies have in the past alleged, and may in the future allege, that our actions violate the antitrust or competition laws in the U.S. or other jurisdictions in which we operate or otherwise constitute unfair competition, or that our products and services are used so broadly that otherwise uncontroversial business practices could be deemed anticompetitive. Any claims or investigations, even if without merit, may be costly to defend or respond to, involve negative publicity, and cause substantial diversion of management's time and effort, and could result in reputational harm, significant judgments, fines and other remedial actions against us, require us to change our business practices, make product or operational changes, or delay or preclude planned transactions, product launches or improvements.

We are regularly subject to general litigation, regulatory scrutiny, and government inquiries.

We are regularly subject to claims, individual and class action lawsuits, arbitration proceedings, government and regulatory investigations, inquiries, actions or requests, and other proceedings alleging violations of laws, rules, and regulations with respect to competition, antitrust, intellectual property, privacy, data protection, information security, anti-money laundering, counter-terrorist financing, sanctions, anti-bribery, anti-corruption, consumer protection (including unfair, deceptive, or abusive acts or practices), fraud, accessibility, securities, tax, labor and employment, commercial disputes, services, charitable fundraising, contract disputes, escheatment of unclaimed or abandoned property, product liability, use of our services for illegal purposes, the matters described in "Note 13—Commitments and Contingencies—Litigation and Regulatory Matters—General Matters" to our consolidated financial statements, and other matters. The number and significance of these disputes and inquiries is expected to continue to increase as our products, services, and business expand in complexity, scale, scope, and geographic reach, including through acquisitions of businesses and technology. Investigations and legal proceedings are inherently uncertain, expensive and disruptive to our operations, and could result in substantial judgments, fines, penalties or settlements, negative publicity, substantial diversion of management's time and effort, reputational harm, criminal sanctions, or orders that prevent or limit us from offering certain products or services; require us to change our business practices in costly ways, develop non-infringing or otherwise altered products or technologies, or pay substantial royalty or licensing fees; or delay or preclude planned transactions or product launches or improvements. Determining legal reserves or possible losses from such matters involves significant estimates and judgments and may not reflect the full range of uncertainties and unpredictable outcomes. We may be exposed to losses in excess of the amount recorded, and such amounts could be material. If any of our estimates and assumptions change or prove to have been incorrect, this could have a material adverse effect on our business, financial position, results of operations, or cash flows.

Third parties may allege that we are infringing their patents and other intellectual property rights.

We are frequently subject to litigation based on allegations of infringement or other violations of intellectual property rights. Intellectual property infringement claims against us may result from, among other things, our expansion into new business areas, including through acquisitions of businesses and technology, or new or expanded products and services and their convergence with technologies not previously associated with areas related to our business, products, and services. The ultimate outcome of any allegation or claim is often uncertain and any such claim, with or without merit, may be time-consuming to defend, result in costly litigation, divert management's time and attention from our business, result in reputational harm, and require us to, among other things, redesign or stop providing our products or services, pay substantial amounts to settle claims or lawsuits, satisfy judgments, or pay substantial royalty or licensing fees.

We may be unable to protect or enforce our intellectual property.

The protection of our proprietary rights, including our trademarks, copyrights, domain names, trade dress, patents and trade secrets, is important to the success of our business. Effective protection of our proprietary rights may not be available in every jurisdiction in which we offer our products and services. Although we have generally taken measures to protect our intellectual property, there can be no assurance that we will be successful in protecting or enforcing our rights in every jurisdiction, that our contractual arrangements will prevent or deter third parties from infringing or misappropriating our intellectual property, or that third parties will not independently develop equivalent or superior intellectual property rights. We may be required to expend significant time and resources to prevent infringement and enforce our rights, and we may be unable to discover or determine the extent of any unauthorized use of our proprietary rights. If we are unable to prevent third parties from infringing or otherwise violating our proprietary rights, the uniqueness and value of our products and services could be adversely affected, the value of our brands could be diminished, and our business could be adversely affected. We expect to continue to license in the future certain of our proprietary rights, such as trademarks or copyrighted material, to others. These licensees may take actions that diminish the value of our proprietary rights or harm our reputation. Any failure to adequately protect or enforce our proprietary rights, or significant costs incurred in doing so, could diminish the value of our intangible assets and materially harm our business.

BUSINESS AND OPERATIONS RISKS

We face substantial and increasingly intense competition worldwide in the global payments industry.

The global payments industry is highly competitive, dynamic, highly innovative, and increasingly subject to regulatory scrutiny and oversight. Many of the areas in which we compete evolve rapidly with innovative and disruptive technologies, shifting user preferences and needs, price sensitivity of merchants and consumers, and frequent introductions of new products and services. Competition also may intensify as new competitors emerge, businesses enter into business combinations and partnerships, and established companies in other segments expand to become competitive with various aspects of our business.

We compete with a wide range of businesses in every aspect of our business. Some of our current and potential competitors are or may be larger than we are, have larger customer bases, greater brand recognition, longer operating histories, a dominant or more secure position, broader geographic scope, volume, scale, resources, and market share than we do, or offer products and services that we do not offer. Other competitors are or may be smaller or younger companies that may be more agile in responding to regulatory and technological changes and customer preferences. Our competitors may devote greater resources to the development, promotion, and sale of products and services, and/or offer lower prices or more effectively offer their own innovative programs, products, and services. We often partner with other businesses, and the ability to continue establishing these partnerships is important to our business. Competition for relationships with these partners is intense, and there can be no assurance that we will be able to continue to establish, grow, or maintain these partner relationships. If we are unable to differentiate our products and services from those of our competitors, drive value for our customers, or effectively and efficiently align our resources with our goals and objectives, we may not be able to compete effectively. See "Item 1. Business—Competition" of this Form 10-K for further discussion of the competitive environment in the markets where we operate.

Changes to payment card networks or bank fees, rules, or practices could harm our business.

To process certain transactions, we must comply with applicable payment card, bank or other network (collectively, "network") rules. The rules govern all aspects of a transaction on the networks, including fees and other practices. From time to time, the networks have increased the fees and assessments that they charge for transactions that access their networks. Certain networks have also imposed special fees or assessments for transactions that are executed through a digital wallet such as the one that PayPal offers. Our payment processors may have the right to pass any increases in fees and assessments on to us and to increase their own fees for processing. Any increase in interchange fees, special fees, or assessments for transactions that we pay to the networks or our payment processors could make our pricing less competitive, increase our operating costs, and reduce our operating income, which could materially harm our business, financial condition, and results of operations.

In some jurisdictions, government regulations have required payment card networks to reduce or cap interchange fees. Any changes in interchange fee rates or limitations, or their applicability to PayPal, could adversely affect our competitive position against payment card service providers and the revenue we earn from our branded card programs, require us to change our business practices, and harm our business.

We may also be subject to fines and other penalties assessed by networks resulting from any rule violations by us or our merchants. The networks set and interpret their rules and have alleged from time to time that various aspects of our business model violate these rules. Such allegations may result in significant fines, penalties, damages, or other liabilities or require changes in our business practices that may be costly and adversely affect our business, results of operations and financial condition. The network rules may also increase the cost of, impose restrictions on, or otherwise impact the development of, our products which may negatively affect product deployment and adoption. The networks could adopt new operating rules or interpret or re-interpret existing rules that we or our payment processors might find difficult or impractical to follow, or costly to implement, which could require us to make significant changes to our products, increase our operational costs, and negatively impact our business. If we become unable or limited in our ability to accept certain payment types such as debit or credit cards, our business would be materially and adversely affected.

Changes in how consumers fund their PayPal transactions could harm our business.

We pay transaction fees when consumers fund payment transactions using credit cards, lower fees when consumers fund payments with debit cards, and nominal fees when consumers fund payment transactions by electronic transfer of funds from bank accounts, from an existing PayPal account balance or Venmo account balance, or through our PayPal branded consumer credit products. Our financial performance is sensitive to changes in the rate at which our consumers fund payments using payment cards, which can significantly increase our costs. Although we provide consumers in certain markets with the opportunity to use their existing PayPal account balance or Venmo account balance to fund payment transactions, some of our consumers may prefer to use payment cards, which may offer features and benefits not provided as part of their PayPal accounts. Any increase in the portion of our payment volume funded using payment cards or in fees associated with our funding mix, or other events or developments that make it more difficult or costly for us to fund transactions with lower-cost funding options, could materially and adversely affect our financial performance and significantly harm our business.

Our ability to receive the benefit of U.S. merchant financing offerings and certain U.S. installment loan products may be subject to challenge.

Merchant loans under our U.S. PayPal Working Capital ("PPWC") and PayPal Business Loan ("PPBL") products and certain U.S. installment loan products are provided by a state-chartered industrial bank under a program agreement with us, and we acquire the receivables generated by those loans from the state-chartered bank after origination. In June 2020, the Federal Deposit Insurance Corporation ("FDIC") approved a final rule clarifying that loans validly originated by state-chartered banks or insured branches of foreign banks remain valid throughout the lifetime of the loan, reflecting a similar rule finalized by the Office of the Comptroller of Currency ("OCC") in May 2020 for nationally chartered banks. The final rule reaffirms and codifies the so-called “valid-when-made doctrine,” which provides that the permissibility of an interest rate for a loan is determined when the loan is made and will not be affected by subsequent events such as sale, assignment, or other transfer. While a number of state attorneys general have unsuccessfully challenged these FDIC and OCC rules, there remains some uncertainty whether non-bank entities purchasing loan receivables originated by FDIC-insured, state-chartered banks may rely on federal preemption of state usury laws and other state laws. An adverse outcome of these or similar challenges, or changes to applicable laws and regulations or regulatory policy, could materially impact our U.S. PPWC, PPBL, certain installment products, and our business.

Our credit products expose us to additional risks.

We offer credit products to a wide range of consumers and merchants in the U.S. and various international markets. The financial success of these products depends largely on the effective management of related risk. The credit decision-making process for our consumer credit products uses proprietary methodologies and credit algorithms and other analytical techniques designed to analyze the credit risk of specific consumers based on, among other factors, their past purchase and transaction history with PayPal or Venmo and their credit scores. Similarly, proprietary risk models and other indicators are applied to assess merchants who desire to use our merchant financing offerings to help predict their ability to repay. These risk models may not accurately predict the creditworthiness of a consumer or merchant due to inaccurate assumptions, including those related to the particular consumer or merchant, market conditions, economic environment, or limited transaction history or other data. The accuracy of these risk models and the ability to manage credit risk related to our credit products may also be affected by legal or regulatory requirements, changes in consumer behavior, changes in the economic environment, issuing bank policies, and other factors.

We generally rely on the activities and charters of unaffiliated financial institutions to provide PayPal and Venmo branded consumer credit and merchant financing offerings to our U.S. customers. As a service provider to these unaffiliated financial institutions, which are federally supervised U.S. financial institutions, we are subject from time to time to examination by their federal banking regulators. In the event of any termination or interruption in a partner bank’s ability or willingness to lend, our ability to offer consumer credit and merchant financing products could be interrupted or limited, which could materially and adversely affect our business. We may be unable to reach a similar arrangement with another unaffiliated financial institution on favorable terms or at all. Obtaining and maintaining the lending licenses required for us to originate such loans ourselves would be a costly, time-consuming and uncertain process, and would subject us to additional laws and regulatory requirements, which could significantly increase our costs and compliance obligations and require us to change our business practices.

We are subject to the risk that account holders who use our credit products will default on their payment obligations, creating the risk of potential charge-offs or negatively impacting the revenue share arrangement with an independent chartered financial institution with respect to our U.S. consumer credit product. The non-payment rate among account holders may increase due to, among other factors, changes to underwriting standards, risk models not accurately predicting the creditworthiness of a user, worsening economic conditions, such as a recession or government austerity programs, increases in prevailing interest rates, and high unemployment rates. Account holders who miss payments often fail to repay their loans, and account holders who file for protection under the bankruptcy laws generally do not repay their loans.

We currently purchase receivables related to our U.S. PayPal-branded merchant financing offerings and certain U.S. consumer installment loan products and extend credit for our consumer and merchant products outside the U.S. through our international subsidiaries. If we are unable to fund our credit products or the purchase of the receivables related to our credit products and offerings adequately or in a cost-effective manner, the growth of our credit products could be negatively impacted.

We rely on third parties in many aspects of our business, which creates additional risk.

We rely on third parties in many aspects of our business, including networks, banks, payment processors, and payment gateways that link us to the payment card and bank clearing networks to process transactions; unaffiliated third-party lenders to originate our U.S. credit products to consumers, U.S. merchant financing, and branded credit card products; branded debit card and savings products issued by unaffiliated banks; cryptocurrency custodial service providers; and external business partners and contractors who provide key functions (e.g., outsourced customer support and product development functions; facilities; information technology, data center facilities and cloud computing). We are subject to additional risks inherent in engaging and relying upon third-party providers, including legal, regulatory, information security, reputational and operational risks. We are undertaking efforts to diversify our reliance on a small number of third-party payment processors in various markets. We are working with our primary payment processor in the U.S. to facilitate the migration of our arrangements to other payment processors over a transition period in connection with the wind-down of our agreement; however, if we are unable to timely and efficiently migrate our business to other payment processors or experience disruptions in connection with this transition, our business could be harmed. If we are unable to effectively manage our third-party relationships, these third parties are unable to meet their obligations to us, or we experience substantial disruptions in these relationships, our operations, results of operations, and financial results could be adversely impacted. Additionally, our relationships with third parties inherently involve a lesser degree of control over business operations, governance, and compliance, which potentially increases our financial, legal, reputational, and operational risk.

Any factors that reduce cross-border trade or make such trade more difficult could harm our business.

Cross-border trade (i.e., transactions where the merchant and consumer are in different countries) is an important source of our revenues and profits. Cross-border transactions generally provide higher revenues and operating income than similar transactions that take place within a single country or market. In certain markets, cross-border trade represents our primary (and in some instances our only) presence.

Cross-border trade may be negatively impacted by various factors including foreign currency exchange rate fluctuations, tariffs, trade barriers or restrictions, sanctions, import or export controls, and the interpretation and application of laws of multiple jurisdictions in the context of cross-border trade and foreign exchange. Any factors that increase the costs of cross-border trade for us or our customers or that restrict, delay, or make cross-border trade more difficult or impractical could reduce our cross-border transactions and volume, negatively impact our revenues and profits, and harm our business.

Failure to deal effectively with fraud, abusive behaviors, bad transactions, and negative customer experiences may increase our loss rate and could negatively impact our business and severely diminish merchant and consumer confidence in and use of our services.

We expect that third parties will continue to attempt to abuse access to and misuse our payments services to commit fraud by, among other things, creating fictitious PayPal accounts using stolen or synthetic identities or personal information, making transactions with stolen financial instruments, abusing or misusing our services for financial gain, or fraudulently inducing users of our systems into engaging in fraudulent transactions. Due to the nature of PayPal's digital payments services, third parties may seek to engage in abusive schemes or fraud attacks that are often difficult to detect and may be deployed at a scale that would otherwise not be possible in physical transactions. Measures to detect and reduce the risk of fraud and abusive behavior are complex, require continuous improvement, and may not be effective in detecting and preventing fraud, particularly new and continually evolving forms of fraud or in connection with new or expanded product offerings. If these measures are not effective, our business could be negatively impacted. We also incur substantial losses from erroneous transactions and situations where funding instruments used for legitimate transactions are closed or have insufficient funds to satisfy payments, or the payment is initiated to an unintended recipient in error. Numerous and evolving fraud schemes and misuse of our payments services could subject us to significant costs and liabilities, require us to change our business practices, cause us to incur significant remediation costs, lead to loss of customer confidence in, or decreased use of, our products and services, damage our reputation and brands, divert the attention of management from the operation of our business, and result in significant compensation or contractual penalties from us to our customers and their business partners as a result of losses or claims.

Our Purchase and Seller Protection Programs ("protection programs") are intended to reduce the likelihood of losses for consumers and merchants from unauthorized and fraudulent transactions. The Purchase Protection Program also protects consumers who do not receive the item ordered or who receive an item that is significantly different from its description. We incur substantial losses from our protection programs as a result of disputes filed by our customers. We seek to recover losses from our protection programs from the merchant, but may not be able to fully recover our losses (for example, if the merchant is unwilling or unable to pay, the transaction involves a fraudulent merchant, or the merchant provides sufficient evidence that the item was delivered).

In addition, consumers who pay through PayPal or Venmo may have reimbursement rights from their payment card issuer, which in turn will seek recovery from us. If losses incurred by us related to payment card transactions become excessive, we could lose the ability to accept payment cards for payment, which would negatively impact our business. Regulators and card networks may also adapt error resolution and chargeback requirements to account for evolving forms of fraud, which could increase PayPal's exposure to fraud losses and impact the scope of coverage of our protection programs. Increases in our loss rate, including as a result of changes to the scope of transactions covered by our protection programs, could negatively impact our business. See "Note 13—Commitments and Contingencies—Protection Programs" to our consolidated financial statements.

Failure to effectively monitor and evaluate the financial condition of our merchants may expose PayPal to losses. In the event of the bankruptcy, insolvency, business failure, or other business interruption of a merchant that sells goods or services in advance of the date of their delivery or use (e.g., airline, cruise, or concert tickets, custom-made goods, and subscriptions), we could be liable to the buyers of such goods or services, including through our Purchase Protection Program or through chargebacks on payment cards used by customers to fund their purchase. Allowances for transaction losses that we have established may be insufficient to cover incurred losses.

Use of our payments services for illegal activities or improper purposes could harm our business.

We expect that users will continue to attempt to use our payments platform for illegal activities or improper uses, including money laundering, terrorist financing, sanctions evasion, illegal online gambling, fraudulent sales of goods or services, illegal telemarketing activities, illegal sales of prescription medications or controlled substances, piracy of software, movies, music, and other copyrighted, trademarked or digital goods, bank fraud, child pornography, human trafficking, prohibited sales of alcoholic beverages or tobacco products, securities fraud, pyramid or Ponzi schemes, or the facilitation of other illegal or improper activity. Moreover, certain activity that may be legal in one jurisdiction may be illegal in another jurisdiction, and a merchant may be found responsible for intentionally or inadvertently importing or exporting illegal goods, resulting in liability for us. Owners of intellectual property rights or government authorities may seek to bring legal action against providers of payments solutions, including PayPal, that are peripherally involved in the sale of infringing or allegedly infringing items by a user. While we invest in measures intended to prevent and detect illegal activities that may occur on our payments platform, these measures require continuous improvement and may not be effective in detecting and preventing illegal activity or improper uses.

Any illegal or improper uses of our payments platform or failure by us to detect or prevent illegal or improper activity by our users may subject us to claims, individual and class action lawsuits, and government and regulatory requests, inquiries, or investigations that could result in liability, restrict our operations, impose additional restrictions or limitations on our business or require us to change our business practices, harm our reputation, increase our costs, and negatively impact our business.

Acquisitions, strategic investments, and other strategic transactions could result in operating difficulties and could harm our business.

We expect to continue to consider and evaluate a wide array of potential strategic transactions as part of our overall business strategy, including business combinations, acquisitions, and dispositions of certain businesses, technologies, services, products, and other assets; strategic investments; and commercial and strategic partnerships (collectively, "strategic transactions"). At any given time, we may be engaged in discussions or negotiations with respect to one or more strategic transactions, any of which could, individually or in the aggregate, be material to our financial condition and results of operations. There can be no assurance that we will be successful in identifying, negotiating, consummating and integrating favorable transaction opportunities. Strategic transactions may involve additional significant challenges, uncertainties, and risks, including challenges of integrating new employees, products, systems, technologies, operations, and business cultures; challenges associated with operating acquired businesses in markets or business areas in which we may have limited or no experience; disruption of our ongoing operations and diversion of our management's attention; inadequate data security, cybersecurity, or operational and information technology resilience; failure to identify, or our underestimation of, commitments, liabilities, deficiencies and other risks associated with acquired businesses or assets; potential exposure to new or incremental risks associated with acquired businesses and entities, strategic investments and other strategic transactions, including potential new or increased regulatory oversight and uncertain or evolving legal, regulatory, and compliance requirements, particularly with respect to companies in new or developing businesses or industries; failure of the transaction to advance our business strategy or for its anticipated benefits to materialize; potential impairment of goodwill or other acquisition-related intangible assets; and the potential for our acquisitions to result in dilutive issuances of our equity securities or the incurrence of significant additional debt. Strategic transactions are inherently risky, may not be successful, and may harm our business, results of operations, and financial condition.

Strategic investments in which we have a minority ownership stake inherently involve a lesser degree of influence over business operations. The success of our strategic investments may be dependent on controlling shareholders, management, or other persons or entities that may have business interests, strategies, or goals that are inconsistent with ours. Business decisions or other actions or omissions of the controlling shareholders, management, or other persons or entities who control companies in which we invest may adversely affect the value of our investment, result in litigation or regulatory action against us, and damage our reputation.

Our international operations subject us to increased risks, which could harm our business.

Our international operations generate roughly one-half of our net revenues. Our international operations subject us to significant challenges, uncertainties, and risks, including local regulatory, licensing, reporting, and legal obligations; costs and challenges associated with operating in markets in which we may have limited or no experience, including effectively localizing our products and services and adapting them to local preferences; difficulties in developing, staffing, and simultaneously managing a large number of varying foreign operations as a result of distance, language, and cultural differences and in light of varying laws, regulations, and customs; differing employment practices and the existence of works councils; difficulties in recruiting and retaining qualified employees and maintaining our company culture; fluctuations in foreign currency exchange rates; exchange control regulations; profit repatriation restrictions; potential tariffs, sanctions, fines, or other trade barriers or restrictions; import or export regulations; compliance with U.S. and foreign anti-bribery, anti-corruption, sanctions, anti-money laundering and counter-terrorist financing laws and regulations; the interpretation and application of laws of multiple jurisdictions; and national or regional political, economic, or social instability.

Our international operations also may heighten many of the other risks described in this "Risk Factors" section. Any violations of the complex foreign and U.S. laws, rules and regulations that may apply to our international operations may result in lawsuits, enforcement actions, criminal actions, or sanctions against us and, our directors, officers, and employees; prohibit or require us to change our business practices; and damage our reputation. Although we have implemented policies and procedures designed to promote compliance with these laws, there can be no assurance that our employees, contractors, or agents will not violate our policies. These risks are inherent in our international operations, may increase our costs of doing business internationally, and could materially and adversely affect our business.

Global and regional economic conditions could harm our business.

Adverse global and regional economic conditions such as turmoil affecting the banking system or financial markets, including, but not limited to, tightening in the credit markets, extreme volatility or distress in the financial markets (including the fixed income, credit, currency, equity, and commodity markets), higher unemployment, high consumer debt levels, recessionary or inflationary pressures, supply chain issues, reduced consumer confidence or economic activity, government fiscal and tax policies, U.S. and international trade relationships, agreements, treaties, tariffs and restrictive actions, the inability of a government to enact a budget in a fiscal year, government shutdowns, government austerity programs, and other negative financial news or macroeconomic developments could have a material adverse impact on the demand for our products and services, including a reduction in the volume and size of transactions on our payments platform. Additionally, any inability to access the capital markets when needed due to volatility or illiquidity in the markets or increased regulatory liquidity and capital requirements may strain our liquidity position. Such conditions may also expose us to fluctuations in foreign currency exchange rates or interest rates that could materially and adversely affect our financial results.

If our reputation or our brands are damaged, our business and operating results may be harmed.

Our reputation and brands are globally recognized, important to our business, and affect our ability to attract and retain our customers. There are numerous ways our reputation or brands could be damaged. We may experience scrutiny or backlash from customers, partners, employees, government entities, media, advocacy groups, and other influencers or stakeholders that disagree with, among other things, our product offering decisions or public policy positions. Damage to our reputation or our brands may result from, among other things, new features, products, services, operational efforts, or terms of service (or changes to the same), or our decisions regarding user privacy, data practices, or information security. The proliferation of social media may increase and compound the likelihood, speed, magnitude, and unpredictability of negative brand events. If our brands or reputation are damaged, our business and operating results may be adversely impacted.

Brexit: The U.K.'s departure from the EU could harm our business, financial condition, and results of operations.

Following the departure of the U.K. from the EU and the EEA on January 31, 2020 (commonly referred to as "Brexit") and the expiration of the transition period on December 31, 2020, there continues to be uncertainty over the practical consequences of Brexit, including the potential for greater restrictions on the supply and availability of goods and services between the U.K. and EEA region, and a general deterioration in consumer sentiment and credit conditions leading to overall negative economic growth and increased risk of merchant default.

The consequences of Brexit have brought legal uncertainty and increased complexity for financial services firms, which could continue as national laws and regulations in the U.K. differ from EU laws and regulations and additional authorization requirements come into effect. These developments have led and could lead in the future to additional regulatory costs and challenges for us. Specifically, PayPal (Europe) currently operates in the U.K. within the scope of its passport permissions (as they existed at the end of the transition period) pursuant to the Temporary Permissions Regime pending the grant of new authorizations by the U.K. financial regulators. If we are unable to obtain the required authorizations before the expiry of the longstop dates set by the U.K. regulators under the Temporary Permissions Regime, our European operations could lose their ability to offer services within the U.K. market, or into the U.K. market on a cross-border basis. Our European operations may also be required to comply with legal and regulatory requirements in the U.K. that may be in addition to, or inconsistent with, those of the EEA, in each case, leading to increased complexity and costs.

Real or perceived inaccuracies in our key metrics may harm our reputation and negatively affect our business.

Our key metrics are calculated using internal company data based on the activity we measure on our payments platform and compiled from multiple systems, including systems that are internally developed or acquired through business combinations. While the measurement of our key metrics is based on what we believe to be reasonable methodologies and estimates, there are inherent challenges and limitations in measuring our key metrics globally at scale. The methodologies used to calculate our key metrics require judgment.

We regularly review our processes for calculating these key metrics, and from time to time we may make adjustments to improve the accuracy or relevance of our metrics. For example, we continuously apply models, processes and practices designed to detect and prevent fraudulent account creation on our platforms, and work to improve and enhance those capabilities. When we detect a significant volume of illegitimate activity, we generally remove the activity identified from our key metrics. Although such adjustments may impact key metrics reported in prior periods, we generally do not update previously reported key metrics to reflect these subsequent adjustments unless the retrospective impact of process improvements or enhancements is determined by management to be material. Further, as our business develops, we may revise or cease reporting metrics if we determine that such metrics are no longer appropriate measures of our performance. If investors, analysts, or customers do not consider our reported measures to be sufficient or to accurately reflect our business, we may receive negative publicity, our reputation may be harmed, and our business may be adversely impacted.

Environmental, social and governance (“ESG”) issues may have an adverse effect on our business, financial condition and results of operations and damage our reputation.

Customers, investors, employees and other stakeholders are increasingly focused on ESG practices, including with respect to global talent, cybersecurity, data privacy and protection and climate change. If we do not adapt to and comply with new laws and regulations or changes to legal or regulatory requirements concerning ESG matters, or fail to meet rapidly evolving investor, industry or stakeholder expectations and standards, our reputation may be harmed, customers may choose to refrain from using our products and services, and our business or financial condition may be adversely affected. Further, we may experience additional scrutiny or backlash from customers, partners, media, government entities, and other stakeholders that disagree if they perceive PayPal to not have responded appropriately with respect to ESG matters.

We specifically recognize the inherent physical climate-related risks wherever business is conducted. Our primary locations may be vulnerable to the adverse effects of climate change. For example, California, where our headquarters are located, has historically experienced, and is projected to continue to experience, climate-related events more frequently, including drought, water scarcity, flooding, heat waves, wildfires and resultant air quality impacts, and power shutoffs associated with wildfire prevention. These extreme weather conditions may disrupt our business and may cause us to experience additional costs to maintain or resume operations and higher attrition. In addition, current and emerging legal and regulatory requirements with respect to climate change (e.g., carbon pricing) and other aspects of ESG (e.g., disclosure requirements) may result in increased compliance requirements on our business and supply chain, which may increase our operating costs and cause disruptions in our operations.

If one or more of our counterparty financial institutions default on their financial or performance obligations to us or fail, we may incur significant losses.

We have significant amounts of cash, cash equivalents, receivables outstanding, and other investments on deposit or in accounts with banks or other financial institutions in the U.S. and international jurisdictions. As part of our foreign currency hedging activities, we regularly enter into transactions involving derivative financial instruments with various financial institutions. Certain banks and other financial institutions are also lenders under our credit facilities. We regularly monitor our exposure to counterparty credit risk, and actively manage this exposure to mitigate the associated risk. Despite these efforts, we may be exposed to the risk of default on obligations by, or deteriorating operating results or financial condition or failure of, these counterparty financial institutions. If one of our counterparty financial institutions were to become insolvent, placed into receivership, or file for bankruptcy, our ability to recover losses incurred as a result of default or to access or recover our assets that are deposited, held in accounts with, or otherwise due from, such counterparty may be limited due to the insufficiency of the failed institutions’ estate to satisfy all claims in full or the applicable laws or regulations governing the insolvency, bankruptcy, or resolution proceedings. In the event of default on obligations by, or the failure of, one or more of these counterparties, we could incur significant losses, which could negatively impact our results of operations and financial condition.

There are risks associated with our indebtedness.

We have incurred indebtedness, and we may incur additional indebtedness in the future. Our ability to pay interest and repay the principal for our indebtedness is dependent upon our ability to manage our business operations and generate sufficient cash flows to service such debt. Our outstanding indebtedness and any additional indebtedness we incur may have significant consequences, including the need to use a significant portion of our cash flow from operations and other available cash to service our indebtedness, thereby reducing the funds available for other purposes, including capital expenditures, acquisitions, strategic investments, and share repurchases; the reduction of our flexibility in planning for or reacting to changes in our business, competitive pressures and market conditions; and limits on our ability to obtain additional financing for working capital, capital expenditures, acquisitions, strategic investments, share repurchases, or other general corporate purposes.

Our revolving credit facilities and the indentures for our senior unsecured notes pursuant to which certain of our outstanding debt securities were issued contain financial and other covenants that restrict or could restrict, among other things, our business and operations. If we fail to pay amounts due under a debt instrument or breach any of its covenants, the lenders or noteholders would typically have the right to demand immediate repayment of all borrowings thereunder (subject in certain cases to a grace or cure period). Moreover, any such acceleration and required repayment of, or default in respect of, our indebtedness could, in turn, constitute an event of default under other debt instruments, thereby resulting in the acceleration and required repayment of our indebtedness. Any of these events could materially adversely affect our liquidity and financial condition.

Changes by any rating agency to our outlook or credit rating could negatively affect the value of both our debt and equity securities and increase our borrowing costs. If our credit ratings are downgraded or other negative action is taken, the interest rates payable by us under our indebtedness may increase, and our ability to obtain additional financing in the future on favorable terms or at all could be adversely affected.

Changes in tax laws, exposure to unanticipated additional tax liabilities, or implementation of reporting or record-keeping obligations could have a material adverse effect on our business.

An increasing number of U.S. states, the U.S. federal government, and governments of foreign jurisdictions, such as the EU Commission, as well as international organizations, such as the Organization for Economic Co-operation and Development, are focused on tax reform and other legislative or regulatory action to increase tax revenue. For example, various countries have proposed or enacted digital services taxes. These actions may materially affect our effective tax rate.

The determination of our worldwide provision for income taxes and other tax liabilities requires estimation and significant judgment, and there are many transactions and calculations for which the ultimate tax determination is uncertain. We are currently undergoing a number of investigations, audits, and reviews by tax authorities in multiple U.S. and foreign tax jurisdictions. Any adverse outcome of any such audit or review could result in unforeseen tax-related liabilities that differ from the amounts recorded in our financial statements, which may, individually or in the aggregate, materially affect our financial results in the periods for which such determination is made. While we have established reserves based on assumptions and estimates that we believe are reasonable to cover such eventualities, these reserves may prove to be insufficient.

In addition, our future income taxes could be adversely affected by the incurrence of losses or earnings being lower than anticipated in jurisdictions that have lower statutory tax rates, and earnings being higher than anticipated in jurisdictions that have higher statutory tax rates; by changes in the valuation of our deferred tax assets and liabilities, including as a result of gains on our foreign currency exchange risk management program; by changes in tax laws, regulations, or accounting principles; or by certain discrete items.

A number of U.S. states, the U.S. federal government, and foreign jurisdictions have implemented and may impose reporting or record-keeping obligations on companies that engage in or facilitate e-commerce to improve tax compliance. A number of jurisdictions are also reviewing whether payment service providers and other intermediaries could be deemed to be the legal agent of merchants for certain tax purposes. We have modified our systems to meet applicable requirements and expect that further modifications will be required to comply with future requirements, which may negatively impact our customer experience and increase operational costs. Any failure by us to comply with these and similar reporting and record-keeping obligations could result in substantial monetary penalties and other sanctions, adversely impact our ability to do business in certain jurisdictions, and harm our business.

We may be unable to attract, retain, and develop the highly skilled employees we need to support our business.

Competition for key and other highly skilled personnel is intense, especially for executive talent, software engineers, and other technology talent. We may be limited in our ability to recruit or hire internationally, including due to restrictive laws or policies on immigration, travel, or availability of visas for skilled workers. The loss of the services of any of our key personnel, or our inability to attract, hire, develop, motivate and retain key and other highly qualified and diverse talent, whether in a remote or in-office environment, or protect the safety, health and productivity of our workforce could harm our overall business and results of operations.

We are subject to risks associated with information disseminated through our products and services.

We may be subject to claims relating to information disseminated through our online services, including claims alleging defamation, libel, harassment, hate speech, breach of contract, invasion of privacy, negligence, copyright or trademark infringement, or other theories based on the nature and content of the materials disseminated through the services, among other things. We invest in measures intended to detect and block activities that may occur on our payments platform in violation of our policies and applicable laws. These measures require continuous improvement and may not be sufficiently effective in detecting and preventing the exchange of information in violation of our policies and applicable laws. If these measures are not sufficiently effective, our business could be negatively impacted. If the laws or regulations that provide protections for online dissemination of information are invalidated or are modified to reduce protections available to us and we become liable for information provided by our customers and carried on our products and services, we could be directly harmed and we may be forced to implement new measures to reduce our exposure, including expending substantial resources or discontinuing certain product or service offerings, which could harm our business.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We own and lease various properties in the United States ("U.S.") and other countries around the world. We use these properties for executive and administrative offices, customer services and operations centers, product development offices, warehouses, and data centers. As of December 31, 2022, our owned and leased properties provided us with aggregate square footage as follows:

	United States	Other Countries	Total
		(In millions)	
Owned facilities	1.0	0.1	1.1
Leased facilities	2.2	2.0	4.2
Total facilities	3.2	2.1	5.3

We own a total of approximately 106 acres of land, with approximately 85 acres in the U.S. Our corporate headquarters are located in San Jose, California and occupy approximately 0.7 million of owned square feet.

Table of Contents

ITEM 3. LEGAL PROCEEDINGS

The information set forth under "Note 13—Commitments and Contingencies—Litigation and Regulatory Matters" to the consolidated financial statements included in Part IV, Item 15 of this Form 10-K is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND I PURCHASES OF EQUITY SECURITIES

COMMON STOCK

PayPal common stock is quoted on the NASDAQ Global Select Market under the ticker symbol "PYPL."

As of February 3, 2023, there were 4,123 holders of record of our common stock. The actual number of stockholders is significantly greater than this number of record holders, and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

DIVIDEND POLICY

We have never paid any cash dividends and we currently do not anticipate paying any cash dividends in the foreseeable future.

STOCK REPURCHASE ACTIVITY

In July 2018, our Board of Directors authorized a stock repurchase program that provides for the repurchase of up to $10 billion of our common stock, with no expiration from the date of authorization. In June 2022, our Board of Directors authorized an additional stock repurchase program that provides for the repurchase of up to $15 billion of our common stock, with no expiration from the date of authorization. Our stock repurchase programs are intended to offset the impact of dilution from our equity compensation programs and, subject to market conditions and other factors, may also be used to make opportunistic repurchases of our common stock to reduce outstanding share count. Any share repurchases under our stock repurchase programs may be made through open market transactions, block trades, privately negotiated transactions including accelerated share repurchase agreements or other means at times and in such amounts as management deems appropriate, and will be funded from our working capital or other financing alternatives. Moreover, any stock repurchases are subject to market conditions and other uncertainties and we cannot predict if or when any stock repurchases will be made. We may terminate our stock repurchase programs at any time without prior notice.

The stock repurchase activity under our stock repurchase programs during the three months ended December 31, 2022 is summarized as follows:

	Total number of shares purchased	Average price paid per share[(1)]	Total number of shares purchased as part of publicly announced plans or programs	Approximate dollar value of shares that may yet be purchased under the plans or programs
	(In millions, except per share amounts)			
Balance as of September 30, 2022				$ 16,871
October 1, 2022 through October 31, 2022	8.2	$ 85.81	8.2	16,167
November 1, 2022 through November 30, 2022	3.6	$ 85.42	3.6	15,861
December 1, 2022 through December 31, 2022	—	$ —	—	15,861
Balance as of December 31, 2022	11.8		11.8	$ 15,861

(1) Average price paid per share for open market purchases includes broker commissions.

ITEM 6. REMOVED AND RESERVED

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements that involve expectations, plans, or intentions (such as those relating to future business, future results of operations or financial condition, new or planned features or services, mergers or acquisitions, or management strategies). These forward-looking statements can be identified by words such as "may," "will," "would," "should," "could," "expect," "anticipate," "believe," "estimate," "intend," "continue," "strategy," "future," "opportunity," "plan," "project," "forecast," and other similar expressions. These forward-looking statements involve risks and uncertainties that could cause our actual results and financial condition to differ materially from those expressed or implied in our forward-looking statements. Such risks and uncertainties include, among others, those discussed in "Item 1A. Risk Factors" of this Form 10-K, as well as in our consolidated financial statements, related notes, and the other information appearing in this report and our other filings with the Securities and Exchange Commission ("SEC"). We do not intend, and undertake no obligation except as required by law, to update any of our forward-looking statements after the date of this report to reflect actual results, new information, or future events or circumstances. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. You should read the following "Management's Discussion and Analysis of Financial Condition and Results of Operations" in conjunction with the audited consolidated financial statements and the related notes that appear in this report. Unless otherwise expressly stated or the context otherwise requires, references to "we," "our," "us," "the Company," and "PayPal" refer to PayPal Holdings, Inc. and its consolidated subsidiaries.

This Management's Discussion and Analysis of Financial Condition and Results of Operations focuses on a discussion of 2022 results as compared to 2021 results. For a discussion of 2021 results as compared to 2020 results, see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" within our Form 10-K for the year ended December 31, 2021 filed with the SEC on February 3, 2022.

BUSINESS ENVIRONMENT

THE COMPANY

We are a leading technology platform that enables digital payments and simplifies commerce experiences on behalf of merchants and consumers worldwide. PayPal is committed to democratizing financial services to help improve the financial health of individuals and to increase economic opportunity for entrepreneurs and businesses of all sizes around the world. Our goal is to enable our merchants and consumers to manage and move their money anywhere in the world in the markets we serve, anytime, on any platform, and using any device when sending payments or getting paid, including person-to-person payments.

Regulatory environment

We operate globally and in a rapidly evolving regulatory environment characterized by a heightened focus by regulators globally on all aspects of the payments industry, including countering terrorist financing, anti-money laundering, privacy, cybersecurity, and consumer protection. The laws and regulations applicable to us, including those enacted prior to the advent of digital payments, continue to evolve through legislative and regulatory action and judicial interpretation. New or changing laws and regulations, including changes to their interpretation and implementation, as well as increased penalties and enforcement actions related to non-compliance, could have a material adverse impact on our business, results of operations, and financial condition. We monitor these areas closely and are focused on designing compliant solutions for our customers.

Information security

Information security risks for global payments and technology companies like us have increased significantly in recent years. Although we have developed systems and processes designed to protect the data we manage, prevent data loss and other security incidents, and effectively respond to known and potential risks, and expect to continue to expend significant resources to bolster these protections, we remain subject to these risks and there can be no assurance that our security measures will provide sufficient security or prevent breaches or attacks. For additional information regarding our information security risks, see “Item 1A. Risk Factors—*Cyberattacks and security vulnerabilities could result in serious harm to our reputation, business, and financial condition*.”

RUSSIA AND UKRAINE CONFLICT

With respect to the military hostilities commenced by Russia in Ukraine in February 2022, our priority is the safety and well-being of our PayPal employee community impacted by these events. We continue to take actions to comply with all applicable restrictions and sanctions that may impact our operations. In March 2022, we suspended our transactional services in Russia. We are unable to reasonably estimate the total potential financial impact that may ultimately result from this situation. In the years ended December 31, 2022 and 2021, our total net revenues related to Russia and Ukraine were not material.

BREXIT

The United Kingdom (“U.K.”) formally exited the European Union (“EU”) and the European Economic Area (“EEA”) on January 31, 2020 (commonly referred to as “Brexit”) with the expiration of the transition period on December 31, 2020. PayPal (Europe) S.à.r.l. et Cie, SCA (“PayPal (Europe)”) operates in the U.K. within the scope of its passport permissions (as they stood at the end of the transition period) under the Temporary Permissions Regime pending the grant of new U.K. authorizations by the U.K. financial regulators. We are currently unable to determine the longer-term impact that Brexit will have on our business, which will depend, in part, on the implications of new tariff, trade, and regulatory frameworks that now govern the provision of cross-border goods and services between the U.K. and the EEA, as well as the financial and operational consequences of the requirement for PayPal (Europe) to obtain new U.K. authorizations to operate its business longer-term within the U.K. market. For additional information on how Brexit could affect our business, see “Item 1A. Risk Factors—*Brexit: The U.K.'s departure from the EU could harm our business, financial condition, and results of operations*.”

Brexit may contribute to instability in financial, stock, and foreign currency exchange markets, including volatility in the value of the British Pound and Euro. We have foreign currency exchange exposure management programs designed to help reduce the impact from foreign currency exchange rate movements. The tables below provide the percentage of our total net revenues and gross loans and interest receivable from the U.K. and EU for the periods presented:

	Year Ended December 31,		
	2022	2021	2020
Net revenues generated from the U.K.	8 %	9 %	11 %
Net revenues generated from the EU	17 %	19 %	19 %

	December 31, 2022	December 31, 2021
Gross loans and interest receivable due from customers in the U.K.	29 %	40 %
Gross loans and interest receivable due from customers in the EU	28 %	21 %

The change in the percentage of gross loans and interest receivable due from customers in the U.K. and EU year over year was primarily attributable to expansion of our installment credit products in the EU, particularly in Germany where we have increased our product offerings.

MACROECONOMIC ENVIRONMENT

The broader implications of the macroeconomic environment, including uncertainty around the duration and severity of the coronavirus pandemic (“COVID-19”), the Russia and Ukraine conflict, supply chain shortages, a recession globally or in markets in which we operate, higher inflation rates, higher interest rates, and other related global economic conditions, remain unknown. A deterioration in macroeconomic conditions could increase the risk of lower consumer spending, merchant and consumer bankruptcy, insolvency, business failure, higher credit losses, foreign currency exchange fluctuations, or other business interruption, which may adversely impact our business. If these conditions continue or worsen, they could adversely impact our future operating results.

OVERVIEW OF RESULTS OF OPERATIONS

The following table provides a summary of our consolidated financial results for the years ended December 31, 2022, 2021, and 2020:

	Year Ended December 31,			Percent Increase/(Decrease)	
	2022	2021	2020	2022	2021
	(In millions, except percentages and per share amounts)				
Net revenues	$ 27,518	$ 25,371	$ 21,454	8 %	18 %
Operating expenses	23,681	21,109	18,165	12 %	16 %
Operating income	3,837	4,262	3,289	(10) %	30 %
Operating margin	14 %	17 %	15 %	**	**
Other income (expense), net	(471)	(163)	1,776	189 %	(109) %
Income tax expense (benefit)	947	(70)	863	**	(108) %
Effective tax rate	28 %	(2)%	17 %	**	**
Net income (loss)	$ 2,419	$ 4,169	$ 4,202	(42) %	(1) %
Net income (loss) per diluted share	$ 2.09	$ 3.52	$ 3.54	(41) %	(1) %
Net cash provided by operating activities[1]	$ 5,813	$ 5,797	$ 6,219	— %	(7) %

All amounts in tables are rounded to the nearest million, except as otherwise noted. As a result, certain amounts may not recalculate using the rounded amounts provided.
[1] Prior period amounts have been revised to conform to the current period presentation. Refer to "Note 1—Overview and Summary of Significant Accounting Policies" to our consolidated financial statements included in this Form 10-K for additional information.
** Not meaningful.

Net revenues increased $2.1 billion, or 8%, in 2022 compared to 2021 driven primarily by growth in total payment volume ("TPV", as defined below under "Key Metrics") of 9%.

Total operating expenses increased $2.6 billion, or 12%, in 2022 compared to 2021 due primarily to an increase in transaction expense, and to a lesser extent, increases in transaction and credit losses, technology and development expenses, and restructuring and other charges, partially offset by a decline in sales and marketing expenses.

Operating income decreased $425 million, or 10%, in 2022 compared to 2021 due to growth in operating expenses exceeding growth in net revenues. Our operating margin was 14% and 17% in 2022 and 2021, respectively. Operating margin for 2022 was negatively impacted primarily by increases in transaction expense and transaction and credit losses.

Net income decreased by $1.8 billion, or 42%, in 2022 as compared to 2021 due to the previously discussed decrease in operating income of $425 million, higher expense of $308 million in other income (expense), net, driven primarily by losses on strategic investments, and an increase in income tax expense of $1.0 billion primarily related to lower benefits associated with stock-based compensation deductions, and higher expense related to intra-group transfers of intellectual property.

IMPACT OF FOREIGN CURRENCY EXCHANGE RATES

We have significant international operations that are denominated in foreign currencies, primarily the British pound, Euro, Australian dollar, and Canadian dollar, subjecting us to foreign currency exchange risk which may adversely impact our financial results. The strengthening or weakening of the United States ("U.S.") dollar versus the British pound, Euro, Australian dollar, and Canadian dollar, as well as other currencies in which we conduct our international operations, impacts the translation of our net revenues and expenses generated in these foreign currencies into the U.S. dollar. In 2022, 2021, and 2020, we generated approximately 43%, 46%, and 49% of our net revenues from customers domiciled outside of the U.S., respectively. Because we generate substantial net revenues internationally, we are subject to the risks of doing business outside of the U.S., including those discussed under "Item 1A. Risk Factors."

We calculate the year-over-year impact of foreign currency exchange movements on our business using prior period foreign currency exchange rates applied to current period transactional currency amounts. While changes in foreign currency exchange rates affect our reported results, we have a foreign currency exchange exposure management program in which we use foreign currency exchange contracts, designated as cash flow hedges, intended to reduce the impact on earnings from foreign currency exchange rate movements. Gains and losses from these foreign currency exchange contracts are recognized as a component of transaction revenues in the same period the forecasted transactions impact earnings.

In the years ended December 31, 2022 and 2021, the year-over-year foreign currency exchange rate movements relative to the U.S. dollar had the following impact on our reported results:

	Year Ended December 31,	
	2022	2021
	(In millions)	
(Unfavorable) favorable impact to net revenues (exclusive of hedging impact)	$ (949)	$ 440
Hedging impact	462	(190)
(Unfavorable) favorable impact to net revenues	(487)	250
Favorable (unfavorable) impact to operating expense	492	(181)
Net favorable impact to operating income	$ 5	$ 69

While we enter into foreign currency exchange contracts to help reduce the impact on earnings from foreign currency exchange rate movements, it is impossible to predict or eliminate the total effects of this exposure.

We also use foreign currency exchange contracts, designated as net investment hedges, to reduce the foreign currency exchange risk related to our investment in certain foreign subsidiaries. Gains and losses associated with these instruments will remain in accumulated other comprehensive income (loss) until the underlying foreign subsidiaries are sold or substantially liquidated.

Given that we also have foreign currency exchange risk on our assets and liabilities denominated in currencies other than the functional currency of our subsidiaries, we have an additional foreign currency exchange exposure management program in which we use foreign currency exchange contracts to offset the impact of foreign currency exchange rate movements on our assets and liabilities. The foreign currency exchange gains and losses on our assets and liabilities are recorded in other income (expense), net, and are offset by the gains and losses on the foreign currency exchange contracts. These foreign currency exchange contracts reduce, but do not entirely eliminate, the impact of foreign currency exchange rate movements on our assets and liabilities.

Additionally, in connection with transactions occurring in multiple currencies on our payments platform, we generally set our foreign currency exchange rates daily and may face financial exposure if we incorrectly set our foreign currency exchange rates or as a result of fluctuations in foreign currency exchange rates between the times that we set our foreign currency exchange rates and when transactions occur.

KEY METRICS AND FINANCIAL RESULTS

KEY METRICS

TPV, number of payment transactions, active accounts, and number of payment transactions per active account are key non-financial performance metrics ("key metrics") that management uses to measure the scale of our platform and the relevance of our products and services to our customers, and are defined as follows:

- *TPV* is the value of payments, net of payment reversals, successfully completed on our payments platform or enabled by PayPal via a partner payment solution, not including gateway-exclusive transactions.

- *Number of payment transactions* are the total number of payments, net of payment reversals, successfully completed on our payments platform or enabled by PayPal via a partner payment solution, not including gateway-exclusive transactions.

- An *active account* is an account registered directly with PayPal or a platform access partner that has completed a transaction on our platform, not including gateway-exclusive transactions, within the past 12 months. A platform access partner is a third party whose customers are provided access to PayPal's platform or services through such third-party's login credentials, including individuals and entities that utilize Hyperwallet's payout capabilities. A user may register on our platform to access different products and may register more than one account to access a product. Accordingly, a user may have more than one active account. The number of active accounts provides management with additional perspective on the overall scale of our platform, but may not have a direct relationship to our operating results.

- *Number of payment transactions per active account* reflects the total number of payment transactions within the previous 12-month period, divided by active accounts at the end of the period. The number of payment transactions per active account provides management with insight into the average number of times an account engages in payments activity on our payments platform in a given period. The number of times a consumer account or a merchant account transacts on our platform may vary significantly from the average number of payment transactions per active account.

As our transaction revenue is typically correlated with TPV growth and the number of payment transactions completed on our payments platform, management uses these metrics to gain insights into the scale and strength of our payments platform, the engagement level of our customers, and underlying activity and trends which may be indicators of current and future performance. We present these key metrics to enhance investors' evaluation of the performance of our business and operating results.

Our key metrics are calculated using internal company data based on the activity we measure on our payments platform and compiled from multiple systems, including systems that are internally developed or acquired through business combinations. While the measurement of our key metrics is based on what we believe to be reasonable methodologies and estimates, there are inherent challenges and limitations in measuring our key metrics globally at our scale. The methodologies used to calculate our key metrics require judgment.

We regularly review our processes for calculating these key metrics, and from time to time we may make adjustments to improve the accuracy or relevance of our metrics. For example, we continuously apply models, processes, and practices designed to detect and prevent fraudulent account creation on our platforms, and work to improve and enhance those capabilities. When we detect a significant volume of illegitimate activity, we generally remove the activity identified from our key metrics. Although such adjustments may impact key metrics reported in prior periods, we generally do not update previously reported key metrics to reflect these subsequent adjustments unless the retrospective impact of process improvements or enhancements is determined by management to be material.

NET REVENUES

Our revenues are classified into the following two categories:

- *Transaction revenues*: Net transaction fees charged to merchants and consumers on a transaction basis based on the TPV completed on our payments platform. Growth in TPV is directly impacted by the number of payment transactions that we enable on our payments platform. We earn additional fees from merchants and consumers: on transactions where we perform currency conversion, when we enable cross-border transactions (i.e., transactions where the merchant and consumer are in different countries), to facilitate the instant transfer of funds for our customers from their PayPal or Venmo account to their bank account or debit card, to facilitate the purchase and sale of cryptocurrencies, as contractual compensation from sellers that violate our contractual terms (for example, through fraud or counterfeiting), and other miscellaneous fees.

- *Revenues from other value added services:* Net revenues derived primarily from revenue earned through partnerships, referral fees, subscription fees, gateway fees, and other services we provide to our merchants and consumers. We also earn revenues from interest and fees earned on our portfolio of loans receivable, and interest earned on certain assets underlying customer balances.

Our revenues can be significantly impacted by a number of factors, including the following:

- The mix of merchants, products, and services;
- The mix between domestic and cross-border transactions;
- The geographic region or country in which a transaction occurs; and
- The amount of our loans receivable outstanding with merchants and consumers.

Refer to "Part I, Item 1A, Risk Factors" in this Form 10-K for further discussion on factors that may impact our revenue.

Net revenue analysis

The components of our net revenues for the years ended December 31, 2022, 2021, and 2020 were as follows (in millions):

pypl-20221231_g7.jpg

Transaction revenues

Transaction revenues grew by $1.8 billion, or 8%, in 2022 compared to 2021 driven primarily by growth in our unbranded card processing volume, which consists primarily of our Braintree products and services, and to a lesser extent, Venmo products and services, in each case driven by growth in TPV and the number of payment transactions on our payments platform. This growth in transaction revenues was partially offset by a decline in TPV and revenue generated from our core PayPal products and services, including foreign currency exchange fees revenue, due primarily to a decrease in revenue earned on eBay's marketplace platform. Additionally, for the year ended December 31, 2022, transaction revenues included $190 million in contractual compensation from sellers that violated our contractual terms, compared to $82 million in the year ended December 31, 2021. This contractual compensation and the year-over-year increase are predominantly attributable to activity in international markets.

The graphs below present the respective key metrics (in millions) for the years ended December 31, 2022, 2021, and 2020:

pypl-20221231_g8.jpg pypl-20221231_g9.jpg pypl-20221231_g10.jpg

*Reflects active accounts at the end of the applicable period. Active accounts as of December 31, 2021 include 3.2 million active accounts contributed by Paidy, Inc. ("Paidy") on the date of acquisition in October 2021.

The following table provides a summary of related metrics:

	Year Ended December 31,			Percent Increase/ (Decrease)	
	2022	2021	2020	2022	2021
Number of payment transactions per active account	51.4	45.4	40.9	13 %	11 %
Percent of cross-border TPV	13 %	16 %	17 %	**	**

** Not meaningful

We had active accounts of 435 million and 426 million as of December 31, 2022 and 2021, respectively, an increase of 2%. Number of payment transactions was 22.3 billion and 19.3 billion as of December 31, 2022 and 2021, respectively, an increase of 16%. TPV was $1.36 trillion and $1.25 trillion as of December 31, 2022 and 2021, respectively, an increase of 9%.

Transaction revenues grew more slowly than TPV and the number of payment transactions in 2022 due primarily to declines in foreign currency exchange fees, TPV attributable to eBay's marketplace (where we had historically earned higher rates), and a decline in revenues from core PayPal products and services, partially offset by a favorable impact from hedging and an increase in revenue from our Venmo products and services.

Revenues from other value added services

Revenues from other value added services increased by $343 million, or 17%, in 2022 compared to 2021 due primarily to an increase in interest earned on certain assets underlying customer account balances resulting from higher interest rates, our revenue share earned from an independent chartered financial institution ("partner institution"), and interest and fee revenue on our merchant loans receivable portfolio. Growth in revenues from other value added services in the current period was partially offset by the impact of revenue earned from the servicing of loans facilitated under the U.S. Government's Paycheck Protection Program in 2021 of $157 million, for which revenue was de minimis in the current period.

Consumers that have outstanding loans and interest receivable due to the partner institution may experience hardships that result in losses recognized by the partner institution, which may result in a decrease in our revenue share earned in future periods. In the event the overall return on the PayPal branded credit programs funded by the partner institution does not meet a minimum rate of return ("minimum return threshold") in a particular quarter, our revenue share for that period would be zero. Further, in the event the overall return on the PayPal branded credit programs managed by the partner institution does not meet the minimum return threshold as measured over four consecutive quarters and in the following quarter, we would be required to make a payment to the partner institution, subject to certain limitations. Through December 31, 2022, the overall return on the PayPal branded credit programs funded by the partner institution exceeded the minimum return threshold.

Seasonality

The Company does not experience meaningful seasonality with respect to net revenues. No individual quarter in 2022, 2021, or 2020 accounted for more than 30% of annual net revenue.

OPERATING EXPENSES

The following table summarizes our operating expenses and related metrics we use to assess the trends in each:

	Year Ended December 31,			Percent Increase/ (Decrease)	
	2022	2021	2020	2022	2021
	(In millions, except percentages)				
Transaction expense	$ 12,173	$ 10,315	$ 7,934	18 %	30 %
Transaction and credit losses	1,572	1,060	1,741	48 %	(39) %
Customer support and operations	2,120	2,075	1,778	2 %	17 %
Sales and marketing	2,257	2,445	1,861	(8) %	31 %
Technology and development	3,253	3,038	2,642	7 %	15 %
General and administrative	2,099	2,114	2,070	(1) %	2 %
Restructuring and other charges	207	62	139	234 %	(55) %
Total operating expenses	$ 23,681	$ 21,109	$ 18,165	12 %	16 %
Transaction expense rate[(1)]	0.90 %	0.83 %	0.85 %	**	**
Transaction and credit loss rate[(2)]	0.12 %	0.09 %	0.19 %	**	**

[(1)] Transaction expense rate is calculated by dividing transaction expense by TPV.
[(2)] Transaction and credit loss rate is calculated by dividing transaction and credit losses by TPV.
** Not meaningful.

Transaction expense

Transaction expense is primarily composed of the costs we incur to accept a customer's funding source of payment. These costs include fees paid to payment processors and other financial institutions when we draw funds from a customer's credit or debit card, bank account, or other funding source they have stored in their digital wallet. We refer to the allocation of funding sources used by our consumers as our "funding mix." The cost of funding a transaction with a credit or debit card is generally higher than the cost of funding a transaction from a bank or through internal sources such as a PayPal or Venmo account balance or our consumer credit products. As we expand the availability and presentation of alternative funding sources to our customers, our funding mix may change, which could increase or decrease our transaction expense rate. The cost of funding a transaction is also impacted by the geographic region or country in which a transaction occurs, as we generally pay lower rates for transactions funded with credit or debit cards outside the U.S. Our transaction expense rate is impacted by changes in product mix, merchant mix, regional mix, funding mix, and fees paid to payment processors and other financial institutions. Macroeconomic environment changes may also result in behavioral shifts in consumer spending patterns affecting the type of funding source they use, which could also impact the funding mix.

pypl-20221231_g11.jpg

Transaction expense increased by $1.9 billion, or 18%, in 2022 compared to 2021 due primarily to an increase in TPV of 9% and unfavorable changes in product mix. The increase in transaction expense rate in 2022 compared to 2021 was also attributable to unfavorable changes in product mix with a higher proportion of TPV from unbranded card processing volume, which generally has higher expense rates than other products and services. For the years ended December 31, 2022, 2021, and 2020, approximately 35%, 39%, and 40% of TPV, respectively, was generated outside of the U.S.

Transaction and credit losses

Transaction losses include the expense associated with our customer protection programs, fraud, and chargebacks. Credit losses include the current expected credit losses associated with our merchant and consumer loans receivable portfolio. Our transaction and credit losses fluctuate depending on many factors, including TPV, product mix, current and projected macroeconomic conditions such as unemployment rates, retail e-commerce sales and household disposable income, merchant insolvency events, changes to and usage of our customer protection programs, the impact of regulatory changes, and the credit quality of loans receivable arising from transactions funded with our credit products for consumers and loans and advances to merchants. Estimating our current expected credit loss allowances for our loans receivable portfolios is an inherently uncertain process and the ultimate losses we incur may vary from the current estimates. We regularly update our allowance estimates as new facts become known and events occur that may impact the ultimate losses incurred. A deterioration in macroeconomic conditions or other factors beyond those considered in our estimates could result in credit losses that exceed our current estimated credit losses and adversely impact our future operating results.

The components of our transaction and credit losses for the years ended December 31, 2022, 2021, and 2020 were as follows (in millions):

pypl-20221231_g12.jpg

Transaction and credit losses increased by $512 million, or 48%, in 2022 compared to 2021.

Transaction losses were approximately $1.2 billion for both 2022 and 2021, reflecting an increase of $17 million, or 1%. Transaction loss rate (transaction losses divided by TPV) was 0.09%, 0.09%, and 0.12% for the years ended December 31, 2022, 2021, and 2020, respectively. The increase in transaction losses in 2022 was attributable to an increase in losses related to our Venmo products and services resulting from fraud schemes, an increase in goods and services transactions which are now eligible for coverage by our protection programs, and a loss related to a merchant insolvency proceeding, which was offset by recoveries attributable to enhancements in our fraud recoupment capabilities and benefits from continued risk mitigation strategies. In the second quarter of 2022, we recorded a $114 million estimated loss related to the above mentioned merchant insolvency proceeding, and in the fourth quarter of 2022, this estimated loss was reduced by approximately $75 million to account for recoveries and changes in our estimated loss reserve.

Credit losses increased by $495 million in 2022 compared to 2021. The components of credit losses for the years ended December 31, 2022, 2021, and 2020 were as follows (in millions):

	Year Ended December 31,		
	2022	2021	2020
Net charge-offs[1]	$ 267	$ 219	$ 310
Reserve build (release)[2]	135	(312)	296
Credit losses	$ 402	$ (93)	$ 606

[1] Net charge-offs includes principal charge-offs partially offset by recoveries for consumer and merchant receivables.
[2] Reserve build (release) represents change in allowance for principal receivables excluding foreign currency remeasurement and, for 2020, impact of adoption of the current expected credit loss accounting standard.

The provision for the year ended December 31, 2022 was primarily attributable to loan originations during the period and a slight deterioration in the credit quality of loans outstanding. The benefit for the year ended December 31, 2021 was attributable to a reduction of our allowance for loans and interest receivable due primarily to improvements in both current and projected macroeconomic conditions at that point in time and the credit quality of loans outstanding, partially offset by an increase in the allowance due to originations. During 2022 and 2021, allowances for our merchant and consumer portfolios included qualitative adjustments that took into account uncertainty with respect to macroeconomic conditions, and uncertainty around the financial health of our borrowers and effectiveness of loan modification programs made available to merchants.

The consumer loans and interest receivable balance as of December 31, 2022 and 2021 was $5.9 billion and $3.8 billion, respectively, net of participation interest sold, representing a year-over-year increase of 53% driven by the expansion of our installment credit products. Approximately 37% and 53% of our consumer loans receivable outstanding as of December 31, 2022 and 2021, respectively, were due from consumers in the U.K. The decline in the percentage of consumer loans receivable outstanding in the U.K. at December 31, 2022 compared to December 31, 2021 was due to overall growth in the consumer loan portfolio, particularly from installment credit products in other markets including Germany, the U.S., and Japan.

The following table provides information regarding the credit quality of our consumer loans and interest receivable balance:

	December 31, 2022	December 31, 2021
Percent of consumer loans and interest receivable current	97.1 %	97.0 %
Percent of consumer loans and interest receivable > 90 days outstanding[1]	1.4 %	1.5 %
Net charge-off rate[2]	4.5 %	4.3 %

[1] Represents percentage of balances which are 90 days past the billing date or contractual repayment date, as applicable.
[2] Net charge-off rate is the annual ratio of net credit losses, excluding fraud losses, on consumer loans as a percentage of the average daily amount of consumer loans and interest receivable balance during the period.

We offer access to merchant finance products for certain small and medium-sized businesses, which we refer to as our merchant finance offerings. Total merchant loans, advances, and interest and fees receivable outstanding, net of participation interest sold, as of December 31, 2022 was $2.1 billion compared to $1.4 billion as of December 31, 2021, representing a year-over-year increase of 48%. The increase in merchant loans, advances and interest and fees receivable outstanding was due primarily to growth in our PayPal Business Loan products in the U.S. Approximately 86% and 5% of our merchant receivables outstanding as of December 31, 2022 were due from merchants in the U.S. and U.K., as compared to approximately 82% and 8% as of December 31, 2021, respectively.

The following table provides information regarding the credit quality of our merchant loans, advances, and interest and fees receivable balance:

	December 31, 2022	December 31, 2021
Percent of merchant loans, advances, and interest and fees receivable current	90.7 %	91.8 %
Percent of merchant loans, advances, and interest and fees receivable > 90 days outstanding[1]	3.7 %	3.1 %
Net charge-off rate[2]	4.5 %	4.7 %

[1] Represents percentage of balances which are 90 days past the original expected or contractual repayment period, as applicable.
[2] Net charge-off rate is the annual ratio of net credit losses, excluding fraud losses, on merchant loans and advances as a percentage of the average daily amount of merchant loans, advances, and interest and fees receivable balance during the period.

We continue to evaluate and modify our acceptable risk parameters in response to the changing macroeconomic environment. Following a reduction in originations in merchant loans and advances in 2020 due to the COVID-19 pandemic, changes to our acceptable risk parameters in 2021 and 2022 resulted in a gradual increase in originations, and thus a higher merchant receivable balance as of December 31, 2022 as compared to December 31, 2021. Modifications to the acceptable risk parameters for our consumer credit products did not have a material impact on our consumer loans in the periods presented.

For additional information, see “Note 11—Loans and Interest Receivable” in the notes to the consolidated financial statements, and “Item 1A. Risk Factors—*Our credit products expose us to additional risks*” included in this Form 10-K.

Customer support and operations

Customer support and operations includes costs incurred in our global customer operations centers, including costs to provide call support to our customers, costs to support our trust and security programs protecting our merchants and consumers, and other costs incurred related to the delivery of our products, including payment devices, card production, and customer onboarding and compliance costs.

pypl-20221231_g13.jpg

Customer support and operations costs increased $45 million, or 2%, in 2022 compared to 2021. The increase in 2022 was primarily attributable to increases in expenses related to software that supports our consumer loan products, customer onboarding and compliance costs, other operating charges, and costs associated with the production of PayPal and Venmo branded debit and credit cards, partially offset by a decline in contractors and consulting costs.

Sales and marketing

Sales and marketing includes costs incurred for customer acquisition, business development, advertising, and marketing programs.

pypl-20221231_g14.jpg

Sales and marketing expenses decreased $188 million, or 8%, in 2022 compared to 2021 due primarily to lower spending on marketing campaigns compared to the prior year and declines in employee-related and consulting costs, partially offset by an increase in amortization of acquired intangibles and payments made to our channel partners.

Technology and development

Technology and development includes costs incurred in connection with the development of our payments platform, new products, and the improvement of our existing products, including the amortization of software and website development costs incurred in developing our payments platform, which are capitalized. It also includes acquired developed technology and our site operations and other infrastructure costs incurred to support our payments platform.

pypl-20221231_g15.jpg

Technology and development expenses increased $215 million, or 7%, in 2022 compared to 2021 due primarily to increases in employee-related expenses and cloud computing services utilized in delivering our products and services, partially offset by a decline in costs related to contractors and consultants.

General and administrative

General and administrative includes costs incurred to provide support to our business, including legal, human resources, finance, risk and compliance, executive, and other support operations.

pypl-20221231_g16.jpg

General and administrative expenses decreased $15 million, or 1%, in 2022 compared to 2021 due primarily to declines in professional services and employee-related expenses due in part to a decline in stock-based compensation expense, partially offset by an increase in costs associated with enterprise software services.

Restructuring and other charges

Restructuring and other charges primarily consist of restructuring expenses and asset impairment charges.

pypl-20221231_g17.jpg

Restructuring and other charges increased by $145 million in 2022 compared to 2021.

During the first quarter of 2022, management initiated a strategic reduction of the existing global workforce intended to streamline and optimize our global operations to enhance operating efficiency. This effort focused on reducing redundant operations and simplifying our organizational structure. The associated restructuring charges during the year ended December 31, 2022 were $121 million. We primarily incurred employee severance and benefits costs, as well as associated consulting costs. The strategic actions associated with this plan were substantially completed by the fourth quarter of 2022. The estimated reduction in annualized employee-related costs associated with the impacted workforce was approximately $265 million, including approximately $100 million in stock-based compensation. A portion of the reduction in annual costs associated with the impacted workforce was reinvested in the business to drive additional growth.

During the first quarter of 2020, management approved a strategic reduction of the existing global workforce as part of a multiphase process to reorganize our workforce concurrently with the redesign of our operating structure, which spanned multiple quarters. During the year ended December 31, 2021, the associated restructuring charges were $27 million. We primarily incurred employee severance and benefits costs, as well as associated consulting costs under the 2020 strategic reduction, which was substantially completed in 2021.

For information on the associated restructuring liability, see "Note 17—Restructuring and Other Charges" in the notes to the consolidated financial statements included in this Form 10-K.

Additionally, we are continuing to review our real estate and facility capacity requirements due to our new and evolving work models. We incurred asset impairment charges of $81 million and $26 million, respectively, due to exiting certain leased properties which resulted in a reduction of right-of-use lease assets and related leasehold improvements.

Other income (expense), net

Other income (expense), net of $(471) million in 2022 increased $308 million as compared to $(163) million in 2021 due primarily to net losses and impairments on strategic investments incurred in the period compared to net gains in the prior period and, to a lesser extent, an increase in interest expense due in part to incremental expense from our May 2022 fixed rate debt, partially offset by an increase in interest income due to an increase in interest rates.

Income tax expense (benefit)

Our effective income tax rate was 28% in 2022 and (2)% in 2021. The increase in our effective income tax rate in 2022 compared to 2021 was primarily attributable to a decrease in discrete tax benefits associated with stock-based compensation deductions and an increase in tax expense related to the intra-group transfer of intellectual property. See "Note 16—Income Taxes" to the consolidated financial statements included in this Form 10-K for more information on our effective tax rate.

LIQUIDITY AND CAPITAL RESOURCES

We require liquidity and access to capital to fund our global operations, including our customer protection programs, credit products, capital expenditures, investments in our business, potential acquisitions and strategic investments, working capital, and other cash needs. We believe that our existing cash, cash equivalents, and investments, cash expected to be generated from operations, and our expected access to capital markets, together with potential external funding through third party sources, will be sufficient to meet our cash requirements within the next 12 months and beyond.

SOURCES OF LIQUIDITY

Cash, cash equivalents, and investments

The following table summarizes our cash, cash equivalents, and investments as of December 31, 2022 and 2021:

	Year Ended December 31,	
	2022	2021
	(In millions)	
Cash, cash equivalents, and investments[1][2]	$ 13,723	$ 12,981

[1] Excludes assets related to funds receivable and customer accounts of $36.4 billion and $36.1 billion as of December 31, 2022 and 2021, respectively.
[2] Excludes total restricted cash of $17 million and $109 million at December 31, 2022 and 2021, respectively, and strategic investments of $2.1 billion and $3.2 billion at December 31, 2022 and 2021, respectively.

Cash, cash equivalents, and investments held by our foreign subsidiaries were $8.6 billion at December 31, 2022 and $7.4 billion at December 31, 2021, or 62% and 57%, of our total cash, cash equivalents, and investments as of those respective dates. At December 31, 2022, all of our cash, cash equivalents, and investments held by foreign subsidiaries were subject to U.S. taxation under Subpart F, Global Intangible Low Taxed Income ("GILTI") or the one-time transition tax under the Tax Cuts and Jobs Act of 2017 ("Tax Act"). Subsequent repatriations to the U.S. will not be taxable from a U.S. federal tax perspective, but may be subject to state income or foreign withholding tax.

A significant aspect of our global cash management activities involves meeting our customers' requirements to access their cash while simultaneously meeting our regulatory financial ratio commitments in various jurisdictions. Our global cash balances are required not only to provide operational liquidity to our businesses, but also to support our global regulatory requirements across our regulated subsidiaries. Accordingly, not all of our cash is available for general corporate purposes.

Cash flows

The following table summarizes our consolidated statements of cash flows:

	Year Ended December 31,		
	2022	2021	2020
		(In millions)	
Net cash provided by (used in):			
Operating activities[(1)]	$ 5,813	$ 5,797	$ 6,219
Investing activities[(1)]	(3,421)	(5,149)	(16,545)
Financing activities[(1)]	(1,110)	(557)	12,454
Effect of exchange rates on cash, cash equivalents, and restricted cash	(155)	(102)	169
Net increase (decrease) in cash, cash equivalents, and restricted cash	$ 1,127	$ (11)	$ 2,297

[(1)] Prior period amounts have been revised to conform to the current period presentation. Refer to "Note 1—Overview and Summary of Significant Accounting Policies" to our consolidated financial statements included in this Form 10-K for additional information.

Operating activities

Cash flows from operating activities includes net income adjusted for certain non-cash expenses, timing differences between expenses recognized for provision for transaction and credit losses and actual cash transaction losses incurred, and changes in other assets and liabilities. Significant non-cash expenses for the period include depreciation and amortization and stock-based compensation. The cash impact from actual transaction losses incurred during a period is reflected as changes in other assets and liabilities. The expenses recognized during the period for provision for credit losses are estimates of current expected credit losses on our merchant and consumer credit products. Actual charge-offs of receivables related to our merchants and consumer credit products have no impact on cash from operating activities.

The net cash generated from operating activities of $5.8 billion in 2022 was due primarily to operating income of $3.8 billion, as well as adjustments for non-cash expenses including provision for transaction and credit losses of $1.6 billion, depreciation and amortization of $1.3 billion, and stock-based compensation of $1.3 billion. Cash flows from operating activities was also impacted by changes in income taxes payable of $373 million, net losses on our strategic investments of $304 million, and an increase in other liabilities of $483 million. These changes, which favorably impacted cash generated from operations, were partially offset by actual cash transaction losses incurred during the period of $1.2 billion and changes in deferred income taxes of $811 million.

The net cash generated from operating activities of $5.8 billion in 2021 was due primarily to operating income of $4.3 billion, as well as adjustments for non-cash expenses including stock-based compensation of $1.4 billion, depreciation and amortization of $1.3 billion, and provision for transaction and credit losses of $1.1 billion. Cash flows from operating activities was also impacted by actual cash transaction losses incurred during the period of $1.2 billion, changes in deferred income taxes of $482 million, an increase in accounts receivable of $222 million, and changes in other assets and liabilities of $287 million.

The net cash generated from operating activities of $6.2 billion in 2020 was due primarily to operating income of $3.3 billion, as well as adjustments for non-cash expenses including provision for transaction and credit losses of $1.7 billion, stock-based compensation of $1.4 billion, and depreciation and amortization of $1.2 billion. Cash flows from operating activities was also impacted by net gains on our strategic investments of $1.9 billion and actual cash transaction losses incurred during the period of $1.1 billion, partially offset by increase in other liabilities of $1.0 billion.

Cash paid for income taxes, net in 2022, 2021, and 2020 was $878 million, $474 million, and $565 million, respectively.

Investing activities

Cash flows from investing activities includes purchases, maturities and sales of investments, cash paid for acquisitions and strategic investments, purchases and sales of property and equipment, purchases, originations, and principal repayment of loans receivable, changes in funds receivable, and changes in collateral posted related to derivative instruments, net.

The net cash used in investing activities of $3.4 billion in 2022 was due primarily to purchases and originations of loans receivable of $28.2 billion, purchases of investments of $20.2 billion, changes in funds receivable from customers of $2.8 billion, and purchases of property and equipment of $706 million. These cash outflows were partially offset by principal repayment of loans receivable of $24.9 billion and maturities and sales of investments of $23.4 billion.

The net cash used in investing activities of $5.1 billion in 2021 was due primarily to purchases of investments of $40.1 billion, purchases and originations of loans receivable of $13.4 billion, acquisitions (net of cash acquired) of $2.8 billion, and purchases of property and equipment of $908 million. These cash outflows were partially offset by maturities and sales of investments of $39.7 billion, principal repayment of loans receivable of $11.8 billion, changes in collateral posted related to derivative instruments, net of $336 million, and changes in funds receivable from customers of $193 million.

The net cash used in investing activities of $16.5 billion in 2020 was due primarily to purchases of investments of $41.5 billion, purchases and originations of loans receivable of $6.1 billion, acquisitions (net of cash acquired) of $3.6 billion, changes in funds receivable from customers of $1.6 billion, purchases of property and equipment of $866 million, and changes in collateral posted related to derivative instruments, net of $327 million. These cash outflows were partially offset by maturities and sales of investments of $30.9 billion, principal repayment of loans receivable of $6.4 billion and proceeds from the sale of property and equipment of $120 million.

Financing activities

Cash flows from financing activities includes proceeds from issuance of common stock, purchases of treasury stock, tax withholdings related to net share settlements of equity awards, borrowings and repayments under financing arrangements, changes in funds payable and amounts due to customers, and changes in collateral received related to derivative instruments, net.

The net cash used in financing activities of $1.1 billion in 2022 was due primarily to the repurchase of $4.2 billion of our common stock under our July 2018 stock repurchase program, repayments of borrowings under financing arrangements of $1.7 billion (including the repurchase and redemption of certain fixed rate notes and repayment of borrowings under a prior credit agreement, both described below under “Available credit and debt”), and tax withholdings of $336 million related to net share settlement of equity awards. These cash outflows were partially offset by borrowings under financing arrangements of $3.5 billion (including proceeds from the issuance of fixed rate debt in May 2022 and borrowings under our Paidy credit agreements) and changes in funds payable and amounts due to customers of $1.5 billion.

The net cash used in financing activities of $557 million in 2021 was due primarily to the repurchase of $3.4 billion of our common stock under our July 2018 stock repurchase program, tax withholdings of $1.0 billion related to net share settlement of equity awards, and repayments of borrowings under Paidy credit agreements of $361 million. The cash outflows were partially offset by changes in funds payable and amounts due to customers of $3.6 billion, cash proceeds from borrowings under our Paidy credit agreements of $272 million, and changes in collateral received related to derivative instruments, net of $207 million.

The net cash generated from financing activities of $12.5 billion in 2020 was due primarily to changes in funds payable and amounts due to customers of $10.6 billion and $7.0 billion of cash proceeds from the issuance of long-term debt in the form of fixed rate notes in May 2020 as well as proceeds from borrowings under our Credit Agreement (as defined below under “Available credit and debt”). These cash inflows were partially offset by repayment of outstanding borrowings under our Credit Agreement of $3.0 billion, the repurchase of $1.6 billion of our common stock under our stock repurchase programs, and tax withholdings related to net share settlement of equity awards of $521 million.

Effect of exchange rates on cash, cash equivalents, and restricted cash

Foreign currency exchange rates had a negative impact of $155 million, a negative impact of $102 million, and a positive impact of $169 million on cash, cash equivalents, and restricted cash during 2022, 2021, and 2020, respectively, which resulted primarily from the impact of fluctuations in the exchange rate of the U.S. dollar to the Australian dollar. The negative impact of foreign currency exchange on cash, cash equivalents, and restricted cash in 2022 was also attributable, to a lesser extent, to the fluctuations in the exchange rate of the U.S. dollar to the Swedish krona, Japanese yen, Indian rupee, and the Euro. The negative impact of foreign currency exchange on cash, cash equivalents, and restricted cash in 2021 was also attributable, to a lesser extent, to the fluctuations in the exchange rate of the U.S. dollar to the Euro and Swedish krona.

Available credit and debt

In February 2022, we entered into a credit agreement (the “Paidy Credit Agreement”) with Paidy as co-borrower, which provides for an unsecured revolving credit facility of ¥60.0 billion. In September 2022, the Paidy Credit Agreement was modified to increase the borrowing capacity by ¥30.0 billion for a total borrowing capacity of ¥90.0 billion (approximately $686 million as of December 31, 2022). In the year ended December 31, 2022, ¥64.3 billion (approximately $491 million) was drawn down under the Paidy Credit Agreement. Accordingly, at December 31, 2022, ¥25.7 billion (approximately $195 million) of borrowing capacity was available for the purposes permitted by the Paidy Credit Agreement, subject to customary conditions to borrowing.

In October 2021, we assumed a credit agreement through our acquisition of Paidy (the “Prior Credit Agreement”). The Prior Credit Agreement provided for a secured revolving credit facility of approximately ¥22.8 billion (approximately $198 million at the time of acquisition). In the first quarter of 2022, we terminated the Prior Credit Agreement and repaid outstanding borrowings.

In September 2019, we entered into a credit agreement (the “Credit Agreement”) that provides for an unsecured $5.0 billion, five-year revolving credit facility that includes a $150 million letter of credit sub-facility and a $500 million swingline sub-facility, with available borrowings under the revolving credit facility reduced by the amount of any letters of credit and swingline borrowings outstanding from time to time. As of December 31, 2022, no borrowings were outstanding under the Credit Agreement and as such, $5.0 billion of borrowing capacity was available for the purposes permitted by the Credit Agreement, subject to customary conditions to borrowing.

We maintain uncommitted credit facilities in various regions throughout the world with a borrowing capacity of approximately $80 million in the aggregate, where we can withdraw and utilize the funds at our discretion for general corporate purposes. As of December 31, 2022, the majority of the borrowing capacity under these credit facilities was available, subject to customary conditions to borrowing.

In May 2022, May 2020 and September 2019, we issued fixed rate notes with varying maturity dates for an aggregate principal amount of $12.0 billion (collectively referred to as the “Notes”). Proceeds from the issuance of these Notes may be used for general corporate purposes, which may include funding the repayment or redemption of outstanding debt, share repurchases, ongoing operations, capital expenditures, and possible acquisitions of businesses, assets, or strategic investments. In May 2022, we used a portion of the proceeds from that debt issuance to repurchase and redeem $1.6 billion in notes from our prior debt issuances in September 2019 and May 2020. As of December 31, 2022, we had $10.4 billion in fixed rate debt outstanding with varying maturity dates.

For additional information, see “Note 12—Debt” to our consolidated financial statements included in this Form 10-K.

Depending on market conditions, we may from time to time issue debt, including in private or public offerings, to fund our operating activities, finance acquisitions, make strategic investments, repurchase shares under our stock repurchase programs, or reduce our cost of capital.

We have a cash pooling arrangement with a financial institution for cash management purposes. The arrangement allows for cash withdrawals from the financial institution based upon our aggregate operating cash balances held within the financial institution (“Aggregate Cash Deposits”). The arrangement also allows us to withdraw amounts exceeding the Aggregate Cash Deposits up to an agreed-upon limit. The net balance of the withdrawals and the Aggregate Cash Deposits are used by the financial institution as a basis for calculating our net interest expense or income under the arrangement. As of December 31, 2022, we had a total of $1.7 billion in cash withdrawals offsetting our $1.7 billion in Aggregate Cash Deposits held within the financial institution under the cash pooling arrangement.

Credit ratings

As of December 31, 2022, we continue to be rated investment grade by Standard and Poor’s Financial Services, LLC, Fitch Ratings, Inc., and Moody’s Investors Services Inc. We expect that these credit rating agencies will continue to monitor our performance, including our capital structure and results of operations. Our goal is to be rated investment grade, but as circumstances change, there are factors that could result in our credit ratings being downgraded or put on a watch list for possible downgrading. If that were to occur, it could increase our borrowing rates, including the interest rate on borrowings under our credit agreements.

CURRENT AND FUTURE CASH REQUIREMENTS

Our material cash requirements include funds to support current and potential: operating activities, credit products, customer protection programs, stock repurchases, strategic investments, acquisitions, other commitments, and capital expenditures and other future obligations.

Credit products

Growth in our portfolio of loan receivables increases our liquidity needs, and any inability to meet those liquidity needs could adversely affect our business. We are currently evaluating partnerships and third-party sources of funding for our credit products.

In June 2018, the Luxembourg Commission de Surveillance du Secteur Financier (the “CSSF”) agreed that PayPal’s management may designate up to 35% of European customer balances held in our Luxembourg banking subsidiary to fund European and U.S. credit activities. In August 2022, the CSSF approved PayPal’s management designating up to 50% of such balances to fund our credit activities through the end of February 2023. During 2022, an additional $1.1 billion was approved to fund our credit activities. As of December 31, 2022, the cumulative amount approved by management to be designated to fund credit activities aggregated to $3.8 billion and represented approximately 37% of European customer balances made available for our corporate use at that date, as determined by applying financial regulations maintained by the CSSF. We may periodically seek to designate additional amounts of European customer balances for our credit activities, as we deem necessary, based on utilization of the approved funds and anticipated credit funding requirements. Under certain exceptional circumstances, corporate liquidity could be called upon to meet our obligations related to our European customer balances.

While our objective is to expand the availability of our credit products with capital from external sources, there can be no assurance that we will be successful in achieving that goal.

Customer protection programs

The risk of losses from our customer protection programs are specific to individual consumers, merchants, and transactions, and may also be impacted by regional variations in, and changes or modifications to, the programs, including as a result of changes in regulatory requirements. For the periods presented in these consolidated financial statements included in this report, our transaction loss rate ranged between 0.09% and 0.12% of TPV. Historical loss rates may not be indicative of future results.

Stock repurchases

During the year ended December 31, 2022, we repurchased approximately $4.2 billion of our common stock in the open market under our stock repurchase program authorized in July 2018. In June 2022, our Board of Directors authorized an additional stock repurchase program that provides for the repurchase of up to $15.0 billion of our common stock, with no expiration from the date of authorization. As of December 31, 2022, a total of approximately $861 million and $15.0 billion remained available for future repurchases of our common stock under our July 2018 and June 2022 stock repurchase programs, respectively. For additional information, see “Note 14—Stock Repurchase Programs” to our consolidated financial statements included in this Form 10-K.

Future obligations

As of December 31, 2022 and 2021, approximately $4.9 billion and $4.1 billion, respectively, of unused credit was available to PayPal Credit account holders in the U.K. While this amount represents the total unused credit available, we have not experienced, and do not anticipate, that all of our PayPal Credit account holders will access their entire available credit at any given point in time. In addition, the individual lines of credit that make up this unused credit are subject to periodic review and termination based on, among other things, account usage and customer creditworthiness.

We have certain fixed contractual obligations and commitments that include future estimated payments for general operating purposes. Changes in our business needs, contractual cancellation provisions, fluctuating interest rates, and other factors may result in actual payments differing from our estimates. We cannot provide certainty regarding the timing and amounts of these payments. The following table summarizes our obligations as of December 31, 2022 that are expected to impact liquidity and cash flow in future periods. We believe we will be able to fund these obligations through our existing cash and investment portfolio and cash expected to be generated from operations.

Payments Due During the Year Ending December 31,	Purchase Obligations	Operating Leases	Transition Tax	Long-term Debt	Total
			(In millions)		
2023	$ 900	$ 170	$ 212	$ 739	$ 2,021
2024	708	157	284	1,568	2,717
2025	374	116	354	1,280	2,124
2026	329	105	—	1,522	1,956
2027	20	92	—	729	841
Thereafter	—	150	—	9,215	9,365
	$ 2,331	$ 790	$ 850	$ 15,053	$ 19,024

The significant assumptions used in our determination of amounts presented in the above table are as follows:

- Purchase obligation amounts include minimum purchase commitments for cloud computing services, advertising, and capital expenditures, and other goods and services entered into in the ordinary course of business.

- Operating lease amounts include minimum rental payments under our non-cancelable operating leases (including leases not yet commenced) primarily for office and data center facilities. The amounts presented are consistent with contractual terms and are not expected to differ significantly from actual results under our existing leases, unless a substantial change in our headcount needs requires us to expand our occupied space or exit an office facility early.

- Transition tax represents the one-time mandatory tax on previously deferred foreign earnings under the Tax Act.

- Long-term debt amounts represent the future principal and interest payments (based on contractual interest rates) on our fixed-rate debt. For more information, see “Note 12—Debt” to our consolidated financial statements included in this Form 10-K.

As we are unable to reasonably predict the timing of settlement of liabilities related to unrecognized tax benefits, net, the table above does not include $1.9 billion of such non-current liabilities included in deferred and other tax liabilities recorded on our consolidated balance sheet as of December 31, 2022.

Other considerations

Our liquidity, access to capital, and borrowing costs could be adversely impacted by declines in our credit rating, our financial performance, and global credit market conditions, as well as a broad range of other factors. In addition, our liquidity, access to capital, and borrowing costs could also be negatively impacted by the outcome of any of the legal or regulatory proceedings to which we are a party. See “Item 1A. Risk Factors” and “Note 13—Commitments and Contingencies” to our consolidated financial statements included in this Form 10-K for additional discussion of these and other risks that our business faces.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The application of U.S. generally accepted accounting principles ("GAAP") requires us to make estimates and assumptions about certain items and future events that directly affect our reported financial condition. We have established detailed policies and control procedures to provide reasonable assurance that the methods used to make estimates and assumptions are well controlled and are applied consistently from period to period. The accounting estimates and assumptions discussed in this section are those that we consider to be the most critical to our financial statements. An accounting estimate or assumption is considered critical if both (a) the nature of the estimate or assumption is material due to the levels of subjectivity and judgment involved, and (b) the impact within a reasonable range of outcomes of the estimate and assumption is material to our financial condition. Management has discussed the development, selection, and disclosure of these estimates with the Audit, Risk, and Compliance Committee of our Board of Directors. Our significant accounting policies, including recent accounting pronouncements, are described in "Note 1—Overview and Summary of Significant Accounting Policies" to the consolidated financial statements included in this Form 10-K.

A quantitative sensitivity analysis is provided where information is reasonably available, can be reliably estimated, and provides material information to investors. The amounts used to assess sensitivity are included to allow users of this report to understand a general directional cause and effect of changes in the estimates and do not represent management's predictions of variability. For all of these estimates, it should be noted that future events rarely develop exactly as forecasted, and such estimates require regular review and adjustment.

ALLOWANCE FOR TRANSACTION AND CREDIT LOSSES

Transaction and credit losses include the expense associated with our customer protection programs, fraud, chargebacks, and credit losses associated with our loans receivable balances. Our transaction and credit losses fluctuate depending on many factors, including: total TPV, product mix, current and projected macroeconomic conditions, merchant insolvency events, changes to and usage of our customer protection programs, the impact of regulatory changes, and the credit quality of loans receivable arising from transactions funded with our credit products, which include revolving and installment credit products offered to consumers at checkout, and merchant loans and advances arising from the PayPal Working Capital and PayPal Business Loan products.

We establish allowances for negative customer balances and estimated transaction losses arising from processing customer transactions, such as chargebacks for unauthorized credit card use and merchant-related chargebacks due to non-delivery or unsatisfactory delivery of purchased items, purchase protection program claims, account takeovers, and Automated Clearing House returns. Additions to the allowance, in the form of provisions, are reflected in transaction and credit losses on our consolidated statements of income (loss). The allowances are based on known facts and circumstances, internal factors including experience with similar cases, historical trends involving collection and write-off patterns, and the mix of transaction and loss types, as well as current and projected macroeconomic factors, as appropriate.

We also establish an allowance for loans and interest receivable, which represents our estimate of current expected credit losses inherent in our portfolio of loans and interest receivable. This evaluation process is subject to numerous estimates and judgments. The allowance is primarily based on expectations of credit losses based on historical lifetime loss data as well as macroeconomic forecasts applied to the portfolio. The loss models incorporate various portfolio attributes including geographic region, first borrowing versus repeat borrowing, delinquency, loan term, internally developed risk ratings, credit rating, and vintage, which vary by portfolio. The loss models also incorporate macroeconomic factors such as forecasted trends in unemployment, retail e-commerce sales, and household disposable income (and through the second quarter of 2022, benchmark credit card charge-off rates), which are sourced externally, using a single scenario that we believe is most appropriate to the economic conditions applicable to a particular period. Projected loss rates, inclusive of historical loss data and macroeconomic factors, are applied to the principal amount of our merchant and consumer receivables. Our consumer receivables consist of revolving products, which do not have a contractual term, and installment products. The reasonable and supportable forecast period for revolving products, installment products, and merchant products that we have included in our projected loss rates for 2022, which approximates the estimated life of the loans, is approximately 2 years, approximately 7 months to 3.5 years, and approximately 2.5 to 3.5 years, respectively. In 2021, the reasonable and supportable forecast periods were consistent with 2022 except for installment products, which had an estimated life of 7 months to 2.5 years. We also include qualitative adjustments that incorporate incremental information not captured in the quantitative estimates of our current expected credit losses. The allowance for current expected credit losses on interest and fees receivable is determined primarily by applying loss curves to each portfolio by geography, delinquency, and period of origination, among other factors.

Determining appropriate current expected credit loss allowances for loans and interest receivable is an inherently uncertain process and ultimate losses may vary from the current estimates. We regularly update our allowance estimates as new facts become known and events occur that may impact the settlement or recovery of losses. The allowances are maintained at a level we deem appropriate to adequately provide for current expected credit losses at the balance sheet date after incorporating the impact of externally sourced macroeconomic forecasts. As of December 31, 2022, we utilized externally published projections of the U.S. and U.K. forecasted unemployment rates, forecasted U.S. retail e-commerce sales, and forecasted U.K. household disposable income, among others, over the reasonable and supportable forecast period. As of December 31, 2021, we utilized externally published projections of the U.S. and U.K. forecasted unemployment rates over the reasonable and supportable forecast period. The overall principal and interest coverage ratio as of December 31, 2022 and 2021 was approximately 7% and 9%, respectively. A significant change in the forecasted macroeconomic factors could result in a material change in our allowances. Our allowance as of December 31, 2022 took into account uncertainty with respect to macroeconomic conditions, and uncertainty around the financial health of our borrowers and effectiveness of loan modification programs made available to merchants. Our allowance as of December 31, 2021 took into account continued volatility with respect to macroeconomic conditions and uncertainty around the financial health of our merchant borrowers, including uncertainty around the effectiveness of loan modification programs made available to merchants. An increase of 1% in the principal and interest coverage ratio would increase our allowances by approximately $80 million based on the loans and interest receivable balance outstanding as of December 31, 2022.

ACCOUNTING FOR INCOME TAXES

Our annual tax rate is based on our income, statutory tax rates, and tax planning opportunities available to us in the various jurisdictions in which we operate. Tax laws are complex and subject to different interpretations by the taxpayer and respective government taxing authorities. Significant judgment is required in determining our tax expense and in evaluating our tax positions, including evaluating uncertainties. We review our tax positions quarterly and adjust the balances as new information becomes available. Our income tax rate is significantly affected by the tax rates that apply to our foreign earnings. In addition to local country tax laws and regulations, our income tax rate depends on the extent that our foreign earnings are taxed by the U.S. through provisions such as the GILTI tax and base erosion anti-abuse tax or as a result of our indefinite reinvestment assertion. Indefinite reinvestment is determined by management’s judgment about, and intentions concerning, our future operations.

Deferred tax assets represent amounts available to reduce income taxes payable on taxable income in future years. Such assets arise because of temporary differences between the financial reporting and tax bases of assets and liabilities, as well as from net operating loss and tax credit carryforwards. We evaluate the recoverability of these future tax deductions and credits by assessing the adequacy of future expected taxable income from all sources, including reversal of taxable temporary differences, forecasted operating earnings, and available tax planning strategies. These sources of income rely heavily on estimates that are based on a number of factors, including our historical experience and short-range and long-range business forecasts. To the extent deferred tax assets are not expected to be realized, we record a valuation allowance.

We recognize and measure uncertain tax positions in accordance with U.S. GAAP, pursuant to which we only recognize the tax benefit from an uncertain tax position if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement. We report a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. U.S. GAAP further requires that a change in judgment related to the expected ultimate resolution of uncertain tax positions be recognized in earnings in the quarter in which such change occurs. We recognize interest and penalties, if any, related to unrecognized tax benefits in income tax expense.

We file annual income tax returns in multiple taxing jurisdictions around the world. A number of years may elapse before an uncertain tax position is audited by the relevant tax authorities and finally resolved. While it is often difficult to predict the final outcome or the timing of resolution of any particular uncertain tax position, we believe that our reserves for income taxes are adequate. We adjust these reserves, as well as the related interest and penalties, where appropriate in light of changing facts and circumstances. Settlement of any particular position could require the use of cash.

Based on our results for the year ended December 31, 2022, a one-percentage point increase in our effective tax rate would have resulted in an increase in our income tax expense of approximately $34 million.

LOSS CONTINGENCIES

We are currently involved in various claims, regulatory and legal proceedings, and investigations of potential operating violations by regulatory oversight authorities. We regularly review the status of each significant matter and assess our potential financial exposure. If the potential loss from any claim, legal proceeding, or potential regulatory violation is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. Significant judgment is required in both the determination of probability and whether an exposure is reasonably estimable. Our judgments are subjective and are based on the status of the legal or regulatory proceedings, the merits of our defenses, and consultation with in-house and outside legal counsel. Because of uncertainties related to these matters, accruals are based on the best information available at the time. As additional information becomes available, we reassess the potential liability related to pending claims, litigation, or other violations and may revise our estimates. Due to the inherent uncertainties of legal and regulatory processes in the multiple jurisdictions in which we operate, our judgments may differ materially from the actual outcomes.

REVENUE RECOGNITION

Application of the accounting principles in U.S. GAAP related to the measurement and recognition of revenue requires us to make judgments and estimates. Complex arrangements with nonstandard terms and conditions may require significant contract interpretation to determine the appropriate accounting. Specifically, the determination of whether we are a principal to a transaction (gross revenue) or an agent (net revenue) can require considerable judgment. Further, we provide incentive payments to consumers and merchants. Evaluating whether these incentives are a payment to a customer, or consideration payable on behalf of a customer, requires judgment. Incentives determined to be made to a customer, or payable on behalf of a customer, are recorded as a reduction to gross revenue. Changes in judgments with respect to these assumptions and estimates could impact the amount of revenue recognized.

VALUATION OF GOODWILL AND INTANGIBLES

The valuation of assets acquired in a business combination requires the use of significant estimates and assumptions. The acquisition method of accounting for business combinations requires us to estimate the fair value of assets acquired, liabilities assumed, and any noncontrolling interest in an acquired business to properly allocate purchase price consideration between assets that are depreciated or amortized and goodwill. Our estimates are based upon assumptions that we believe to be reasonable, but which are inherently uncertain and unpredictable. These valuations require the use of management's assumptions, which do not reflect unanticipated events and circumstances that may occur.

EVALUATION OF STRATEGIC INVESTMENTS FOR IMPAIRMENT

We have strategic investments in non-marketable equity securities, which include investments that do not have a readily determinable fair value and are measured at cost minus impairment, if any, and are adjusted for changes resulting from observable price changes in orderly transactions for an identical or similar investment in the same issuer (the Measurement Alternative). We review these investments regularly to determine if impairment has occurred. We assess whether an impairment loss on these non-marketable equity securities, which are primarily investments in privately held companies, has occurred based on qualitative factors such as the companies' financial condition and business outlook, industry performance, regulatory, economic or technological environment, and other relevant events and factors affecting the company. When indicators of impairment exist, we estimate the fair value of these non-marketable equity securities using the market approach and/or the income approach. If any impairment is identified, we write down the investment to its fair value and record the corresponding charge through other income (expense), net in our consolidated statements of income (loss). Estimating fair value requires judgment and use of estimates such as discount rates, forecasted cash flows, and market data of comparable companies, among others.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is the potential for economic losses to be incurred on market risk sensitive instruments arising from adverse changes in market factors such as interest rates, foreign currency exchange rates, and equity investment risk. Management establishes and oversees the implementation of policies governing our investing, funding, and foreign currency derivative activities intended to mitigate market risks. We monitor risk exposures on an ongoing basis.

INTEREST RATE RISK

We are exposed to interest rate risk relating to our investment portfolio and from interest-rate sensitive assets underlying the customer balances we hold on our consolidated balance sheets as customer accounts.

As of December 31, 2022 and 2021, approximately 57% and 40%, respectively, of our total cash, cash equivalents, and investment portfolio (excluding restricted cash and strategic investments) was held in cash and cash equivalents. The remaining portfolio and assets underlying the customer balances that we hold on our consolidated balance sheets as customer accounts are maintained in interest and non-interest bearing bank deposits, time deposits, and available-for-sale debt securities. We seek to preserve principal while holding eligible liquid assets, as defined by applicable regulatory requirements and commercial law in certain jurisdictions where we operate, equal to at least 100% of the aggregate amount of all customer balances. We do not pay interest on amounts due to customers.

Interest rate movements affect the interest income we earn on cash and cash equivalents, time deposits, and available-for-sale debt securities and the fair value of those securities. A hypothetical 100 basis points increase in interest rates would have resulted in a decrease in the fair value of our cash equivalents and available-for-sale debt securities investment by approximately $161 million and $272 million at December 31, 2022 and 2021, respectively. Changes in the fair value of our available-for-sale debt securities resulting from such interest rate changes are reported as a component of accumulated other comprehensive income ("AOCI") and are realized only if we sell the securities prior to their scheduled maturities or the declines in fair values are due to expected credit losses.

As of December 31, 2022 and 2021, we had $10.4 billion and $9.0 billion, respectively, in fixed rate debt with varying maturity dates. Since these notes bear interest at fixed rates, they do not result in any financial statement risk associated with changes in interest rates. However, the fair value of these notes fluctuates when interest rates change, increasing in periods of declining interest rates and declining in periods of increasing interest rates.

As of December 31, 2022 and 2021, we also had revolving credit facilities of approximately $5.7 billion and $5.2 billion, respectively, available to us. We are obligated to pay interest on borrowings under these facilities as well as other customary fees, including an upfront fee and an unused commitment fee based on our debt rating. Borrowings under these facilities, if any, bear interest at floating rates. As a result, we are exposed to the risk related to fluctuations in interest rate to the extent of our borrowings. As of December 31, 2022 and 2021, we had ¥64.3 billion (approximately $491 million) and ¥11.3 billion (approximately $98 million), respectively, outstanding under these credit facilities. A 100 basis points hypothetical adverse change in applicable market interest rates would not have resulted in a material impact to interest expense recorded in the period. For additional information, see "Note 12—Debt" in the notes to the consolidated financial statements included in this Form 10-K.

Interest rates may also adversely impact our customers' spending levels and ability and willingness to pay outstanding amounts owed to us. Higher interest rates often lead to larger payment obligations by customers of our credit products to us, or to lenders under mortgage, credit card, and other consumer and merchant loans, which may reduce our customers' ability to remain current on their obligations to us and therefore lead to increased delinquencies, charge-offs, and allowances for loans and interest receivable, which could have an adverse effect on our net income (loss).

FOREIGN CURRENCY EXCHANGE RATE RISK

We have significant operations internationally that are denominated in foreign currencies, primarily the British pound, Euro, Australian dollar, and Canadian dollar, which subject us to foreign currency exchange rate risk and may adversely impact our financial results. We transact in various foreign currencies and have significant international revenues and costs. In addition, we charge our international subsidiaries for their use of intellectual property and technology and for certain corporate services. Our cash flows, results of operations, and certain of our intercompany balances that are exposed to foreign currency exchange rate fluctuations may differ materially from expectations, and we may record significant gains or losses due to foreign currency fluctuations and related hedging activities. We are generally a net receiver of foreign currencies and therefore benefit from a weakening of the United States ("U.S.") dollar, and are adversely affected by a strengthening of the U.S. dollar, relative to foreign currencies. We considered the historical trends in foreign currency exchange rates and determined that it was reasonably possible that changes in exchange rates of 10% for all currencies could be experienced in the near term.

We have a foreign currency exchange exposure management program designed to identify material foreign currency exposures, manage these exposures, and reduce the potential effects of currency fluctuations on our consolidated cash flows and results of operations through the execution of foreign currency exchange contracts. These foreign currency exchange contracts are accounted for as derivative instruments; for additional details related to our foreign currency exchange contracts, please see “Note 10—Derivative Instruments” to the consolidated financial statements included in this Form 10-K.

We use foreign currency exchange forward contracts to protect our forecasted U.S. dollar-equivalent earnings and our investment in foreign subsidiaries from adverse changes in foreign currency exchange rates. These hedging contracts reduce, but do not entirely eliminate, the impact of adverse foreign currency exchange rate movements. We designate these contracts as cash flow hedges of forecasted revenues denominated in foreign currencies and net investment hedges for accounting purposes. The derivative’s gain or loss is initially reported as a component of AOCI. Cash flow hedges are subsequently reclassified into revenue in the same period the forecasted transaction affects earnings. The accumulated gains and losses associated with net investment hedges will remain in AOCI until the foreign subsidiaries are sold or substantially liquidated, at which point they will be reclassified into earnings.

If the U.S. dollar weakened by a hypothetical 10% at December 31, 2022 and 2021, the amount recorded in AOCI related to our foreign currency exchange forward contracts, before taxes, would have been approximately $710 million and $512 million lower, respectively, before considering the offsetting impact of the underlying hedged item.

We have an additional foreign currency exchange management program in which we use foreign currency exchange contracts to offset the foreign currency exchange risk on our assets and liabilities denominated in currencies other than the functional currency of our subsidiaries. These contracts are not designated as hedging instruments and reduce, but do not entirely eliminate, the impact of currency exchange rate movements on our assets and liabilities. The foreign currency exchange gains and losses on our assets and liabilities are recorded in other income (expense), net, and are offset by the gains and losses on the foreign currency exchange contracts.

Adverse changes in exchange rates of a hypothetical 10% for all foreign currencies would have resulted in a negative impact on income before income taxes of approximately $173 million and $196 million at December 31, 2022 and 2021, respectively, without considering the offsetting effect of foreign currency exchange contracts. Foreign currency exchange contracts in place as of December 31, 2022 would have positively impacted income before income taxes by approximately $144 million, resulting in a net negative impact of approximately $29 million. Foreign currency exchange contracts in place as of December 31, 2021 would have positively impacted income before income taxes by approximately $203 million, resulting in a net positive impact of approximately $7 million. These reasonably possible adverse changes in exchange rates of 10% were applied to monetary assets, monetary liabilities, and available-for-sale debt securities denominated in currencies other than the functional currencies of our subsidiaries at the balance sheet dates to compute the adverse impact these changes would have had on our income before income taxes in the near term.

EQUITY INVESTMENT RISK

Our strategic investments are subject to a variety of market-related risks that could substantially reduce or increase the carrying value of the portfolio. As of December 31, 2022 and 2021, our strategic investments totaled $2.1 billion and $3.2 billion which represented approximately 14% and 20% of our total cash, cash equivalents, and short-term and long-term investment portfolio at each of those respective dates. Our strategic investments include marketable equity securities, which are publicly traded, and non-marketable equity securities, which are primarily investments in privately held companies. We are required to record all adjustments to the value of these strategic investments through our consolidated statements of income (loss). As such, we expect volatility to our net income (loss) in future periods due to changes in fair value related to our investments in marketable equity securities and changes in observable prices related to our non-marketable equity securities accounted for under the Measurement Alternative. These changes could be material based on market conditions. Additionally, the financial success of our investments in privately held companies is typically dependent on a liquidity event, such as a public offering, acquisition, private sale, or other favorable market event providing the ability to realize appreciation in the value of the investment. A hypothetical adverse change of 10% in the carrying value of our strategic investments as of December 31, 2022, which could be experienced in the near term, would have resulted in an incremental decrease of approximately $215 million to the carrying value of the portfolio. We review our non-marketable equity securities accounted for under the Measurement Alternative for impairment when events and circumstances indicate a decline in fair value of such assets below carrying value. Our analysis includes a review of recent operating results and trends, recent purchases and sales of securities, and other publicly available data, for which we assess factors such as the investees’ financial condition and business outlook, industry performance, regulatory, economic, or technological environment, and other relevant events and factors affecting the investee.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The audited consolidated financial statements covering the years ended December 31, 2022, 2021, and 2020 and accompanying notes listed in Part IV, Item 15(a)(1) of this Form 10-K are included in this report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures. Based on the evaluation of our disclosure controls and procedures (as defined in the Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act), our principal executive officer and our principal financial officer have concluded that as of December 31, 2022, the end of the period covered by this report, our disclosure controls and procedures were effective.

Management's report on internal control over financial reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our management, including our principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its evaluation under the framework in *Internal Control - Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2022.

The effectiveness of our internal control over financial reporting as of December 31, 2022 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears in Item 15(a) of this Form 10-K.

Changes in internal controls over financial reporting. There were no changes in our internal controls over financial reporting as defined in Exchange Act Rule 13a-15(f) that occurred during our most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Incorporated by reference from our Proxy Statement for our 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2022.

ITEM 11. EXECUTIVE COMPENSATION

Incorporated by reference from our Proxy Statement for our 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2022.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Incorporated by reference from our Proxy Statement for our 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2022.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Incorporated by reference from our Proxy Statement for our 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2022.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Incorporated by reference from our Proxy Statement for our 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2022.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this report:

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of PayPal Holdings, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of PayPal Holdings, Inc. and its subsidiaries (the “Company”) as of December 31, 2022 and 2021, and the related consolidated statements of income (loss), of comprehensive income (loss), of stockholders’ equity and of cash flows for each of the three years in the period ended December 31, 2022, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2022 listed in the index appearing under Item 15(a)(2) (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Changes in Accounting Principles

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for credit losses on financial instruments in 2020.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company’s internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements 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. 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) 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 matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Allowance for Loans Receivable

As described in Notes 1 and 11 to the consolidated financial statements, as of December 31, 2022, the Company recorded total loans and interest receivable of $7,431 million, net of an allowance of $598 million. The allowance for loans receivable is primarily based on expectations of credit losses based on historical lifetime loss data as well as macroeconomic forecasts applied to the portfolio. The loss models incorporate various portfolio attributes, as well as macroeconomic factors such as forecasted trends in unemployment, retail e-commerce sales, and household disposable income. The forecasted macroeconomic factors are sourced externally, using a single scenario to reflect the economic conditions applicable to a particular period. Management also includes qualitative adjustments that incorporate incremental information not captured in the expected credit loss models.

The principal considerations for our determination that performing procedures relating to the allowance for loans receivable is a critical audit matter are (i) the high degree of auditor subjectivity and effort in performing procedures and evaluating audit evidence relating to certain models which apply macroeconomic forecasts to estimate expected credit losses; and (ii) the audit effort involved in the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the allowance for loans receivable, including controls over certain models which apply macroeconomic forecasts to estimate expected credit losses. These procedures also included, among others, the involvement of professionals with specialized skill and knowledge to assist in testing management's process for estimating the allowance for loans receivable. Testing management's process included (i) evaluating the appropriateness of the methodology and certain models; (ii) testing the completeness and accuracy of certain data used in the estimate; and (iii) evaluating the reasonableness of management's application of macroeconomic forecasts to estimate expected credit losses.

/s/ PricewaterhouseCoopers LLP
San Jose, California
February 9, 2023

We have served as the Company's auditor since 2000.

PayPal Holdings, Inc.

CONSOLIDATED BALANCE SHEETS

	As of December 31,	
	2022	**2021**
	(In millions, except par value)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 7,776	$ 5,197
Short-term investments	3,092	4,303
Accounts receivable, net	963	800
Loans and interest receivable, net of allowances of $598 and $491 as of December 31, 2022 and 2021, respectively	7,431	4,846
Funds receivable and customer accounts	36,357	36,141
Prepaid expenses and other current assets	1,898	1,287
Total current assets	57,517	52,574
Long-term investments	5,018	6,797
Property and equipment, net	1,730	1,909
Goodwill	11,209	11,454
Intangible assets, net	788	1,332
Other assets	2,455	1,737
Total assets	$ 78,717	$ 75,803
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$ 126	$ 197
Funds payable and amounts due to customers	40,107	38,841
Accrued expenses and other current liabilities	4,055	3,755
Income taxes payable	813	236
Total current liabilities	45,101	43,029
Deferred tax liability and other long-term liabilities	2,925	2,998
Long-term debt	10,417	8,049
Total liabilities	58,443	54,076
Commitments and contingencies (Note 13)		
Equity:		
Common stock, $0.0001 par value; 4,000 shares authorized; 1,136 and 1,168 shares outstanding as of December 31, 2022 and 2021, respectively	—	—
Preferred stock, $0.0001 par value; 100 shares authorized, unissued	—	—
Treasury stock at cost, 173 and 132 shares as of December 31, 2022 and 2021, respectively	(16,079)	(11,880)
Additional paid-in-capital	18,327	17,208
Retained earnings	18,954	16,535
Accumulated other comprehensive income (loss)	(928)	(136)
Total equity	20,274	21,727
Total liabilities and equity	$ 78,717	$ 75,803

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

PayPal Holdings, Inc.
CONSOLIDATED STATEMENTS OF INCOME (LOSS)

	Year Ended December 31,		
	2022	2021	2020
	(In millions, except for per share amounts)		
Net revenues	$ 27,518	$ 25,371	$ 21,454
Operating expenses:			
Transaction expense	12,173	10,315	7,934
Transaction and credit losses	1,572	1,060	1,741
Customer support and operations	2,120	2,075	1,778
Sales and marketing	2,257	2,445	1,861
Technology and development	3,253	3,038	2,642
General and administrative	2,099	2,114	2,070
Restructuring and other charges	207	62	139
Total operating expenses	23,681	21,109	18,165
Operating income	3,837	4,262	3,289
Other income (expense), net	(471)	(163)	1,776
Income before income taxes	3,366	4,099	5,065
Income tax expense (benefit)	947	(70)	863
Net income (loss)	$ 2,419	$ 4,169	$ 4,202
Net income (loss) per share:			
Basic	$ 2.10	$ 3.55	$ 3.58
Diluted	$ 2.09	$ 3.52	$ 3.54
Weighted average shares:			
Basic	1,154	1,174	1,173
Diluted	1,158	1,186	1,187

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

PayPal Holdings, Inc.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Net income (loss)	$ 2,419	$ 4,169	$ 4,202
Other comprehensive income (loss), net of reclassification adjustments:			
Foreign currency translation adjustments (“CTA”)	(305)	(72)	(48)
Net investment hedges CTA (losses) gains, net	(25)	—	55
Tax benefit on net investment hedges CTA losses, net	6	—	—
Unrealized (losses) gains on cash flow hedges, net	(88)	522	(329)
Tax benefit (expense) on unrealized (losses) gains on cash flow hedges, net	4	(26)	4
Unrealized (losses) gains on investments, net	(504)	(98)	9
Tax benefit (expense) on unrealized (losses) gains on investments, net	120	22	(2)
Other comprehensive income (loss), net of tax	(792)	348	(311)
Comprehensive income (loss)	$ 1,627	$ 4,517	$ 3,891

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

PayPal Holdings, Inc.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock Shares	Treasury Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Noncontrolling Interest	Total Equity
	(In millions)						
Balances at December 31, 2019	1,173	$ (6,872)	$ 15,588	$ (173)	$ 8,342	$ 44	$ 16,929
Adoption of current expected credit loss standard	—	—	—	—	(178)	—	(178)
Net income	—	—	—	—	4,202	—	4,202
Foreign CTA	—	—	—	(48)	—	—	(48)
Net investment hedge CTA gain	—	—	—	55	—	—	55
Unrealized losses on cash flow hedges, net	—	—	—	(329)	—	—	(329)
Tax benefit on unrealized losses on cash flow hedges, net	—	—	—	4	—	—	4
Unrealized gains on investments, net	—	—	—	9	—	—	9
Tax expense on unrealized gains on investments, net	—	—	—	(2)	—	—	(2)
Common stock and stock-based awards issued and assumed, net of shares withheld for employee taxes	11	—	(365)	—	—	—	(365)
Common stock repurchased	(12)	(1,635)	—	—	—	—	(1,635)
Stock-based compensation	—	—	1,421	—	—	—	1,421
Balances at December 31, 2020	1,172	$ (8,507)	$ 16,644	$ (484)	$ 12,366	$ 44	$ 20,063
Net income	—	—	—	—	4,169	—	4,169
Foreign CTA	—	—	—	(72)	—	—	(72)
Unrealized gains on cash flow hedges, net	—	—	—	522	—	—	522
Tax expense on unrealized gains on cash flow hedges, net	—	—	—	(26)	—	—	(26)
Unrealized losses on investments, net	—	—	—	(98)	—	—	(98)
Tax benefit on unrealized losses on investments, net	—	—	—	22	—	—	22
Common stock and stock-based awards issued and assumed, net of shares withheld for employee taxes	11	—	(881)	—	—	—	(881)
Common stock repurchased	(15)	(3,373)	—	—	—	—	(3,373)
Stock-based compensation	—	—	1,445	—	—	—	1,445
Change in noncontrolling interest	—	—	—	—	—	(44)	(44)
Balances at December 31, 2021	1,168	$ (11,880)	$ 17,208	$ (136)	$ 16,535	$ —	$ 21,727
Net income	—	—	—	—	2,419	—	2,419
Foreign CTA	—	—	—	(305)	—	—	(305)
Net investment hedge CTA losses, net	—	—	—	(25)	—	—	(25)
Tax benefit on net investment hedges CTA losses, net	—	—	—	6	—	—	6
Unrealized losses on cash flow hedges, net	—	—	—	(88)	—	—	(88)
Tax benefit on unrealized losses on cash flow hedges, net	—	—	—	4	—	—	4
Unrealized losses on investments, net	—	—	—	(504)	—	—	(504)
Tax benefit on unrealized losses on investments, net	—	—	—	120	—	—	120
Common stock and stock-based awards issued, net of shares withheld for employee taxes	9	—	(195)	—	—	—	(195)
Common stock repurchased	(41)	(4,199)	—	—	—	—	(4,199)
Stock-based compensation	—	—	1,313	—	—	—	1,313
Other	—	—	1	—	—	—	1
Balances at December 31, 2022	1,136	$ (16,079)	$ 18,327	$ (928)	$ 18,954	$ —	$ 20,274

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

PayPal Holdings, Inc.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2022	2021	2020
		(In millions)	
Cash flows from operating activities:			
Net income (loss)	$ 2,419	$ 4,169	$ 4,202
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Transaction and credit losses	1,572	1,060	1,741
Depreciation and amortization	1,317	1,265	1,189
Stock-based compensation	1,261	1,376	1,376
Deferred income taxes	(811)	(482)	165
Net (gains) losses on strategic investments	304	(46)	(1,914)
Other	205	100	47
Changes in assets and liabilities:			
Accounts receivable	(163)	(222)	(100)
Transaction loss allowance for cash losses, net	(1,230)	(1,178)	(1,120)
Other current assets and non-current assets	118	(486)	(171)
Accounts payable	(35)	(31)	(4)
Income taxes payable	373	73	(230)
Other current liabilities and non-current liabilities	483	199	1,038
Net cash provided by operating activities	5,813	5,797	6,219
Cash flows from investing activities:			
Purchases of property and equipment	(706)	(908)	(866)
Proceeds from sales of property and equipment	5	5	120
Purchases and originations of loans receivable	(28,170)	(13,420)	(6,098)
Principal repayment of loans receivable	24,903	11,826	6,392
Purchases of investments	(20,219)	(40,116)	(41,513)
Maturities and sales of investments	23,411	39,698	30,908
Acquisitions, net of cash and restricted cash acquired	—	(2,763)	(3,609)
Funds receivable	(2,813)	193	(1,552)
Collateral posted related to derivative instruments, net	(19)	336	(327)
Other investing activities	187	—	—
Net cash used in investing activities	(3,421)	(5,149)	(16,545)
Cash flows from financing activities:			
Proceeds from issuance of common stock	143	162	137
Purchases of treasury stock	(4,199)	(3,373)	(1,635)
Tax withholdings related to net share settlements of equity awards	(336)	(1,036)	(521)
Borrowings under financing arrangements	3,475	272	6,966
Repayments under financing arrangements	(1,686)	(361)	(3,000)
Funds payable and amounts due to customers	1,498	3,572	10,597
Collateral received related to derivative instruments, net	(6)	207	(38)
Other financing activities	1	—	(52)
Net cash (used in) provided by financing activities	(1,110)	(557)	12,454
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(155)	(102)	169
Net change in cash, cash equivalents, and restricted cash	1,127	(11)	2,297
Cash, cash equivalents, and restricted cash at beginning of period	18,029	18,040	15,743
Cash, cash equivalents, and restricted cash at end of period	$ 19,156	$ 18,029	$ 18,040

PayPal Holdings, Inc.

CONSOLIDATED STATEMENTS OF CASH FLOWS—(Continued)

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Supplemental cash flow disclosures:			
Cash paid for interest	$ 280	$ 231	$ 190
Cash paid for income taxes, net	$ 878	$ 474	$ 565
The table below reconciles cash, cash equivalents, and restricted cash as reported in the consolidated balance sheets to the total of the same amounts shown in the consolidated statements of cash flows:			
Cash and cash equivalents	$ 7,776	$ 5,197	$ 4,794
Short-term and long-term investments	17	109	24
Funds receivable and customer accounts	11,363	12,723	13,222
Total cash, cash equivalents, and restricted cash shown in the consolidated statements of cash flows	$ 19,156	$ 18,029	$ 18,040

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

PayPal Holdings, Inc.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—OVERVIEW AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

OVERVIEW AND ORGANIZATION

PayPal Holdings, Inc. ("PayPal," the "Company," "we," "us," or "our") was incorporated in Delaware in January 2015 and is a leading technology platform that enables digital payments and simplifies commerce experiences on behalf of merchants and consumers worldwide. PayPal is committed to democratizing financial services to help improve the financial health of individuals and to increase economic opportunity for entrepreneurs and businesses of all sizes around the world. Our goal is to enable our merchants and consumers to manage and move their money anywhere in the world in the markets we serve, anytime, on any platform, and using any device when sending payments or getting paid, including person-to-person payments.

We operate globally and in a rapidly evolving regulatory environment characterized by a heightened focus by regulators globally on all aspects of the payments industry, including countering terrorist financing, anti-money laundering, privacy, cybersecurity, and consumer protection. The laws and regulations applicable to us, including those enacted prior to the advent of digital payments, continue to evolve through legislative and regulatory action and judicial interpretation. New or changing laws and regulations, including changes to their interpretation and implementation, as well as increased penalties and enforcement actions related to non-compliance, could have a material adverse impact on our business, results of operations, and financial condition. We monitor these areas closely and are focused on designing compliant solutions for our customers.

SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation and principles of consolidation

The accompanying consolidated financial statements include the financial statements of PayPal and our wholly- and majority-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. The noncontrolling interest reported in a prior period was a component of equity on our consolidated balance sheets and represented the equity interests not owned by PayPal, and was recorded for consolidated entities we controlled and of which we owned less than 100%. Noncontrolling interest was not presented separately on our consolidated statements of income (loss) as the amount was de minimis.

Investments in entities where we have the ability to exercise significant influence, but not control, over the investee are accounted for using the equity method of accounting. For such investments, our share of the investee's results of operations is included in other income (expense), net on our consolidated statements of income (loss). Investments in entities where we do not have the ability to exercise significant influence over the investee are accounted for at fair value or cost minus impairment, if any, adjusted for changes resulting from observable price changes, which are included in other income (expense), net on our consolidated statements of income (loss). Our investment balance is included in long-term investments on our consolidated balance sheets.

We determine at the inception of each investment, and re-evaluate if certain events occur, whether an entity in which we have made an investment is considered a variable interest entity ("VIE"). If we determine an investment is in a VIE, we then assess if we are the primary beneficiary, which would require consolidation.

As of December 31, 2021, we had consolidated two VIEs that provided financing for and held loans receivable of Paidy, Inc. ("Paidy"). We were the primary beneficiary of the VIEs as we performed the servicing and collection for the loans receivable, which were the activities that most significantly impacted the VIE's economic performance, and we had the obligation to absorb the losses and/or the right to receive the benefits of the VIE that could potentially be significant to these entities. The financial results of these VIEs were included in our consolidated financial statements. As of December 31, 2021, the carrying value of the assets and liabilities of our consolidated VIEs was included as short-term investments of $87 million, loans and interest receivable, net of $21 million, and long-term debt of $98 million. Cash of $87 million, included in short-term investments, was restricted to settle the debt obligations. In the first quarter of 2022, we terminated Paidy's legacy debt structure and replaced it with a new credit agreement executed in February 2022. As a result, we no longer have any consolidated VIEs as of December 31, 2022. See "Note 12—Debt" for additional information.

As of December 31, 2022 and December 31, 2021, the carrying value of our investments in nonconsolidated VIEs was $128 million and $74 million, respectively, and is included as non-marketable equity securities applying the equity method of accounting in long-term investments on our consolidated balance sheets. Our maximum exposure to loss related to our nonconsolidated VIEs, which represents funded commitments and any future funding commitments, was $232 million and $205 million as of December 31, 2022 and 2021, respectively.

In the opinion of management, these consolidated financial statements reflect all adjustments, consisting only of normal recurring adjustments, which are necessary for a fair presentation of the consolidated financial statements for all periods presented. Certain amounts for prior years have been reclassified to conform to the financial statement presentation as of and for the year ended December 31, 2022.

Reclassifications

Beginning with the fourth quarter of 2022, we reclassified certain cash flows related to our collateral security arrangements for derivative instruments from cash flows from operating activities to cash flows from investing activities and cash flows from financing activities within the consolidated statements of cash flows. Prior period amounts have been reclassified to conform to the current period presentation.

The current period presentation classifies all changes in collateral posted and collateral received related to derivative instruments on our consolidated statements of cash flows as cash flows from investing activities and cash flows from financing activities, respectively. We believe that the current period presentation provides a more meaningful representation of the nature of the cash flows and allows for greater transparency as the cash flows related to the derivatives impact operating cash flows upon settlement exclusive of the offsetting cash flows from collateral.

The following tables present the effects of the changes on the presentation of these cash flows to the previously reported consolidated statements of cash flows:

	Year Ended December 31, 2021 (In millions)		
	As Previously Reported [1]	Adjustments	Reclassified
Net cash provided by (used in):			
Operating activities[2]	$ 6,340	$ (543)	$ 5,797
Investing activities[3]	(5,485)	336	(5,149)
Financing activities[4]	(764)	207	(557)
Effect of exchange rates on cash, cash equivalents, and restricted cash	(102)	—	(102)
Net decrease in cash, cash equivalents, and restricted cash	$ (11)	$ —	$ (11)

[1] As reported in our 2021 Form 10-K filed with the SEC on February 3, 2022.
[2] Financial statement lines impacted in operating activities were “Other current assets and non-current assets” and “Other current liabilities and non-current liabilities,” which decreased by $336 million and $207 million, respectively, to arrive at the reclassified amounts.
[3] Financial statement line impacted in investing activities was “Collateral posted related to derivative instruments, net.”
[4] Financial statement line impacted in financing activities was “Collateral received related to derivative instruments, net.”

	Year Ended December 31, 2020 (In millions)		
	As Previously Reported [1]	Adjustments	Reclassified
Net cash provided by (used in):			
Operating activities[2]	$ 5,854	$ 365	$ 6,219
Investing activities[3]	(16,218)	(327)	(16,545)
Financing activities[4]	12,492	(38)	12,454
Effect of exchange rates on cash, cash equivalents, and restricted cash	169	—	169
Net increase in cash, cash equivalents, and restricted cash	$ 2,297	$ —	$ 2,297

[1] As reported in our 2021 Form 10-K filed with the SEC on February 3, 2022.
[2] Financial statement lines impacted in operating activities were "other current assets and non-current assets" and "other current liabilities and non-current liabilities," which increased by $327 million and $38 million, respectively, to arrive at the reclassified amounts.
[3] Financial statement line impacted in investing activities was "Collateral posted related to derivative instruments, net."
[4] Financial statement line impacted in financing activities was "Collateral received related to derivative instruments, net."

Use of estimates

The preparation of consolidated financial statements in conformity with United States ("U.S.") generally accepted accounting principles ("GAAP") 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 revenues and expenses during the reporting period. On an ongoing basis, we evaluate our estimates, including those related to provisions for transaction and credit losses, income taxes, loss contingencies, revenue recognition, the valuation of goodwill and intangible assets, and the valuation of strategic investments. We base our estimates on historical experience and various other assumptions which we believe to be reasonable under the circumstances. Actual results could materially differ from these estimates.

Cash and cash equivalents

Cash and cash equivalents are short-term, highly liquid investments with original maturities of three months or less when purchased and are comprised of primarily bank deposits, government and agency securities, and commercial paper.

Investments

Short-term investments include time deposits and available-for-sale debt securities with original maturities of greater than three months but less than one year when purchased or maturities of one year or less on the reporting date. Long-term investments include time deposits and available-for-sale debt securities with maturities exceeding one year on the reporting date, as well as our strategic investments. Our available-for-sale debt securities are reported at fair value using the specific identification method. Unrealized gains and losses are reported as a component of other comprehensive income (loss), net of related estimated tax provisions or benefits.

We elect to account for available-for-sale debt securities denominated in currencies other than the functional currency of our subsidiaries, underlying funds receivable and customer accounts, short-term investments, and long-term investments, under the fair value option as further discussed in "Note 9—Fair Value Measurement of Assets and Liabilities." The changes in fair value related to initial measurement and subsequent changes in fair value are included in earnings as a component of other income (expense), net.

Our strategic investments consist of marketable equity securities, which are publicly traded, and non-marketable equity securities, which are primarily investments in privately held companies. Marketable equity securities have readily determinable fair values with changes in fair value recorded in other income (expense), net. Non-marketable equity securities include investments that do not have a readily determinable fair value, as well as equity method investments. The investments that do not have readily determinable fair value are measured at cost minus impairment, if any, and are adjusted for changes resulting from observable price changes in orderly transactions for an identical or similar investment in the same issuer (the "Measurement Alternative"). Non-marketable equity securities also include our investments where we have the ability to exercise significant influence, but not control, over the investee and account for these securities using the equity method of accounting. All gains and losses on these investments, realized and unrealized, and our share of earnings or losses from investments accounted for using the equity method are recognized in other income (expense), net on our consolidated statements of income (loss).

We assess whether an impairment loss on our non-marketable, measurement alternative investments has occurred based on qualitative factors such as the companies' financial condition and business outlook, industry performance, regulatory, economic or technological environment, and other relevant events and factors affecting the company. We assess whether an other-than-temporary impairment loss on our equity method investments has occurred due to declines in fair value or other market conditions. When indicators of impairment exist, we estimate the fair value of our non-marketable equity securities using the market approach and/or the income approach. Estimating fair value requires judgment and use of estimates such as discount rates, forecasted cash flows, and market data of comparable companies, among others. If any impairment is identified for non-marketable equity securities or impairment is considered other-than-temporary for our equity method investments, we write down the investment to its fair value and record the corresponding charge through other income (expense), net in our consolidated statements of income (loss). Our available-for-sale debt securities in an unrealized loss position are written down to fair value through a charge to other income (expense), net in our consolidated statements of income (loss) if we intend to sell the security or it is more likely than not we will be required to sell the security before recovery of its amortized cost basis. For the remaining available-for-sale debt securities in an unrealized loss position, if we identify that the decline in fair value has resulted from credit losses, taking into consideration changes to the rating of the security by rating agencies, implied yields versus benchmark yields, and the extent to which fair value is less than amortized cost, among other factors, we estimate the present value of cash flows expected to be collected. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses is recorded, limited by the amount that the fair value is less than the amortized cost basis. Any portion of impairment not related to credit losses is recognized in other comprehensive income (loss).

Loans and interest receivable, net

Loans and interest receivable, net represents merchant receivables originated under our PayPal Working Capital ("PPWC") product and PayPal Business Loan ("PPBL") product and consumer loans originated under our PayPal Credit and installment credit products. PayPal Credit consists of revolving credit products.

In the U.S., PPWC, PPBL, and consumer interest-bearing installment products are provided under a program agreement we have with an independent chartered financial institution ("partner institution"). The partner institution extends credit to merchants for the PPWC and PPBL products and to consumers for interest-bearing installment products and we purchase the related receivables originated by the partner institution. For our merchant finance products outside the U.S., we extend working capital advances and loans in Europe through our Luxembourg banking subsidiary, and working capital loans in Australia through an Australian subsidiary. In the U.S., we extend certain short-term, interest-free, installment loans to consumers through a U.S. subsidiary. For our international consumer credit products, we extend credit in Europe through our Luxembourg banking subsidiary, and in Australia and Japan, through local subsidiaries.

As part of our arrangement with the partner institution in the U.S., we sell back a participation interest in the pool of receivables for the PPWC, PPBL, and consumer interest-bearing installment products. The partner institution has no recourse against us related to their participation interests for failure of debtors to pay when due. The participation interests held by the partner institution have the same priority to the interests held by us and are subject to the same credit, prepayment, and interest rate risk associated with this pool of receivables. All risks of loss are shared pro rata based on participation interests held among all participating stakeholders. We account for the asset transfer as a sale and derecognize the portion of the participation interests for which control has been surrendered. For this arrangement, gains or losses on the sale of the participation interests are not material as the carrying amount of the participation interest sold approximates the fair value at time of transfer.

In certain instances where a merchant is able to demonstrate that it is experiencing financial difficulty, there may be a modification of the loan or advance and the related interest or fee receivable for which it is probable that, without modification, we would be unable to collect all amounts due, therefore resulting in a troubled debt restructuring ("TDR"). Refer to "Note 11—Loans and Interest Receivable" for further information related to TDRs.

Loans, advances, and interest and fees receivable are reported at their outstanding balances, net of any participation interests sold and unamortized deferred origination costs. We maintain the servicing rights for the entire pool of consumer and merchant receivables outstanding and receive a market-based service fee for servicing the assets underlying the participation interest sold.

We offer both revolving and installment credit products to our consumers. The terms of our consumer relationships require us to submit monthly bills to the consumer detailing loan repayment requirements. The terms also allow us to charge the consumer interest and fees in certain circumstances. Due to the relatively small dollar amount of individual loans and interest receivable, we do not require collateral on these balances.

Another partner institution is the exclusive issuer of the PayPal Credit consumer financing program in the U.S. We do not hold an ownership interest in the receivables generated through the program and therefore, do not record these receivables on our consolidated financial statements. PayPal earns a revenue share on the portfolio of consumer receivables owned by the partner institution, which is recorded in revenues from other value added services on our consolidated statements of income (loss).

Allowance for loans and interest receivable

The allowance for loans and interest receivable represents our estimate of current expected credit losses inherent in our portfolio of loans and interest receivables. Increases to the allowance for loans receivable are reflected as a component of transaction and credit losses on our consolidated statements of income (loss). Increases to the allowance for interest and fees receivable are reflected as a reduction of net revenues on our consolidated statements of income (loss), or as a reduction of deferred revenue when interest and fees are billed at the inception of a loan or advance. The evaluation process to assess the adequacy of allowances is subject to numerous estimates and judgments.

The Company adopted Accounting Standards Update ("ASU") 2016-13, *Financial Instruments - Credit Losses* (Topic 326): *Measurement of Credit Losses on Financial Instruments* ("CECL") effective January 1, 2020.

The allowance for merchant loans, advances, and interest and fees receivable is primarily based on expectations of credit losses based on historical lifetime loss data as well as macroeconomic forecasts applied to the portfolio. In the third quarter of 2022, our expected credit loss models for our merchant receivables were updated. These changes did not have a material impact on our provision recorded in the year ended December 31, 2022. The merchant loss models incorporate various portfolio attributes including geographic region, first borrowing versus repeat borrowing, delinquency, internally developed risk ratings, and vintage, as well as macroeconomic factors such as forecasted trends in unemployment and retail e-commerce sales (and through the second quarter of 2022, benchmark credit card charge-off rates.) The forecasted macroeconomic factors are sourced externally, using a single scenario that we believe is most appropriate to the economic conditions applicable to a particular period. The reasonable and supportable forecast period for merchant products that we have included in our projected loss rates for 2022 and 2021, which approximates the estimated life of the loans, is approximately 2.5 to 3.5 years. Projected loss rates, inclusive of historical loss data and macroeconomic factors, are applied to the principal amount of our merchant receivables. We also include qualitative adjustments that incorporate incremental information not captured in the quantitative estimates of our current expected credit losses. The allowance for current expected credit losses on interest and fees receivable is determined primarily by applying loss curves to each portfolio by geography, delinquency, and period of origination, among other factors.

The allowance for consumer loans and interest receivable is primarily based on expectations of credit losses based on historical lifetime loss data. The allowance for loans and interest receivable for our revolving credit product also incorporates macroeconomic forecasts applied to the portfolio. The consumer loss models incorporate various portfolio attributes including geographic region, loan term, delinquency, credit rating, vintage, and for the revolving credit portfolio macroeconomic factors such as forecasted trends in unemployment and household disposable income. The forecasted macroeconomic factors are sourced externally, using a single scenario that we believe is most appropriate to the economic conditions applicable to a particular period. The reasonable and supportable forecast period for revolving products and installment products that we have included in our projected loss rates for 2022, which approximates the estimated life of the loans, is approximately 2 years and approximately 7 months to 3.5 years, respectively. In 2021, the reasonable and supportable forecast periods were consistent with 2022 except for installment products, which had an estimated life of 7 months to 2.5 years. Projected loss rates, inclusive of historical loss data and, for the revolving credit portfolio macroeconomic factors, are derived based on and applied to the principal amount of our consumer receivables. We also include qualitative adjustments that incorporate incremental information not captured in the quantitative estimates of our current expected credit losses, such as expectations of macroeconomic conditions not captured in the loss models for our installment products. The allowance for current expected credit losses on interest and fees receivable is determined primarily by applying loss curves to each portfolio by geography, delinquency, and period of origination, among other factors.

Customer accounts

We hold all customer balances, both in the U.S. and internationally, as direct claims against us which are reflected on our consolidated balance sheets as a liability classified as amounts due to customers. Certain jurisdictions where PayPal operates require us to hold eligible liquid assets, as defined by applicable regulatory requirements and commercial law in these jurisdictions, equal to at least 100% of the aggregate amount of all customer balances. Therefore, we restrict the use of the assets underlying the customer balances to meet these regulatory requirements and separately classify the assets as customer accounts in our consolidated balance sheets. We classify the assets underlying the customer balances as current based on their purpose and availability to fulfill our direct obligation under amounts due to customers. Customer funds for which PayPal is an agent and custodian on behalf of our customers are not reflected on our consolidated balance sheets. These funds include U.S. dollar funds which are deposited at one or more third-party financial institutions insured by the Federal Deposit Insurance Corporation (“FDIC”) and are eligible for FDIC pass-through insurance (subject to applicable limits).

Under applicable accounting standards, we are an agent when facilitating cryptocurrency transactions on behalf of our customers. Cryptocurrencies held on behalf of our customers are not PayPal’s assets and therefore, are not reflected as cryptocurrency assets on our consolidated balance sheets; however, we recognize a crypto asset safeguarding liability with a corresponding safeguarding asset to reflect our obligation to safeguard the cryptocurrencies held on behalf of our customers.

In June 2018, the Luxembourg Commission de Surveillance du Secteur Financier (the “CSSF”) agreed that PayPal’s management may designate up to 35% of European customer balances held in our Luxembourg banking subsidiary to fund European and U.S. credit activities. In August 2022, the CSSF approved PayPal’s management designating up to 50% of such balances to fund our credit activities through the end of February 2023. During the year ended December 31, 2022, an additional $1.1 billion was approved to fund our credit activities. As of December 31, 2022, the cumulative amount approved by management to be designated to fund credit activities aggregated to $3.8 billion and represented approximately 37% of European customer balances made available for our corporate use at that date as determined by applying financial regulations maintained by the CSSF. At the time PayPal’s management designates the European customer balances held in our Luxembourg banking subsidiary to be used to extend credit, the balances are classified as cash and cash equivalents and no longer classified as customer accounts on our consolidated balance sheets. The remaining assets underlying the customer balances remain separately classified as customer accounts on our consolidated balance sheets. We identify these customer accounts separately from corporate funds and maintain them in interest and non-interest bearing bank deposits, time deposits, and available-for-sale debt securities. Customer balances deposited with our partners on a short-term basis in advance of customer transactions and used to fulfill our direct obligation under amounts due to customers are classified as cash and cash equivalents within our customer accounts classification on our consolidated balance sheets. See “Note 8—Funds Receivable and Customer Accounts and Investments” for additional information related to customer accounts.

We present changes in funds receivable and customer accounts as cash flows from investing activities in our consolidated statements of cash flows based on the nature of the activity underlying our customer accounts.

Funds receivable and funds payable

Funds receivable and funds payable arise due to the time required to initiate collection from and clear transactions through external payment networks. When customers fund their PayPal account using their bank account, credit card, debit card, or withdraw funds from their PayPal account to their bank account or through a debit card transaction, there is a clearing period before the cash is received or settled, usually one to three business days for U.S. transactions and generally up to five business days for international transactions. In addition, a portion of our customers' funds are settled directly to their bank account. These funds are also classified as funds receivable and funds payable and arise due to the time required to initiate collection from and clear transactions through external payment networks.

Property and equipment

Property and equipment consists primarily of computer equipment, software and website development costs, land and buildings, leasehold improvements, and furniture and fixtures. Property and equipment are stated at historical cost less accumulated depreciation and amortization. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets; generally, one to four years for computer equipment and software, including capitalized software and website development costs, three years for furniture and fixtures, up to 30 years for buildings and building improvements, and the shorter of five years or the non-cancelable term of the lease for leasehold improvements.

Direct costs incurred to develop software for internal use and website development costs, including those costs incurred in expanding and enhancing our payments platform, are capitalized and amortized generally over an estimated useful life of three years and are recorded as amortization within the financial statement captions aligned with the internal organizations that are the primary beneficiaries of such assets. We capitalized $511 million and $462 million of internally developed software and website development costs for the years ended December 31, 2022 and 2021, respectively. Amortization expense for these capitalized costs was $426 million, $366 million, and $322 million for the years ended December 31, 2022, 2021, and 2020, respectively. Costs related to the maintenance of internal use software and website development costs are expensed as incurred.

Leases

We determine whether an arrangement is a lease for accounting purposes at contract inception. Operating leases are recorded as right-of-use ("ROU") assets, which are included in other assets, and lease liabilities, which are included in accrued expenses and other current liabilities and deferred tax liability and other long-term liabilities on our consolidated balance sheets. For sale-leaseback transactions, we evaluate the sale and the lease arrangement based on our conclusion as to whether control of the underlying asset has been transferred, and recognize the sale-leaseback as either a sale transaction or under the financing method. The financing method requires the asset to remain on our consolidated balance sheets throughout the term of the lease and the proceeds to be recognized as a financing obligation.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. Our leases do not provide an implicit rate and therefore we use an incremental borrowing rate for specific terms on a collateralized basis using information available on the commencement date in determining the present value of lease payments. The ROU asset calculation includes lease payments to be made and excludes lease incentives. The ROU asset and lease liability may include amounts attributed to options to extend or terminate the lease when it is reasonably certain we will exercise that option. When we reach a decision to exercise a lease renewal or termination option, we recognize the associated impact to the ROU asset and lease liability. Lease expense for operating leases is recognized on a straight-line basis over the lease term.

We evaluate ROU assets related to leases for indicators of impairment whenever events or changes in circumstances indicate that the carrying amount of an ROU asset may not be recoverable. When a decision has been made to exit a lease prior to the contractual term or to sublease that space, we evaluate the asset for impairment and recognize the associated impact to the ROU asset and related expense, if applicable. The evaluation is performed at the asset group level initially and when appropriate, at the lowest level of identifiable cash flows, which is at the individual lease level. Undiscounted cash flows expected to be generated by the related ROU assets are estimated over the ROU assets' useful lives. If the evaluation indicates that the carrying amount of the ROU assets may not be recoverable, any potential impairment is measured based upon the fair value of the related ROU asset or asset group as determined by appropriate valuation techniques.

We have lease agreements with lease and non-lease components. We have elected to apply the practical expedient and account for the lease and non-lease components as a single lease component for all leases, where applicable. In addition, we have elected to apply the practical expedients related to lease classification, hindsight, and land easement. We apply a single portfolio approach to account for the ROU assets and lease liabilities.

Goodwill and intangible assets

Goodwill is tested for impairment, at a minimum, on an annual basis at the reporting unit level by first performing a qualitative assessment to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying value. If the reporting unit does not pass the qualitative assessment, then the reporting unit's carrying value is compared to its fair value. Goodwill is considered impaired if the carrying value of the reporting unit exceeds its fair value. The fair value of the reporting unit may be estimated using income and market approaches. The discounted cash flow method, a form of the income approach, uses expected future operating results and a market participant discount rate. The market approach uses comparable company prices and other relevant information generated by market transactions (either publicly traded entities or mergers and acquisitions) to develop pricing metrics to be applied to historical and expected future operating results of the reporting unit. Failure to achieve these expected results, changes in the discount rate, or market pricing metrics may cause a future impairment of goodwill at the reporting unit level. We conducted our annual impairment test of goodwill as of August 31, 2022 and 2021. We determined that no adjustment to the carrying value of goodwill of our reporting unit was required. As of December 31, 2022, we determined that no events occurred, or circumstances changed from August 31, 2022 through December 31, 2022 that would more likely than not reduce the fair value of the reporting unit below its carrying amount.

Intangible assets consist of acquired customer list and user base intangible assets, marketing related intangibles, developed technology, and other intangible assets. Intangible assets are amortized over the period of estimated benefit using the straight-line method and estimated useful lives ranging from two to seven years. No significant residual value is estimated for intangible assets.

Impairment of long-lived assets

We evaluate long-lived assets (including intangible assets) for impairment whenever events or changes in circumstances indicate that the carrying amount of a long-lived asset may not be recoverable. An asset is considered impaired if its carrying amount exceeds the future undiscounted cash flow the asset is expected to generate.

Allowance for transaction losses

We are exposed to transaction losses due to credit card and other payment misuse as well as nonperformance from sellers who accept payments through PayPal. We establish an allowance for estimated losses arising from completing customer transactions, such as chargebacks for unauthorized credit card use and merchant-related chargebacks due to non-delivery or unsatisfactory delivery of purchased items, purchase protection program claims, and account takeovers. This allowance represents an accumulation of the estimated amounts of probable transaction losses as of the reporting date, including those which we have not yet identified. The allowance is monitored regularly and is updated based on actual loss data. The allowance is based on known facts and circumstances, internal factors including experience with similar cases, historical trends involving loss payment patterns, and the mix of transaction and loss types, as applicable. Additions to the allowance are reflected as a component of transaction and credit losses on our consolidated statements of income (loss). The allowance for transaction losses is included in accrued expenses and other current liabilities on our consolidated balance sheets.

Allowance for negative customer balances

Negative customer balances occur primarily when there are insufficient funds in a customer's PayPal account to cover charges applied for Automated Clearing House returns, debit card transactions, and merchant-related chargebacks due to non-delivery or unsatisfactory delivery of purchased items, which are generally within the scope of our protection programs. Negative customer balances can be cured by the customer by adding funds to their account, receiving payments, or through back-up funding sources. We also utilize third-party collection agencies. For negative customer balances that are not expected to be cured or otherwise collected, we provide an allowance for expected losses. The allowance represents expected losses based on historical trends involving collection and write-off patterns, internal factors including our experience with similar cases, other known facts and circumstances, and reasonable and supportable macroeconomic forecasts, as applicable. Loss rates are derived using historical loss data for each delinquency bucket using a roll rate model that captures the losses and the likelihood that a negative customer balance will be written off as the delinquency age of such balance increases. The loss rates are then applied to the outstanding negative customer balances. Once the quantitative calculation is performed, we review the adequacy of the allowance and determine if qualitative adjustments need to be considered. We write-off negative customer balances in the month in which the balance becomes outstanding for 120 days. Write-offs that are recovered are recorded as a reduction to our allowance for negative customer balances. Negative customer balances are included in other current assets, net of the allowance on our consolidated balance sheets. Adjustments to the allowance for negative customer balances are recorded as a component of transaction and credit losses on our consolidated statements of income (loss).

Derivative instruments

See "Note 10—Derivative Instruments" for information related to the derivative instruments.

Fair value measurements

We measure certain financial assets and liabilities at fair value on a recurring basis and certain financial and non-financial assets and liabilities at fair value on a non-recurring basis when a change in fair value or impairment is evidenced. Fair value is defined as the price received to sell an asset or paid to transfer a liability in the principal market for the asset or liability in an orderly transaction between market participants on the measurement date. Fair value is estimated by maximizing the use of observable inputs and minimizing the use of unobservable inputs. The categorization within the following three-level fair value hierarchy for our recurring and non-recurring fair value measurements is based upon the lowest level of input that is available and significant to the fair value measurement:

- Level 1 - Observable inputs, such as unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 - Observable inputs other than Level 1 quoted prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active or other inputs that are observable or can be market-corroborated.
- Level 3 - Unobservable inputs that cannot be directly corroborated by observable market data and that typically reflect management's estimate of assumptions that market participants would use in pricing the asset or liability.

See "Note 9—Fair Value Measurement of Assets and Liabilities" for additional information related to our fair value measurements.

Crypto asset safeguarding liability and corresponding safeguarding asset

See "Note 7—Other Financial Statement Details" for information related to our crypto asset safeguarding liability and corresponding safeguarding asset.

Concentrations of risk

Our cash, cash equivalents, short-term investments, accounts receivable, loans and interest receivable, net, funds receivable and customer accounts, long-term investments, and long-term notes receivable, are potentially subject to concentration of credit risk. Cash, cash equivalents, and customer accounts are placed with financial institutions that management believes are of high credit quality. In addition, funds receivable are generated primarily with financial institutions which management believes are of high credit quality. We invest our cash, cash equivalents, and customer accounts primarily in highly liquid, highly rated instruments which are uninsured. We have corporate deposit balances with financial services institutions which exceed the FDIC insurance limit of $250,000. As part of our cash management process, we perform periodic evaluations of the relative credit standing of these financial institutions. Our accounts receivable are derived from revenue earned from customers located in the U.S. and internationally. Our loans and interest receivable are derived from merchant and consumer financing activities for customers located in the U.S. and internationally. Our long-term notes receivable is derived from deferred proceeds associated with the sale of our U.S. consumer credit receivables portfolio to a partner institution in 2018. As of December 31, 2022 and 2021, one customer accounted for 20% and 25% of net accounts receivables, respectively. No customer accounted for more than 10% of net loans receivable as of December 31, 2022 and 2021. At December 31, 2022 and 2021, one partner institution accounted for our long-term notes receivable balance, which represented 18% and 22% of other assets, respectively. During the years ended December 31, 2022, 2021, and 2020, no customer accounted for more than 10% of net revenues. During the years ended December 31, 2022, 2021, and 2020, we earned approximately 2%, 6%, and 13% of revenue, respectively, from customers on eBay's Marketplaces platform. No other source of revenue represented more than 10% of our revenue.

Revenue recognition

See "Note 2—Revenue" for information related to our revenue recognition.

Advertising expense

We expense the cost of producing advertisements at the time production occurs and expense the cost of communicating advertisements in the period during which the advertising space or airtime is used as sales and marketing expense. Online advertising expenses are recognized based on the terms of the individual agreements, which are generally over the greater of the ratio of the number of impressions delivered over the total number of contracted impressions, on a pay-per-click basis, or on a straight-line basis over the term of the contract. Advertising expense totaled $518 million, $740 million, and $654 million for the years ended December 31, 2022, 2021, and 2020, respectively.

Defined contribution savings plans

We have a defined contribution savings plan in the U.S. which qualifies under Section 401(k) of the Internal Revenue Code ("Code"). Our non-U.S. employees are covered by other savings plans. Expenses related to our defined contribution savings plans are recorded when services are rendered by our employees.

Stock-based compensation

We determine compensation expense associated with restricted stock units, performance based restricted stock units, and restricted stock awards based on the estimated fair value of our common stock on the date of grant. We determine compensation expense associated with stock options based on the estimated grant date fair value method using the Black-Scholes valuation model. We generally recognize compensation expense using a straight-line amortization method over the respective vesting period for awards that are ultimately expected to vest. Accordingly, stock-based compensation expense for the years ended December 31, 2022, 2021, and 2020 has been reduced for estimated forfeitures. When estimating forfeitures, we consider voluntary termination behavior of our employees as well as trends of actual forfeitures.

Foreign currency

Many of our foreign subsidiaries have designated the local currency of their respective countries as their functional currency. Assets and liabilities of our non-U.S. dollar functional currency subsidiaries are translated into U.S. dollars at exchange rates prevailing at the balance sheet dates. Revenues and expenses of our non-U.S. dollar functional currency subsidiaries are translated into U.S. dollars using daily exchange rates. Gains and losses resulting from these translations are recorded as a component of accumulated other comprehensive income (loss) ("AOCI"). Gains and losses from the remeasurement of foreign currency transactions into the functional currency are recognized as other income (expense), net in our consolidated statements of income (loss).

Income taxes

We account for income taxes using an asset and liability approach which requires the recognition of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in the financial statements or tax returns. The measurement of current and deferred tax assets and liabilities is based on provisions of enacted tax laws; the effects of future changes in tax laws or rates are not anticipated. If necessary, the measurement of deferred tax assets is reduced by the amount of any tax benefits that are not expected to be realized based on available evidence. We report a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. We recognize interest and penalties, if any, related to unrecognized tax benefits in income tax expense. We account for Global Intangible Low-Taxed Income as a current-period expense when incurred.

Other income (expense), net

Other income (expense), net includes: (i) interest income, which consists of interest earned on corporate cash and cash equivalents and short-term and long-term investments, (ii) interest expense, which consists of interest expense, fees, and amortization of debt discount on our long-term debt (including current portion) and credit facilities, (iii) realized and unrealized gains (losses) on strategic investments, which includes changes in fair value related to our marketable equity securities and observable price changes and impairments on our non-marketable equity securities, and (iv) other, which primarily includes foreign currency exchange gains and losses due to remeasurement of certain foreign currency denominated monetary assets and liabilities, and fair value changes on the derivative contracts not designated as hedging instruments.

Recent accounting guidance

In March 2022, the Financial Accounting Standards Board ("FASB") issued ASU 2022-02, *Troubled Debt Restructurings ("TDRs")* and *Vintage Disclosures* (Topic 326): *Financial Instruments – Credit Losses*. This amended guidance will eliminate the accounting designation of a loan modification as a TDR, including eliminating the measurement guidance for TDRs. The amendments also enhance existing disclosure requirements and introduce new requirements related to modifications of receivables due from borrowers experiencing financial difficulty. Additionally, this guidance requires entities to disclose gross write-offs by year of origination for financing receivables, such as loans and interest receivable. The amended guidance is effective for fiscal years beginning after December 15, 2022 and is required to be applied prospectively, except for the recognition and measurement of TDRs, which can be applied on a modified retrospective basis. We have concluded that our financial statements were not materially impacted upon adoption. We adopted this guidance effective January 1, 2023 on a prospective basis and will provide additional disclosures as required.

Recently adopted accounting guidance

In March 2022, the SEC released Staff Accounting Bulletin No. 121 ("SAB 121"), which provides guidance for an entity to consider when it has obligations to safeguard customers' crypto assets, whether directly or through an agent or another third party acting on its behalf. The interpretive guidance requires a reporting entity to record a liability to reflect its obligation to safeguard the crypto assets held for its platform users with a corresponding safeguarding asset. The crypto asset safeguarding liability and the corresponding safeguarding asset will be measured at the fair value of the crypto assets held for the platform users with the measurement of the safeguarding asset taking into account any potential loss events. SAB 121 also requires disclosures related to the entity's safeguarding obligations for crypto assets held for its platform users. SAB 121 was effective in the first interim or annual financial statements ending after June 15, 2022 with retrospective application as of the beginning of the fiscal year. We adopted this guidance for the quarter ended June 30, 2022 with retrospective application as of January 1, 2022. As of June 30, 2022, we recorded $596 million for both the crypto asset safeguarding liability and corresponding safeguarding asset, which were classified as accrued expenses and other current liabilities and prepaid expenses and other current assets, respectively, on our condensed consolidated balance sheet. For additional information, see "Note 7—Other Financial Statement Details."

There are other new accounting pronouncements issued by the FASB that we have adopted or will adopt, as applicable. We do not believe any of these new accounting pronouncements have had, or will have, a material impact on our consolidated financial statements or disclosures.

NOTE 2—REVENUE

We enable our customers to send and receive payments. We earn revenue primarily by completing payment transactions for our customers on our payments platform and from other value added services. Our revenues are classified into two categories: transaction revenues and revenues from other value added services.

TRANSACTION REVENUES

We earn transaction revenues primarily from fees paid by our customers to receive payments on our platform. These fees may have a fixed and variable component. The variable component is generally a percentage of the value of the payment amount and is known at the time the transaction is processed. For a portion of our transactions, the variable component of the fee is eligible for reimbursement when the underlying transaction is approved for a refund. We estimate the amount of fee refunds that will be processed each quarter and record a provision against our transaction revenues. The volume of activity processed on our payments platform, which results in transaction revenue, is referred to as Total Payment Volume ("TPV"). We earn additional fees from merchants and consumers on transactions where we perform currency conversion, when we enable cross-border transactions (i.e., transactions where the merchant and consumer are in different countries), to facilitate the instant transfer of funds for our customers from their PayPal or Venmo account to their bank account or debit card, to facilitate the purchase and sale of cryptocurrencies, as contractual compensation from sellers that violate our contractual terms (for example, through fraud or counterfeiting), and other miscellaneous fees. Our transaction revenues are also reduced by certain incentives provided to our customers.

Our contracts with our customers are usually open-ended and can be terminated by either party without a termination penalty after the notice period has lapsed. Therefore, our contracts are defined at the transaction level and do not extend beyond the service already provided. Our contracts generally renew automatically without any significant material rights. Some of our contracts include tiered pricing, which are based primarily on volume. The fee charged per transaction is adjusted up or down if the volume processed for a specified period is different from prior period defined volumes. We have concluded that this volume-based pricing approach does not constitute a future material right since the discount is within a range typically offered to a class of customers with similar volume. We do not have any capitalized contract costs and we do not carry any material contract balances.

Our primary service comprises a single performance obligation to complete payments on our payments platform for our customers. Using our risk assessment tools, we perform a transaction risk assessment on individual transactions to determine whether a transaction should be authorized for completion on our payments platform. When we authorize a transaction, we become obligated to our customer to complete the payment transaction.

We recognize fees charged to our customers primarily on a gross basis as transaction revenue when we are the principal in respect of completing a payment transaction. As a principal to the transaction, we control the service of completing payments on our payments platform. We bear primary responsibility for the fulfillment of the payment service, contract directly with our customers, control the product specifications, and define the value proposal from our services. Further, we have full discretion in determining the fee charged to our customers, which is independent of the costs we incur in instances where we may utilize payment processors or other financial institutions to perform services on our behalf. We therefore bear full margin risk when completing a payment transaction. These fees paid to payment processors and other financial institutions are recognized as transaction expense. We are also responsible for providing customer support.

To promote engagement and acquire new users on our platform, we may provide incentives to merchants and consumers in various forms including discounts on fees, rebates, rewards, and coupons. Evaluating whether an incentive is a payment to a customer requires judgment. Incentives that are determined to be consideration payable to a customer or paid on behalf of a customer are recognized as a reduction of revenue. Certain incentives paid to users that are not our customers are classified as sales and marketing expense.

We provide merchants and consumers with protection programs for certain transactions completed on our payments platform. These programs are intended to protect both merchants and consumers from loss primarily due to fraud and counterparty performance. These protection programs do not provide a separate service to our customers and we estimate and record associated costs in transaction and credit losses during the period the payment transaction is completed.

REVENUES FROM OTHER VALUE ADDED SERVICES

We earn revenues from other value added services, which are comprised primarily of revenue earned through partnerships, referral fees, subscription fees, gateway fees, and other services that we provide to our merchants and consumers. These contracts typically have one performance obligation which is provided and recognized over the term of the contract. The transaction price is generally fixed and known at the end of each reporting period; however, for some agreements, it may be necessary to estimate the transaction price using the expected value method. Revenue earned from other value added services is recorded on a net basis when we are considered the agent with respect to processing transactions.

We also earn revenues from interest and fees earned on our portfolio of loans receivable and interest earned on certain assets underlying customer balances. Interest and fees earned on the portfolio of loans receivable are computed and recognized based on the effective interest method and are presented net of any required reserves and amortization of deferred origination costs.

DISAGGREGATION OF REVENUE

We determine operating segments based on how our chief operating decision maker (“CODM”) manages the business, makes operating decisions around the allocation of resources, and evaluates operating performance. Our CODM is our Chief Executive Officer, who regularly reviews our operating results on a consolidated basis. We operate as one segment and have one reportable segment. Based on the information provided to and reviewed by our CODM, we believe that the nature, amount, timing, and uncertainty of our revenue and cash flows and how they are affected by economic factors are most appropriately depicted through our primary geographical markets and types of revenue categories (transaction revenues and revenues from other value added services). Revenues recorded within these categories are earned from similar products and services for which the nature of associated fees and the related revenue recognition models are substantially the same.

The following table presents our revenue disaggregated by primary geographical market and category:

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Primary geographical markets			
U.S.	$ 15,807	$ 13,712	$ 11,013
United Kingdom ("U.K.")	2,071	2,340	2,340
Other countries[1]	9,640	9,319	8,101
Total net revenues[2]	$ 27,518	$ 25,371	$ 21,454
Revenue category			
Transaction revenues	$ 25,206	$ 23,402	$ 19,918
Revenues from other value added services	2,312	1,969	1,536
Total net revenues[2]	$ 27,518	$ 25,371	$ 21,454

[1] No single country included in the other countries category generated more than 10% of total revenue.
[2] Total net revenues include $1.3 billion, $425 million, and $597 million for the years ended December 31, 2022, 2021, and 2020, respectively, which do not represent revenues recognized in the scope of Accounting Standards Codification Topic 606, *Revenue from contracts with customers*. Such revenues relate to interest and fees earned on loans and interest receivable, as well as hedging gains or losses, and interest earned on certain assets underlying customer balances.

Net revenues are attributed to the country in which the party paying our PayPal fee is located.

NOTE 3—NET INCOME (LOSS) PER SHARE

Basic net income (loss) per share is computed by dividing net income (loss) for the period by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) for the period by the weighted average number of shares of common stock and potentially dilutive common stock outstanding for the period. The dilutive effect of outstanding equity incentive awards is reflected in diluted net income (loss) per share by application of the treasury stock method. The calculation of diluted net income (loss) per share excludes all anti-dilutive common shares. During periods when we report net loss, diluted net loss per share is the same as basic net loss per share because the effects of potentially dilutive items would decrease the net loss per share.

The following table sets forth the computation of basic and diluted net income (loss) per share for the periods indicated:

	Year Ended December 31,		
	2022	2021	2020
	(In millions, except per share amounts)		
Numerator:			
Net income (loss)	$ 2,419	$ 4,169	$ 4,202
Denominator:			
Weighted average shares of common stock—basic	1,154	1,174	1,173
Dilutive effect of equity incentive awards	4	12	14
Weighted average shares of common stock—diluted	1,158	1,186	1,187
Net income (loss) per share:			
Basic	$ 2.10	$ 3.55	$ 3.58
Diluted	$ 2.09	$ 3.52	$ 3.54
Common stock equivalents excluded from net income (loss) per diluted share because their effect would have been anti-dilutive or potentially dilutive	13	2	1

NOTE 4—BUSINESS COMBINATIONS

There were no acquisitions accounted for as business combinations or divestitures completed in 2022.

ACQUISITIONS COMPLETED IN 2021

During the year ended December 31, 2021, we completed five acquisitions reflecting 100% of the equity interests of the acquired companies, for an aggregate purchase price of $3.1 billion.

Paidy

We completed the acquisition of Paidy in October 2021 by acquiring all outstanding shares for total consideration of approximately $2.7 billion, consisting of approximately $2.6 billion in cash and approximately $161 million in assumed restricted stock and restricted stock units, subject to vesting conditions. Paidy is a two-sided payments platform that primarily provides buy now, pay later solutions (installment credit offerings) in Japan. With the acquisition of Paidy, we expanded our capabilities and relevance in Japan.

The following table summarizes the final allocation of the purchase consideration to the fair value of the assets acquired and liabilities assumed:

	(In millions)
Goodwill	$ 1,897
Customer lists and user base	512
Marketing related	83
Developed technology	47
Total intangibles	$ 642
Loans and interest receivable, net	197
Cash and cash equivalents	102
Other net assets	87
Short-term and long-term debt	(188)
Deferred tax liabilities, net	(166)
Total purchase price	$ 2,571

The intangible assets acquired consist primarily of merchant contracts, trade names/trademarks, and developed technology with estimated useful lives of three to seven years. Contractual gross loans and interest receivable acquired were $216 million. We expect to collect substantially all of these receivables. The excess of the purchase consideration, including the fair value of our equity investment, over the fair value of net tangible and identifiable intangible assets acquired was recorded as goodwill and is attributable to the workforce of Paidy and the synergies expected to arise from the acquisition, including continued customer acquisition. Goodwill was not deductible for income tax purposes.

In connection with the acquisition, we issued restricted stock and restricted stock units with an approximate grant date fair value of $161 million, which represents post-business combination expense. The equity granted is a combination of shares issued to certain former Paidy employees subject to a holdback arrangement and assumed Paidy employee equity grants, which vest over a period of up to approximately four years subject to continued employment.

Other acquisitions

In 2021, we completed four other acquisitions accounted for as business combinations. The total purchase price for these acquisitions was $542 million, consisting primarily of cash consideration. The allocation of purchase consideration resulted in approximately $90 million of technology, customer, and marketing-related intangible assets with estimated useful lives ranging from approximately one to seven years, net assets of $17 million, and goodwill of approximately $435 million attributable to the workforce of the acquired companies and the synergies expected to arise from these acquisitions, including the integration of the acquired technology with our existing product offerings. Goodwill was not considered deductible for income tax purposes.

ACQUISITIONS COMPLETED IN 2020

During the year ended December 31, 2020, we completed one acquisition reflecting 100% of the equity interests of the acquired company, for a purchase price of $3.6 billion.

Honey Science Corporation

We completed our acquisition of Honey Science Corporation ("Honey") in January 2020 by acquiring all outstanding shares for total consideration of approximately $4.0 billion, consisting of approximately $3.6 billion in cash and approximately $400 million in assumed restricted stock, restricted stock units, and stock options, subject to vesting conditions. Honey was acquired to enhance our value proposition by allowing us to further simplify and personalize shopping experiences for consumers while driving conversion and increasing consumer engagement and sales for merchants.

The following table summarizes the final allocation of the purchase consideration to the fair value of the assets acquired and liabilities assumed:

	(In millions)
Goodwill	$ 2,962
Customer lists and user base	115
Marketing related	30
Developed technology	572
Total intangibles	$ 717
Accounts receivable, net	50
Deferred tax liabilities, net	(58)
Other net liabilities	(36)
Total purchase price	$ 3,635

The intangible assets acquired consist primarily of customer contracts, trade name/trademarks, and developed technology with estimated useful lives of three years. The excess of the purchase consideration over the fair value of net tangible and identifiable intangible assets acquired was recorded as goodwill and is attributable to the workforce of Honey and the synergies expected to arise from the acquisition through continued customer acquisition, cross selling initiatives, and product enhancements. Goodwill was not deductible for income tax purposes.

In connection with the acquisition, we assumed restricted stock, restricted stock units, and options with an approximate grant date fair value of $400 million, which represents post-business combination expense. The equity granted was a combination of shares issued to certain former Honey employees subject to a holdback arrangement and assumed Honey employee grants, which vest over a period of up to four years and are subject to continued employment.

OTHER INFORMATION

Prior to acquisition, we held minority interests in certain of the companies we acquired in 2021. We remeasured these investments immediately before the completion of the respective acquisitions at a total acquisition-date fair value of $64 million, which resulted in an aggregate gain of $36 million recognized as other income (expense), net in our consolidated statements of income (loss). The acquisition-date fair value was derived using the value paid less a control premium based on market analysis performed by a third party.

NOTE 5—GOODWILL AND INTANGIBLE ASSETS

GOODWILL

The following table presents goodwill balances and adjustments to those balances during the years ended December 31, 2022 and 2021:

	December 31, 2020	Goodwill Acquired	Adjustments	December 31, 2021	Goodwill Acquired	Adjustments	December 31, 2022
				(In millions)			
Total goodwill	$ 9,135	2,355	(36)	$ 11,454	—	(245)	$ 11,209

The goodwill acquired during 2021 was attributable to the five acquisitions completed within 2021 as described in "Note 4—Business Combinations." The adjustments to goodwill during 2022 and 2021 pertained primarily to foreign currency translation adjustments.

INTANGIBLE ASSETS

The components of identifiable intangible assets were as follows:

	December 31, 2022				December 31, 2021			
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life (Years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Useful Life (Years)
				(In millions, except years)				
Intangible assets:								
Customer lists and user base	$ 1,664	$ (1,092)	$ 572	7	$ 1,726	$ (919)	$ 807	7
Marketing related	395	(339)	56	5	405	(315)	90	5
Developed technology	1,099	(1,048)	51	3	1,109	(822)	287	3
All other	438	(329)	109	7	454	(306)	148	7
Intangible assets, net	$ 3,596	$ (2,808)	$ 788		$ 3,694	$ (2,362)	$ 1,332	

Amortization expense for intangible assets was $471 million, $443 million, and $451 million for the years ended December 31, 2022, 2021, and 2020, respectively.

Expected future intangible asset amortization as of December 31, 2022 was as follows:

Fiscal years:	(In millions)
2023	$ 214
2024	196
2025	160
2026	103
2027	65
Thereafter	50
	$ 788

NOTE 6—LEASES

PayPal enters into various leases, which are primarily real estate operating leases. We use these properties for executive and administrative offices, data centers, product development offices, customer services and operations centers, and warehouses.

While a majority of our lease agreements do not contain an explicit interest rate, certain of our lease agreements are subject to changes based on the Consumer Price Index or another referenced index. In the event of changes to the relevant index, lease liabilities are not remeasured and instead are treated as variable lease payments and recognized in the period in which the obligation for those payments is incurred.

The short-term lease exemption has been adopted for all leases with a duration of less than 12 months.

PayPal's lease portfolio includes a small number of subleases. A sublease situation can arise when currently leased real estate space is available and is surplus to operational requirements.

As of December 31, 2022, we had no finance leases.

The components of lease expense were as follows:

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Lease expense			
Operating lease expense	$ 171	$ 170	$ 166
Sublease income	(8)	(8)	(6)
Lease expense, net	$ 163	$ 162	$ 160

Supplemental cash flow information related to leases was as follows:

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows from operating leases	$ 172	$ 167	$ 159
ROU lease assets obtained in exchange for new operating lease liabilities	$ 131	$ 124	$ 345
Other non-cash ROU lease asset activity	$ (52)	$ (21)	$ (23)

Supplemental balance sheet information related to leases was as follows:

	As of December 31,	
	2022	2021
	(In millions, except weighted-average figures)	
Operating ROU lease assets	$ 574	$ 659
Current operating lease liabilities	151	142
Operating lease liabilities	569	620
Total operating lease liabilities	$ 720	$ 762
Weighted-average remaining lease term—operating leases	5.7 years	6.1 years
Weighted-average discount rate—operating leases	3 %	3 %

Future minimum lease payments for our operating leases as of December 31, 2022 were as follows:

	Operating Leases
Fiscal years:	**(In millions)**
2023	$ 169
2024	155
2025	114
2026	103
2027	90
Thereafter	147
Total	$ 778
Less: present value discount	(58)
Lease liability	$ 720

Operating lease amounts include minimum lease payments under our non-cancelable operating leases primarily for office and data center facilities. The amounts presented are consistent with contractual terms and are not expected to differ significantly from actual results under our existing leases. We recognize rent expense under such agreements on a straight-line basis. Rent expense for the years ended December 31, 2022, 2021, and 2020 totaled $202 million, $192 million, and $172 million, respectively.

In the first quarter of 2020, we entered into a sale-leaseback arrangement as the seller-lessee for a data center as the buyer-lessor obtained control of the facility. We sold the data center and simultaneously entered into an operating lease agreement with the purchaser for the right to use the facility for 8 years. The Company received proceeds of approximately $119 million, net of selling costs, which resulted in a de minimis net gain on the sale transaction.

In the years ended December 31, 2022, 2021 and 2020, we incurred asset impairment charges of $81 million, $26 million, and $30 million, respectively, within restructuring and other charges on our consolidated statements of income (loss). The impairments included a reduction to our ROU lease assets in the amount of $52 million, $21 million, and $23 million, respectively, which were attributed to certain leased space we are no longer utilizing for our business operations, a portion of which is being subleased.

As of December 31, 2022, we entered into an additional operating lease for real estate, which will commence in the second quarter of 2023 or later with minimum lease payments aggregating to $12 million and a lease term of 6 years.

NOTE 7—OTHER FINANCIAL STATEMENT DETAILS

CRYPTO ASSET SAFEGUARDING LIABILITY AND CORRESPONDING SAFEGUARDING ASSET

We allow our customers in certain markets to buy, hold, sell, receive, and send certain cryptocurrencies as well as use the proceeds from sales of cryptocurrencies to pay for purchases at checkout. These cryptocurrencies consist of Bitcoin, Ethereum, Bitcoin Cash, and Litecoin (collectively, “our customers’ crypto assets”). We engage third parties, which are licensed trust companies, to provide certain custodial services, including holding our customers’ cryptographic key information, securing our customers’ crypto assets, and protecting them from loss or theft, including indemnification against certain types of losses such as theft. Our third-party custodian holds the crypto assets in a custodial account in PayPal’s name for the benefit of PayPal’s customers. We maintain the internal recordkeeping of our customers’ crypto assets, including the amount and type of crypto asset owned by each of our customers in that custodial account. Given that we currently utilize one third-party custodian, there is concentration risk in the event the custodian is not able to perform in accordance with our agreement.

Due to the unique risks associated with cryptocurrencies, including technological, legal, and regulatory risks, we recognize a crypto asset safeguarding liability to reflect our obligation to safeguard the crypto assets held for the benefit of our customers, which is recorded in accrued expenses and other current liabilities on our consolidated balance sheet. We also recognize a corresponding safeguarding asset which is recorded in prepaid expenses and other current assets on our consolidated balance sheet. The crypto asset safeguarding liability and corresponding safeguarding asset are measured and recorded at fair value on a recurring basis using prices available in the market we determine to be the principal market at the balance sheet date. The corresponding safeguarding asset may be adjusted for loss events, as applicable. As of December 31, 2022, the Company has not incurred any safeguarding loss events, and therefore, the crypto asset safeguarding liability and corresponding safeguarding asset were recorded at the same value. The following table summarizes the significant crypto assets we hold for the benefit of our customers and the crypto asset safeguarding liability and corresponding safeguarding asset as of December 31, 2022 (in millions):

Bitcoin	$	291
Ethereum		250
Other		63
Crypto asset safeguarding liability	$	604
Crypto asset safeguarding asset	$	604

PROPERTY AND EQUIPMENT, NET

	As of December 31,			
	2022		2021	
	(In millions)			
Property and equipment, net:				
Computer equipment and software	$	3,380	$	3,298
Internal use software and website development costs		3,814		3,301
Land and buildings		388		380
Leasehold improvements		364		379
Furniture and fixtures		141		146
Development in progress and other		25		86
Total property and equipment, gross		8,112		7,590
Accumulated depreciation and amortization		(6,382)		(5,681)
Total property and equipment, net	$	1,730	$	1,909

Depreciation and amortization expense was $846 million, $822 million, and $738 million for the years ended December 31, 2022, 2021, and 2020, respectively.

Net changes in accounts payable on our consolidated statements of cash flows includes non-cash investing activities associated with property and equipment; the impact of which was a decrease of $36 million and $27 million in 2022 and 2021, respectively, and an increase of $17 million in 2020.

Geographical information

The following table summarizes long-lived assets based on geography, which consist of property and equipment, net and operating lease ROU assets:

	As of December 31, 2022	As of December 31, 2021
	(In millions)	
Long-lived assets:		
U.S.	$ 1,910	$ 2,050
Other countries	394	518
Total long-lived assets	$ 2,304	$ 2,568

Long-lived assets attributed to the U.S. and other countries are based upon the country in which the asset is located or owned.

ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The following table summarizes the changes in accumulated balances of other comprehensive income (loss) for the year ended December 31, 2022:

	Unrealized Gains (Losses) on Cash Flow Hedges	Unrealized Gains (Losses) on Investments	Foreign Currency Translation Adjustment ("CTA")	Net Investment Hedges CTA Gains (Losses)	Estimated Tax (Expense) Benefit	Total
	(In millions)					
Beginning balance	$ 199	$ (87)	$ (270)	$ 24	$ (2)	$ (136)
Other comprehensive income (loss) before reclassifications	374	(499)	(305)	(25)	130	(325)
Less: Amount of gain reclassified from AOCI	462	5	—	—	—	467
Net current period other comprehensive income (loss)	(88)	(504)	(305)	(25)	130	(792)
Ending balance	$ 111	$ (591)	$ (575)	$ (1)	$ 128	$ (928)

The following table summarizes the changes in accumulated balances of other comprehensive income (loss) for the year ended December 31, 2021:

	Unrealized Gains (Losses) on Cash Flow Hedges	Unrealized Gains (Losses) on Investments	Foreign CTA	Net Investment Hedges CTA Gains (Losses)	Estimated Tax (Expense) Benefit	Total
	(In millions)					
Beginning balance	$ (323)	$ 11	$ (198)	$ 24	$ 2	$ (484)
Other comprehensive income (loss) before reclassifications	332	(98)	(72)	—	(4)	158
Less: Amount of loss reclassified from AOCI	(190)	—	—	—	—	(190)
Net current period other comprehensive income (loss)	522	(98)	(72)	—	(4)	348
Ending balance	$ 199	$ (87)	$ (270)	$ 24	$ (2)	$ (136)

The following table summarizes the changes in accumulated balances of other comprehensive income (loss) for the year ended December 31, 2020:

	Unrealized Gains (Losses) on Cash Flow Hedges	Unrealized Gains (Losses) on Investments	Foreign CTA	Net Investment Hedges CTA Gains (Losses)	Estimated Tax (Expense) Benefit	Total
			(In millions)			
Beginning balance	$ 6	$ 2	$ (150)	$ (31)	$ —	$ (173)
Other comprehensive income (loss) before reclassifications	(309)	9	(48)	55	2	(291)
Less: Amount of gain reclassified from AOCI	20	—	—	—	—	20
Net current period other comprehensive income (loss)	(329)	9	(48)	55	2	(311)
Ending balance	$ (323)	$ 11	$ (198)	$ 24	$ 2	$ (484)

The following table provides details about reclassifications out of AOCI for the periods presented below:

Details about AOCI Components	Amount of Gains (Losses) Reclassified from AOCI			Affected Line Item in the Statements of Income (Loss)
	Year Ended December 31,			
	2022	2021	2020	
		(In millions)		
Gains (losses) on cash flow hedges—foreign currency exchange contracts	$ 462	$ (190)	$ 20	Net revenues
Unrealized gains (losses) on investments	5	—	—	Other income (expense), net
	467	(190)	20	Income before income taxes
	—	—	—	Income tax expense (benefit)
Total reclassifications for the period	$ 467	$ (190)	$ 20	Net income (loss)

OTHER INCOME (EXPENSE), NET

The following table reconciles the components of other income (expense), net for the periods presented below:

	Year Ended December 31,		
	2022	2021	2020
		(In millions)	
Interest income	$ 174	$ 57	$ 88
Interest expense	(304)	(232)	(209)
Net gains (losses) on strategic investments	(304)	46	1,914
Other	(37)	(34)	(17)
Other income (expense), net	$ (471)	$ (163)	$ 1,776

Refer to “Note 1—Overview and Summary of Significant Accounting Policies” for details on the composition of these balances.

NOTE 8—FUNDS RECEIVABLE AND CUSTOMER ACCOUNTS AND INVESTMENTS

The following table summarizes the assets underlying our funds receivable and customer accounts, short-term investments, and long-term investments as of December 31, 2022 and 2021:

	December 31, 2022	December 31, 2021
	(In millions)	
Funds receivable and customer accounts:		
Cash and cash equivalents	$ 11,363	$ 12,723
Time deposits	95	334
Available-for-sale debt securities	17,349	18,336
Funds receivable	7,550	4,748
Total funds receivable and customer accounts	$ 36,357	$ 36,141
Short-term investments:		
Time deposits	$ 482	$ 590
Available-for-sale debt securities	2,593	3,604
Restricted cash	17	109
Total short-term investments	$ 3,092	$ 4,303
Long-term investments:		
Time deposits	$ 55	$ 45
Available-for-sale debt securities	2,817	3,545
Strategic investments	2,146	3,207
Total long-term investments	$ 5,018	$ 6,797

As of December 31, 2022 and 2021, the estimated fair value of our available-for-sale debt securities included within funds receivable and customer accounts, short-term investments, and long-term investments was as follows:

	December 31, 2022[(1)]			
	Gross Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	(In millions)			
Funds receivable and customer accounts:				
U.S. government and agency securities	$ 8,736	$ —	$ (252)	$ 8,484
Foreign government and agency securities	1,479	—	(44)	1,435
Corporate debt securities	1,637	—	(82)	1,555
Asset-backed securities	1,324	—	(26)	1,298
Municipal securities	410	—	(3)	407
Commercial paper	3,702	1	(14)	3,689
Short-term investments:				
U.S. government and agency securities	815	—	(3)	812
Foreign government and agency securities	435	—	(11)	424
Corporate debt securities	641	—	(14)	627
Asset-backed securities	415	—	(9)	406
Commercial paper	324	—	—	324
Long-term investments:				
U.S. government and agency securities	493	—	(36)	457
Foreign government and agency securities	386	—	(22)	364
Corporate debt securities	987	—	(58)	929
Asset-backed securities	1,085	—	(18)	1,067
Total available-for-sale debt securities[(2)]	$ 22,869	$ 1	$ (592)	$ 22,278

(1) "—" Denotes gross unrealized gain or unrealized loss of less than $1 million in a given position.
(2) Excludes foreign currency denominated available-for-sale debt securities accounted for under the fair value option. Refer to "Note 9—Fair Value Measurement of Assets and Liabilities."

	December 31, 2021[1]			
	Gross Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
	(In millions)			
Funds receivable and customer accounts:				
U.S. government and agency securities	$ 8,754	$ —	$ (31)	$ 8,723
Foreign government and agency securities	1,849	—	(9)	1,840
Corporate debt securities	3,377	—	(15)	3,362
Asset-backed securities	1,552	—	(3)	1,549
Municipal securities	535	—	—	535
Short-term investments:				
U.S. government and agency securities	537	—	—	537
Foreign government and agency securities	493	—	(1)	492
Corporate debt securities	2,285	—	—	2,285
Asset-backed securities	278	—	(1)	277
Long-term investments:				
U.S. government and agency securities	568	—	(6)	562
Foreign government and agency securities	742	—	(6)	736
Corporate debt securities	1,445	—	(11)	1,434
Asset-backed securities	817	—	(4)	813
Total available-for-sale debt securities[2]	$ 23,232	$ —	$ (87)	$ 23,145

[1] "—" Denotes gross unrealized gain or unrealized loss of less than $1 million in a given position.
[2] Excludes foreign currency denominated available-for-sale debt securities accounted for under the fair value option. Refer to "Note 9—Fair Value Measurement of Assets and Liabilities."

Gross amortized cost and estimated fair value balances exclude accrued interest receivable on available-for-sale debt securities, which totaled $65 million and $36 million at December 31, 2022 and 2021, respectively, and were included in other current assets on our consolidated balance sheets.

As of December 31, 2022 and 2021, the gross unrealized losses and estimated fair value of our available-for-sale debt securities included within funds receivable and customer accounts, short-term investments, and long-term investments for which an allowance for credit losses was not deemed necessary in the current period, aggregated by the length of time those individual securities have been in a continuous loss position, was as follows:

	December 31, 2022[1]					
	Less than 12 months		12 months or longer		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
	(In millions)					
Funds receivable and customer accounts:						
U.S. government and agency securities	$ 3,730	$ (89)	$ 4,246	$ (163)	$ 7,976	$ (252)
Foreign government and agency securities	410	(11)	997	(34)	1,407	(45)
Corporate debt securities	9	(1)	1,545	(81)	1,554	(82)
Asset-backed securities	773	(11)	508	(14)	1,281	(25)
Municipal securities	264	(3)	50	—	314	(3)
Commercial paper	3,079	(14)	—	—	3,079	(14)
Short-term investments:						
U.S. government and agency securities	345	—	73	(3)	418	(3)
Foreign government and agency securities	61	—	362	(11)	423	(11)
Corporate debt securities	97	(2)	465	(12)	562	(14)
Asset-backed securities	175	(2)	217	(7)	392	(9)
Commercial paper	224	—	—	—	224	—
Long-term investments:						
U.S. government and agency securities	—	—	457	(36)	457	(36)
Foreign government and agency securities	31	(2)	333	(20)	364	(22)
Corporate debt securities	85	(6)	834	(52)	919	(58)
Asset-backed securities	872	(9)	195	(9)	1,067	(18)
Total available-for-sale debt securities	$ 10,155	$ (150)	$ 10,282	$ (442)	$ 20,437	$ (592)

[1] "—" Denotes gross unrealized loss or fair value of less than $1 million in a given position.

	December 31, 2021[1]					
	Less than 12 months		12 months or longer		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
	(In millions)					
Funds receivable and customer accounts:						
U.S. government and agency securities	$ 8,224	$ (31)	$ —	$ —	$ 8,224	$ (31)
Foreign government and agency securities	1,703	(9)	20	—	1,723	(9)
Corporate debt securities	1,816	(15)	—	—	1,816	(15)
Asset-backed securities	1,302	(3)	—	—	1,302	(3)
Municipal securities	50	—	—	—	50	—
Short-term investments:						
U.S. government and agency securities	440	—	—	—	440	—
Foreign government and agency securities	485	(1)	—	—	485	(1)
Corporate debt securities	336	—	—	—	336	—
Asset-backed securities	273	(1)	—	—	273	(1)
Long-term investments:						
U.S. government and agency securities	562	(6)	—	—	562	(6)
Foreign government and agency securities	736	(6)	—	—	736	(6)
Corporate debt securities	1,355	(11)	—	—	1,355	(11)
Asset-backed securities	707	(4)	—	—	707	(4)
Total available-for-sale debt securities	$ 17,989	$ (87)	$ 20	$ —	$ 18,009	$ (87)

[1] "—" Denotes gross unrealized loss or fair value of less than $1 million in a given position.

Unrealized losses have not been recognized into income as we neither intend to sell, nor anticipate that it is more likely than not that we will be required to sell, the securities before recovery of their amortized cost basis. The decline in fair value is due primarily to changes in market interest rates, rather than credit losses. We will continue to monitor the performance of the investment portfolio and assess whether impairment due to expected credit losses has occurred. Amounts reclassified to earnings from unrealized gains and losses were not material for the years ended December 31, 2022 and 2021.

Our available-for-sale debt securities included within funds receivable and customer accounts, short-term investments, and long-term investments classified by date of contractual maturity were as follows:

	December 31, 2022	
	Amortized Cost	Fair Value
	(In millions)	
One year or less	$ 11,591	$ 11,470
After one year through five years	9,232	8,790
After five years through ten years	1,968	1,941
After ten years	78	77
Total	$ 22,869	$ 22,278

STRATEGIC INVESTMENTS

Our strategic investments include marketable equity securities, which are publicly traded, and non-marketable equity securities, which are primarily investments in privately held companies. Our marketable equity securities have readily determinable fair values and are recorded as long-term investments on our consolidated balance sheets at fair value with changes in fair value recorded in other income (expense), net on our consolidated statements of income (loss). Marketable equity securities totaled $323 million and $1.9 billion as of December 31, 2022 and 2021, respectively, including the impact of the sale of marketable equity securities during the year ended December 31, 2022.

Our non-marketable equity securities are recorded in long-term investments on our consolidated balance sheets. As of December 31, 2022 and 2021, we had non-marketable equity securities of $136 million and $79 million, respectively, where we have the ability to exercise significant influence, but not control, over the investee. We account for these equity securities using the equity method of accounting. The remaining non-marketable equity securities do not have a readily determinable fair value and we measure these equity investments at cost minus impairment, if any, and adjust for changes resulting from observable price changes in orderly transactions for an identical or similar investment in the same issuer. All gains and losses on these investments, realized and unrealized, and our share of earnings or losses from investments accounted for using the equity method are recognized in other income (expense), net on our consolidated statements of income (loss). The carrying value of our non-marketable equity securities totaled $1.8 billion and $1.3 billion as of December 31, 2022 and 2021, respectively.

Measurement Alternative adjustments

The adjustments to the carrying value of our non-marketable equity securities accounted for under the Measurement Alternative in the years ended December 31, 2022 and 2021 were as follows:

	Year Ended December 31,	
	2022	2021
	(In millions)	
Carrying amount, beginning of period	$ 1,268	$ 779
Adjustments related to non-marketable equity securities:		
Net additions[1]	100	133
Gross unrealized gains	423	356
Gross unrealized losses and impairments	(104)	—
Carrying amount, end of period	$ 1,687	$ 1,268

[1] Net additions include purchases, reductions due to sales of securities, and reclassifications when Measurement Alternative is subsequently elected or no longer applies.

The following table summarizes the cumulative gross unrealized gains and cumulative gross unrealized losses and impairment related to non-marketable equity securities accounted for under the Measurement Alternative, held at December 31, 2022 and 2021, respectively:

	December 31, 2022	December 31, 2021
	(In millions)	
Cumulative gross unrealized gains	$ 1,137	$ 733
Cumulative gross unrealized losses and impairments	$ (131)	$ (27)

Unrealized gains (losses) on strategic investments, excluding those accounted for using the equity method

The following table summarizes the net unrealized gains (losses) on marketable and non-marketable equity securities, excluding those accounted for using the equity method, held at December 31, 2022 and 2021, respectively:

	Year Ended December 31,	
	2022	2021
	(In millions)	
Net unrealized gains (losses)	$ 79	$ (46)

NOTE 9—FAIR VALUE MEASUREMENT OF ASSETS AND LIABILITIES

FINANCIAL ASSETS AND LIABILITIES MEASURED AND RECORDED AT FAIR VALUE ON A RECURRING BASIS

The following tables summarize our financial assets and liabilities measured at fair value on a recurring basis as of December 31, 2022 and 2021:

	December 31, 2022	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
		(In millions)	
Assets:			
Cash and cash equivalents[1]	$ 932	$ —	$ 932
Short-term investments[2]:			
U.S. government and agency securities	812	—	812
Foreign government and agency securities	424	—	424
Corporate debt securities	627	—	627
Asset-backed securities	406	—	406
Commercial paper	324	—	324
Total short-term investments	2,593	—	2,593
Funds receivable and customer accounts[3]:			
Cash and cash equivalents	192	—	192
U.S. government and agency securities	8,484	—	8,484
Foreign government and agency securities	1,777	—	1,777
Corporate debt securities	1,694	—	1,694
Asset-backed securities	1,298	—	1,298
Municipal securities	407	—	407
Commercial paper	3,689	—	3,689
Total funds receivable and customer accounts	17,541	—	17,541
Derivatives	244	—	244
Crypto asset safeguarding asset	604	—	604
Long-term investments[2],[4]:			
U.S. government and agency securities	457	—	457
Foreign government and agency securities	364	—	364
Corporate debt securities	929	—	929
Asset-backed securities	1,067	—	1,067
Marketable equity securities	323	323	—
Total long-term investments	3,140	323	2,817
Total financial assets	$ 25,054	$ 323	$ 24,731
Liabilities:			
Derivatives	$ 298	$ —	$ 298
Crypto asset safeguarding liability	604	—	604
Total financial liabilities	$ 902	$ —	$ 902

[1] Excludes cash of $6.8 billion not measured and recorded at fair value.
[2] Excludes restricted cash of $17 million and time deposits of $537 million not measured and recorded at fair value.
[3] Excludes cash, time deposits, and funds receivable of $18.8 billion underlying funds receivable and customer accounts not measured and recorded at fair value.
[4] Excludes non-marketable equity securities of $1.8 billion measured using the Measurement Alternative or equity method accounting.

	December 31, 2021	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
		(In millions)	
Assets:			
Cash and cash equivalents[1]	$ 400	$ —	$ 400
Short-term investments[2]:			
U.S. government and agency securities	537	—	537
Foreign government and agency securities	505	—	505
Corporate debt securities	2,285	—	2,285
Asset-backed securities	277	—	277
Total short-term investments	3,604	—	3,604
Funds receivable and customer accounts[3]:		—	
Cash and cash equivalents	622	—	622
U.S. government and agency securities	8,723	—	8,723
Foreign government and agency securities	4,090	—	4,090
Corporate debt securities	3,439	—	3,439
Asset-backed securities	1,549	—	1,549
Municipal securities	535	—	535
Total funds receivable and customer accounts	18,958	—	18,958
Derivatives	304	—	304
Long-term investments[2], [4]:			
U.S. government and agency securities	562	—	562
Foreign government and agency securities	736	—	736
Corporate debt securities	1,434	—	1,434
Asset-backed securities	813	—	813
Marketable equity securities	1,860	1,860	—
Total long-term investments	5,405	1,860	3,545
Total financial assets	$ 28,671	$ 1,860	$ 26,811
Liabilities:			
Derivatives	$ 130	$ —	$ 130

(1) Excludes cash of $4.8 billion not measured and recorded at fair value.
(2) Excludes restricted cash of $109 million and time deposits of $635 million not measured and recorded at fair value.
(3) Excludes cash, time deposits, and funds receivable of $17.2 billion underlying funds receivable and customer accounts not measured and recorded at fair value.
(4) Excludes non-marketable equity securities of $1.3 billion measured using the Measurement Alternative or equity method accounting.

Our marketable equity securities are valued using quoted prices for identical assets in active markets (Level 1). There are no active markets for our crypto asset safeguarding liability or the corresponding safeguarding asset. Accordingly, we have valued the asset and liability using quoted prices on the active exchange that has been identified as the principal market for the underlying crypto assets (Level 2). All other financial assets and liabilities are valued using quoted prices for identical instruments in less active markets, readily available pricing sources for comparable instruments, or models using market observable inputs (Level 2).

A majority of our derivative instruments are valued using pricing models that take into account the contract terms as well as multiple inputs where applicable, such as currency rates, interest rate yield curves, option volatility, and equity prices. Our derivative instruments are primarily short-term in nature, generally one month to one year in duration. Certain foreign currency contracts designated as cash flow hedges may have a duration of up to 18 months.

As of December 31, 2022 and 2021, we did not have any assets or liabilities requiring measurement at fair value on a recurring basis without observable market values that would require a high level of judgment to determine fair value (Level 3).

We elect to account for available-for-sale debt securities denominated in currencies other than the functional currency of our subsidiaries under the fair value option. Election of the fair value option allows us to recognize any gains and losses from fair value changes on such investments in other income (expense), net on the consolidated statements of income (loss) to significantly reduce the accounting asymmetry that would otherwise arise when recognizing the corresponding foreign exchange gains and losses relating to customer liabilities. The following table summarizes the estimated fair value of our available-for-sale debt securities under the fair value option as of December 31, 2022 and 2021:

	December 31, 2022	December 31, 2021
	(In millions)	
Funds receivable and customer accounts	$ 481	$ 2,327
Short-term investments	$ —	$ 13

The following table summarizes the gains (losses) from fair value changes recognized in other income (expense), net related to the available-for-sale debt securities under the fair value option for the years ended December 31, 2022 and 2021:

	Year Ended December 31,	
	2022	2021
	(In millions)	
Funds receivable and customer accounts	$ (149)	$ (101)
Short-term investments	$ —	$ (30)

ASSETS MEASURED AND RECORDED AT FAIR VALUE ON A NON-RECURRING BASIS

The following tables summarize our assets held as of December 31, 2022 and 2021 for which a non-recurring fair value measurement was recorded during the years ended December 31, 2022 and 2021, respectively:

	December 31, 2022	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
	(In millions)		
Non-marketable equity securities measured using the Measurement Alternative[1]	$ 987	$ 589	$ 398
Other assets[2]	165	165	—
Total	$ 1,152	$ 754	$ 398

(1) Excludes non-marketable equity securities of $700 million accounted for under the Measurement Alternative for which no observable price changes occurred during the year ended December 31, 2022.
(2) Consists of ROU lease assets recorded at fair value pursuant to impairment charges that occurred during the year ended December 31, 2022. See “Note 6—Leases” for additional information.

	December 31, 2021	Significant Other Observable Inputs (Level 2)
	(In millions)	
Non-marketable equity securities measured using the Measurement Alternative[1]	$ 611	$ 611
Other assets[2]	86	86
Total	$ 697	$ 697

(1) Excludes non-marketable equity securities of $657 million accounted for under the Measurement Alternative for which no observable price changes occurred during the year ended December 31, 2021.
(2) Consists of ROU lease assets recorded at fair value pursuant to impairment charges that occurred during the year ended December 31, 2021. See “Note 6—Leases” for additional information.

We measure the non-marketable equity securities accounted for under the Measurement Alternative at cost minus impairment, if any, adjusted for observable price changes in orderly transactions for an identical or similar investment in the same issuer. Non-marketable equity securities that have been remeasured during the period based on observable price changes are classified within Level 2 in the fair value hierarchy because we estimate the fair value based on valuation methods which only include significant inputs that are observable, such as the observable transaction price at the transaction date. The fair value of non-marketable equity securities that have been remeasured due to impairment are classified within Level 3 as we estimate fair value using significant unobservable inputs such as discount rates, forecasted cash flows, and market data of comparable companies, among others.

We evaluate ROU assets related to leases for indicators of impairment whenever events or changes in circumstances indicate that the carrying amount of an ROU asset may not be recoverable. Impairment losses on ROU lease assets related to office operating leases are calculated initially using estimated rental income per square foot derived from observable market data, and the impaired asset is classified within Level 2 in the fair value hierarchy.

FINANCIAL ASSETS AND LIABILITIES NOT MEASURED AND RECORDED AT FAIR VALUE

Our financial instruments, including cash, restricted cash, time deposits, loans and interest receivable, net, certain customer accounts, and long-term debt related to borrowings on our credit facilities are carried at amortized cost, which approximates their fair value. Our notes receivable had a carrying value of approximately $441 million and fair value of approximately $396 million as of December 31, 2022. Our notes receivable had a carrying value of approximately $381 million and fair value of approximately $424 million as of December 31, 2021. Our long-term debt (including current portion) in the form of fixed rate notes had a carrying value of approximately $10.3 billion and fair value of approximately $9.5 billion as of December 31, 2022. Our fixed rate notes had a carrying value of approximately $9.0 billion and fair value of approximately $9.3 billion as of December 31, 2021. If these financial instruments were measured at fair value in the financial statements, cash would be classified as Level 1; restricted cash, time deposits, certain customer accounts, and long-term debt (including current portion) would be classified as Level 2; and the remaining financial instruments would be classified as Level 3 in the fair value hierarchy.

NOTE 10—DERIVATIVE INSTRUMENTS

SUMMARY OF DERIVATIVE INSTRUMENTS

Our primary objective in holding derivatives is to reduce the volatility of earnings and cash flows associated with changes in foreign currency exchange rates. Our derivatives expose us to credit risk to the extent that our counterparties may be unable to meet the terms of the arrangement. We seek to mitigate such risk by limiting our counterparties to, and by spreading the risk across, major financial institutions and by entering into collateral security arrangements. In addition, the potential risk of loss with any one counterparty resulting from this type of credit risk is monitored on an ongoing basis. We do not use any derivative instruments for trading or speculative purposes.

Cash flow hedges

We have significant international revenues and costs denominated in foreign currencies, which subjects us to foreign currency exchange risk. We have a foreign currency exposure management program in which we designate certain foreign currency exchange contracts, generally with maturities of 18 months or less, to reduce the volatility of cash flows primarily related to forecasted revenues denominated in foreign currencies. The objective of these foreign currency exchange contracts is to help mitigate the risk that the U.S. dollar-equivalent cash flows are adversely affected by changes in the applicable U.S. dollar/foreign currency exchange rate. These derivative instruments are designated as cash flow hedges and accordingly, the derivative's gain or loss is initially reported as a component of AOCI and subsequently reclassified into revenue in the same period the forecasted transaction affects earnings. We evaluate the effectiveness of our foreign currency exchange contracts on a quarterly basis by comparing the critical terms of the derivative instruments with the critical terms of the forecasted cash flows of the hedged item; if the critical terms are the same, we conclude the hedge will be perfectly effective. We do not exclude any component of the changes in fair value of the derivative instruments from the assessment of hedge effectiveness. We report cash flows arising from derivative instruments consistent with the classification of cash flows from the underlying hedged items that these derivatives are hedging. Accordingly, the cash flows associated with derivatives designated as cash flow hedges are classified in cash flows from operating activities on our consolidated statements of cash flows.

As of December 31, 2022, we estimated that $110 million of net derivative gains related to our cash flow hedges included in AOCI are expected to be reclassified into earnings within the next 12 months. During the years ended December 31, 2022, 2021, and 2020, we did not discontinue any cash flow hedges because it was probable that the original forecasted transaction would not occur and as such, did not reclassify any gains or losses to earnings prior to the occurrence of the hedged transaction. If we elect to discontinue our cash flow hedges and it is probable that the original forecasted transaction will occur, we continue to report the derivative's gain or loss in AOCI until the forecasted transaction affects earnings, at which point we also reclassify it into earnings. Gains and losses on derivatives held after we discontinue our cash flow hedges and on derivative instruments that are not designated as cash flow hedges are recorded in the same financial statement line item to which the derivative relates.

Net investment hedges

We use forward foreign currency exchange contracts to reduce the foreign currency exchange risk related to our investment in certain foreign subsidiaries. These derivatives are designated as net investment hedges and accordingly, the gains and losses on the portion of the derivatives included in the assessment of hedge effectiveness is recorded in AOCI as part of foreign currency translation. We exclude forward points from the assessment of hedge effectiveness and recognize them in other income (expense), net on a straight-line basis over the life of the hedge. The accumulated gains and losses associated with these instruments will remain in AOCI until the foreign subsidiaries are sold or substantially liquidated, at which point they will be reclassified into earnings. The cash flows associated with derivatives designated as a net investment hedge are classified in cash flows from investing activities on our consolidated statements of cash flows.

We have not reclassified any gains or losses related to net investment hedges from AOCI into earnings during any of the periods presented.

Foreign currency exchange contracts not designated as hedging instruments

We have a foreign currency exposure management program in which we use foreign currency exchange contracts to offset the foreign currency exchange risk of our assets and liabilities denominated in currencies other than the functional currency of our subsidiaries. These contracts are not designated as hedging instruments and reduce, but do not entirely eliminate, the impact of foreign currency exchange rate movements on our assets and liabilities. The gains and losses due to remeasurement of certain foreign currency denominated monetary assets and liabilities are recorded in other income (expense), net, which are offset by the gains and losses on these foreign currency exchange contracts. The cash flows associated with our non-designated derivatives used to hedge foreign currency denominated monetary assets and liabilities are classified in cash flows from operating activities on our consolidated statements of cash flows.

FAIR VALUE OF DERIVATIVE CONTRACTS

The fair value of our outstanding derivative instruments as of December 31, 2022 and 2021 was as follows:

	Balance Sheet Location	As of December 31, 2022	As of December 31, 2021
		(In millions)	
Derivative Assets:			
Foreign currency exchange contracts designated as hedging instruments	Other current assets	$ 167	$ 205
Foreign currency exchange contracts designated as hedging instruments	Other assets (non-current)	15	21
Foreign currency exchange contracts not designated as hedging instruments	Other current assets	62	78
Total derivative assets		$ 244	$ 304
Derivative Liabilities:			
Foreign currency exchange contracts designated as hedging instruments	Other current liabilities	$ 68	$ 27
Foreign currency exchange contracts designated as hedging instruments	Other long-term liabilities	133	—
Foreign currency exchange contracts not designated as hedging instruments	Other current liabilities	97	103
Total derivative liabilities		$ 298	$ 130

MASTER NETTING AGREEMENTS - RIGHTS OF SET-OFF

Under master netting agreements with certain counterparties to our foreign currency exchange contracts, subject to applicable requirements, we are allowed to net settle transactions of the same type with a single net amount payable by one party to the other. However, we have elected to present the derivative assets and derivative liabilities on a gross basis on our consolidated balance sheets. Rights of set-off associated with our foreign currency exchange contracts represented a potential offset to both assets and liabilities of $70 million as of December 31, 2022 and $102 million as of December 31, 2021.

We have entered into collateral security arrangements that provide for collateral to be received or posted when the net fair value of certain financial instruments fluctuates from contractually established thresholds. The following table provides the collateral exchanged posted and received:

	December 31, 2022	December 31, 2021
	(In millions)	
Cash collateral posted[1]	$ 24	$ 5
Cash collateral received[2]	$ 203	$ 209

[1] Right to reclaim cash collateral related to our derivative liabilities recognized in other current assets on our consolidated balance sheets.
[2] Obligation to return counterparty cash collateral related to our derivative assets recognized in other current liabilities on our consolidated balance sheets.

EFFECT OF DERIVATIVE CONTRACTS ON CONSOLIDATED FINANCIAL STATEMENTS

The following table provides the location in the consolidated statements of income (loss) and amount of recognized gains or losses related to our derivative instruments:

	Year Ended December 31,					
	2022		2021		2020	
	(In millions)					
	Net revenues	Other income (expense), net	Net revenues	Other income (expense), net	Net revenues	Other income (expense), net
Total amounts presented in the consolidated statements of income (loss) in which the effects of derivatives are recorded	$ 27,518	$ (471)	$ 25,371	$ (163)	$ 21,454	$ 1,776
Gains (losses) on derivatives in cash flow hedging relationship:						
Amount of gains (losses) on foreign exchange contracts reclassified from AOCI	462	—	(190)	—	20	—
Gains on derivatives in net investment hedging relationship:						
Amount of gains on foreign exchange contracts excluded from the assessment of effectiveness	—	84	—	—	—	—
Gains (losses) on derivatives not designated as hedging instruments:						
Amount of gains (losses) on foreign exchange contracts	—	118	—	144	—	(110)
Amount of losses on equity derivative contracts [(1)]	—	(174)	—	—	—	(64)
Total gains (losses)	$ 462	$ 28	$ (190)	$ 144	$ 20	$ (174)

[(1)] During the years ended December 31, 2022 and December 31, 2020, equity derivative contracts were entered into and matured which related to the sale of marketable equity securities related to a strategic investment. The cash flows associated with the equity derivative contracts were classified in cash flows from investing activities on our consolidated statements of cash flows.

The following table provides the amount of pre-tax unrealized gains or losses included in the assessment of hedge effectiveness related to our derivative instruments designated as hedging instruments that are recognized in other comprehensive income (loss):

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Unrealized gains (losses) on foreign exchange contracts designated as cash flow hedges	$ 374	$ 332	$ (309)
Unrealized (losses) gains on foreign exchange contracts designated as net investment hedges	(25)	—	55
Total unrealized gains (losses) recognized from derivative contracts designated as hedging instruments in the consolidated statements of comprehensive income (loss)	$ 349	$ 332	$ (254)

NOTIONAL AMOUNTS OF DERIVATIVE CONTRACTS

Derivative transactions are measured in terms of the notional amount; however, this amount is not recorded on the balance sheet and is not, when viewed in isolation, a meaningful measure of the risk profile of the derivative instruments. The notional amount is generally not exchanged, but is used only as the underlying basis on which the value of foreign currency exchange payments under these contracts is determined. The following table provides the notional amounts of our outstanding derivatives:

	Year Ended December 31,	
	2022	2021
	(In millions)	
Foreign exchange contracts designated as hedging instruments	$ 7,149	$ 5,349
Foreign exchange contracts not designated as hedging instruments	11,840	20,414
Total	$ 18,989	$ 25,763

NOTE 11—LOANS AND INTEREST RECEIVABLE

CONSUMER RECEIVABLES

We offer revolving and installment credit products as a funding option for consumers in certain checkout transactions on our payments platform. Our revolving credit product consists of PayPal Credit in the U.K. Once a consumer is approved for credit, it is made available to them as a funding source in their PayPal wallet. Additionally, we offer installment credit products at the time of checkout in various markets, including the U.S., several markets across Europe, Australia, and Japan. The majority of the installment loans allow consumers to pay for purchases over periods of 12 months or less. Beginning in June 2022, we purchase receivables related to interest-bearing installment loans extended to U.S. consumers by a partner institution and are responsible for servicing functions related to that portfolio. During the year ended December 31, 2022, we purchased approximately $381 million in consumer receivables. As of December 31, 2022 and 2021, the outstanding balance of consumer receivables, which consisted of revolving and installment loans and interest receivable, was $5.9 billion and $3.8 billion, respectively, net of the participation interest sold to the partner institution of $17 million and nil, respectively. See "Note 1—Overview and Summary of Significant Accounting Policies" for additional information on this participation arrangement.

We closely monitor the credit quality of our consumer receivables to evaluate and manage our related exposure to credit risk. Credit risk management begins with initial underwriting and continues through the full repayment of a loan. To assess a consumer who requests a loan, we use, among other indicators, internally developed risk models using detailed information from external sources, such as credit bureaus where available, and internal data, including the consumer's prior repayment history with our credit products where available. We use delinquency status and trends to assist in making (or, for interest-bearing installment loans in the U.S., to assist the partner institution in making) new and ongoing credit decisions, to adjust our models, to plan our collection practices and strategies, and in determining our allowance for consumer loans and interest receivable.

The following tables present the delinquency status of consumer loans and interest receivable by year of origination. The amounts are based on the number of days past the billing date for revolving loans or contractual repayment date for installment loans. The "current" category represents balances that are within 29 days of the billing date or contractual repayment date, as applicable.

	December 31, 2022 (In millions, except percentages)							
		Installment Loans Amortized Cost Basis						
	Revolving Loans Amortized Cost Basis	2022	2021	2020	2019	2018	Total	Percent
Current	$ 1,850	$ 3,726	$ 123	$ —	$ —	$ —	$ 5,699	97.1%
30 - 59 Days	23	26	2	—	—	—	51	0.9%
60 - 89 Days	15	20	2	—	—	—	37	0.6%
90 - 179 Days	34	47	4	—	—	—	85	1.4%
Total[1]	$ 1,922	$ 3,819	$ 131	$ —	$ —	$ —	$ 5,872	100%

[1] Excludes receivables from other consumer credit products of $11 million at December 31, 2022.

	December 31, 2021 (In millions, except percentages)							
		Installment Loans Amortized Cost Basis						
	Revolving Loans Amortized Cost Basis	2021	2020	2019	2018	2017	Total	Percent
Current	$ 1,790	$ 1,939	$ 3	$ —	$ —	$ —	$ 3,732	97.0%
30 - 59 Days	18	16	—	—	—	—	34	0.9%
60 - 89 Days	12	13	—	—	—	—	25	0.6%
90 - 179 Days	27	28	1	—	—	—	56	1.5%
Total[1]	$ 1,847	$ 1,996	$ 4	$ —	$ —	$ —	$ 3,847	100%

[1] Excludes receivables from other consumer credit products of $44 million at December 31, 2021.

The following table summarizes the activity in the allowance for consumer loans and interest receivable for the years ended December 31, 2022 and 2021:

	December 31, 2022			December 31, 2021		
	Consumer Loans Receivable	Interest Receivable	Total Allowance[1]	Consumer Loans Receivable	Interest Receivable	Total Allowance[1]
	(In millions)					
Beginning balance	$ 243	$ 43	$ 286	$ 299	$ 53	$ 352
Provisions	292	15	307	20	10	30
Charge-offs	(216)	(29)	(245)	(116)	(20)	(136)
Recoveries	21	—	21	28	—	28
Other[2]	(18)	(4)	(22)	12	—	12
Ending balance	$ 322	$ 25	$ 347	$ 243	$ 43	$ 286

[1] Excludes allowances from other consumer credit products of $3 million and $4 million at December 31, 2022 and 2021, respectively.
[2] Includes amounts related to foreign currency remeasurement and, for the year ended December 31, 2021, initial allowance for purchased credit deteriorated ("PCD") loans acquired during the period. A portion of the Paidy loan portfolio acquired was determined to be purchase credit deteriorated as the loans were 30 days or more past due. As such, we recorded current expected credit losses on the PCD loans.

The provision for the year ended December 31, 2022 was primarily attributable to growth in the consumer receivable portfolio. Qualitative adjustments were made to account for limitations in our current expected credit loss models due to uncertainty with respect to macroeconomic conditions and the financial health of our borrowers.

The increase in charge-offs for the year ended December 31, 2022 compared to the same period in the prior year was due to the expansion of our short-term installment products.

The provision for current expected credit losses relating to our consumer receivable portfolio is recognized in transaction and credit losses on our consolidated statements of income (loss). The provision for interest receivable for interest earned on our consumer receivable portfolio is recognized in revenues from other value added services as a reduction to revenue. Loans receivable continue to accrue interest until they are charged off.

We charge off consumer receivable balances in the month in which a customer's balance becomes 180 days past the billing date or contractual repayment date, except for the U.S. consumer interest-bearing installment receivables, which are charged off 120 days past the contractual repayment date. Bankrupt accounts are charged off within 60 days after receipt of notification of bankruptcy. Charge-offs are recorded as a reduction to our allowance for loans and interest receivable and subsequent recoveries, if any, are recorded as an increase to the allowance for loans and interest receivable.

MERCHANT RECEIVABLES

We offer access to merchant finance products for certain small and medium-sized businesses through our PPWC and PPBL products, which we collectively refer to as our merchant finance offerings. We purchase receivables related to credit extended to U.S. merchants by a partner institution and are responsible for servicing functions related to that portfolio. During the years ended December 31, 2022 and 2021, we purchased approximately $3.2 billion and $1.8 billion in merchant receivables, respectively. As of December 31, 2022 and 2021, the total outstanding balance in our pool of merchant loans, advances, and interest and fees receivable was $2.1 billion and $1.4 billion, respectively, net of the participation interest sold to the partner institution of $97 million and $63 million, respectively. See "Note 1—Overview and Summary of Significant Accounting Policies" for additional information on this participation arrangement.

Through our PPWC product, merchants can borrow a certain percentage of their annual payment volume processed by PayPal and are charged a fixed fee for the loan or advance based on the overall credit assessment of the merchant. Loans and advances are repaid through a fixed percentage of the merchant's future payment volume that PayPal processes. Through our PPBL product, we provide merchants access to short-term business financing for a fixed fee based on an evaluation of the applying business as well as the business owner. PPBL repayments are collected through periodic payments until the balance has been satisfied.

The interest or fee is fixed at the time the loan or advance is extended and is recognized as deferred revenue in accrued expenses and other current liabilities on our consolidated balance sheets. The fixed interest or fee is amortized into revenues from other value added services based on the amount repaid over the repayment period. We estimate the repayment period for PPWC based on the merchant's payment processing history with PayPal. For PPWC, there is a general requirement that at least 10% of the original amount of the loan or advance plus the fixed fee must be repaid every 90 days. We calculate the repayment rate of the merchant's future payment volume so that repayment of the loan or advance and fixed fee is expected to generally occur within 9 to 12 months from the date of the loan or advance. On a monthly basis, we recalculate the repayment period based on the repayment activity on the receivable. As such, actual repayment periods are dependent on actual merchant payment processing volumes. For PPBL, we receive fixed periodic payments over the contractual term of the loan, which generally ranges from 3 to 12 months.

We actively monitor receivables with repayment periods greater than the original expected or contractual repayment period, as well as the credit quality of our merchant loans and advances that we extend or purchase so that we can evaluate, quantify, and manage our credit risk exposure. To assess a merchant seeking a loan or advance, we use, among other indicators, risk models developed internally which utilize information obtained from multiple internal and external data sources to predict the likelihood of timely and satisfactory repayment by the merchant of the loan or advance amount and the related interest or fee. Primary drivers of the models include the merchant's annual payment volume, payment processing history with PayPal, prior repayment history with PayPal's credit products where available, information sourced from consumer and business credit bureau reports, and other information obtained during the application process. We use delinquency status and trends to assist in making (or, in the U.S., to assist the partner institution in making) ongoing credit decisions, to adjust our internal models, to plan our collection strategies, and in determining our allowance for these loans, advances, and interest and fees receivable.

Merchant receivables delinquency and allowance

The following tables present the delinquency status of merchant loans, advances, and interest and fees receivable by year of origination. The amounts are based on the number of days past the expected or contractual repayment date for amounts outstanding. The "current" category represents balances that are within 29 days of the expected repayment date or contractual repayment date, as applicable.

	December 31, 2022 (In millions, except percentages)						
	2022	2021	2020	2019	2018	Total	Percent
Current	$ 1,826	$ 20	$ 57	$ 42	$ 2	$ 1,947	90.7%
30 - 59 Days	63	7	3	4	—	77	3.6%
60 - 89 Days	34	4	4	2	—	44	2.0%
90 - 179 Days	55	9	3	3	—	70	3.3%
180+ Days	1	2	2	3	—	8	0.4%
Total[(1)]	$ 1,979	$ 42	$ 69	$ 54	$ 2	$ 2,146	100%

	December 31, 2021 (In millions, except percentages)						
	2021	2020	2019	2018	2017	Total	Percent
Current	$ 1,100	$ 129	$ 95	$ 3	$ —	$ 1,327	91.8%
30 - 59 Days	24	12	12	1	—	49	3.4%
60 - 89 Days	10	8	7	—	—	25	1.7%
90 - 179 Days	10	11	11	1	—	33	2.3%
180+ Days	—	4	7	1	—	12	0.8%
Total[(1)]	$ 1,144	$ 164	$ 132	$ 6	$ —	$ 1,446	100%

[(1)] Balances include the impact of modification programs offered by the Company as a part of our novel coronavirus ("COVID-19") pandemic payment relief initiatives (as discussed further below).

The following table summarizes the activity in the allowance for merchant loans, advances, and interest and fees receivable, for the years ended December 31, 2022 and 2021:

	December 31, 2022			December 31, 2021		
	Merchant Loans and Advances	Interest and Fees Receivable	Total Allowance	Merchant Loans and Advances	Interest and Fees Receivable	Total Allowance
	(In millions)					
Beginning balance	$ 192	$ 9	$ 201	$ 440	$ 43	$ 483
Provisions	109	18	127	(116)	(22)	(138)
Charge-offs	(105)	(9)	(114)	(173)	(12)	(185)
Recoveries	34	—	34	41	—	41
Ending balance	$ 230	$ 18	$ 248	$ 192	$ 9	$ 201

The provision for the year ended December 31, 2022 was primarily attributable to originations in the merchant portfolio and a slight deterioration in credit quality of loans outstanding. Qualitative adjustments were made to account for uncertainty around the effectiveness of loan modification programs made available to merchants in previous years, as described further below.

The decrease in the charge-offs for the year ended December 31, 2022 compared to the prior year was due to the charge-off of accounts in 2021 that experienced financial difficulties as a result of the COVID-19 pandemic.

For merchant loans and advances, the determination of delinquency is based on the current expected or contractual repayment period of the loan or advance and fixed interest or fee payment as compared to the original expected or contractual repayment period. We charge off the receivables outstanding under our PPBL product when the repayments are 180 days past the contractual repayment date. We charge off the receivables outstanding under our PPWC product when the repayments are 180 days past our expectation of repayments and the merchant has not made a payment in the last 60 days, or when the repayments are 360 days past due regardless of whether the merchant has made a payment in the last 60 days. Bankrupt accounts are charged off within 60 days of receiving notification of bankruptcy. The provision for credit losses on merchant loans and advances is recognized in transaction and credit losses on our consolidated statements of income (loss), and the provision for interest and fees receivable is recognized as a reduction of deferred revenue in accrued expenses and other current liabilities on our consolidated balance sheets. Charge-offs are recorded as a reduction to our allowance for loans and interest receivable and subsequent recoveries, if any, are recorded as an increase to the allowance for loans and interest receivable.

Troubled debt restructurings

In certain instances where a merchant is able to demonstrate that it is experiencing financial difficulty, there may be a modification of the loan or advance and the related interest or fee receivable for which it is probable that, without modification, we would be unable to collect all amounts due. These modifications are intended to provide merchants with financial relief, and help enable us to mitigate losses.

These modifications include an increase in term by approximately 1 to 5.5 years while moving the delinquency status to current. The fee on certain of these loans or advances remains unchanged over the extended term. Alternatively, certain loans and advances have been modified to replace the initial fixed fee structure at the time the loan or advance was extended with a fixed annual percentage rate applied over the amended remaining term, which will continue to accrue interest at the fixed rate until the earlier of maturity or charge-off. These modifications had a de minimis impact on our consolidated statements of income (loss) in the years ended December 31, 2022 and 2021.

Allowances for TDRs are assessed separately from other loans and advances within our portfolio and are determined by estimating current expected credit losses utilizing the modified term and interest rate assumptions. Historical loss estimates are utilized in addition to macroeconomic assumptions to determine expected credit loss rates. Further, we may include qualitative adjustments that incorporate incremental information not captured in the quantitative estimates of our current expected credit losses.

During the year ended December 31, 2022, merchant loans, advances, and interest and fees receivables which have been modified as TDRs were de minimis. The following table shows merchant loans, advances and interest and fees receivables which were modified as TDRs in the year ended December 31, 2021:

	Year Ended December 31, 2021		
	Number of Accounts (in thousands)	Outstanding Balances[1] (in millions)	Weighted Average Payment Term Extensions (in months)
Loans and interest receivable	3	$ 45	36

[1] Balances are as of modification date.

A merchant is considered in payment default after a modification when the merchant's payment becomes 60 days past their expected or contractual repayment date. For loans or advances that have defaulted after being modified, the increased estimate of current expected credit loss is factored into overall expected credit losses. In the years ended December 31, 2022 and 2021, the amount of merchant loans, advances, and interest and fees receivables classified as TDRs that have subsequently defaulted on payments was de minimis.

NOTE 12—DEBT

FIXED RATE NOTES

In May 2022, we issued fixed rate notes with varying maturity dates for an aggregate principal amount of $3.0 billion. Interest on these notes is payable on June 1 and December 1 of each year, beginning on December 1, 2022.

In May 2020, we issued fixed rate notes with varying maturity dates for an aggregate principal amount of $4.0 billion. Interest on these notes is payable on June 1 and December 1 of each year, beginning on December 1, 2020.

In September 2019, we issued fixed rate notes with varying maturity dates for an aggregate principal amount of $5.0 billion. Interest on these notes is payable in arrears semiannually (payable on April 1 and October 1).

The notes issued from the May 2022, May 2020, and September 2019 debt issuances are senior unsecured obligations and are collectively referred to as the “Notes.” We may redeem the Notes in whole, at any time, or in part, from time to time, prior to maturity, at their redemption prices. Upon the occurrence of both a change of control of the Company and a downgrade of the Notes below an investment grade rating, we will be required to offer to repurchase each series of Notes at a price equal to 101% of the then outstanding principal amounts, plus accrued and unpaid interest. The Notes are subject to covenants, including limitations on our ability to create liens on our assets, enter into sale and leaseback transactions, and merge or consolidate with another entity, in each case subject to certain exceptions, limitations, and qualifications. Proceeds from the issuance of these Notes may be used for general corporate purposes, which may include funding the repayment or redemption of outstanding debt, share repurchases, ongoing operations, capital expenditures, acquisitions of businesses, assets, or strategic investments.

In May 2022, we repurchased certain Notes under the September 2019 and May 2020 debt issuances prior to maturity through tender offers. In addition, in June 2022, we redeemed the outstanding balance of the notes maturing in September 2022 through a make-whole redemption. We repurchased and redeemed $1.6 billion of outstanding Notes, as described above, which resulted in de minimis debt extinguishment net gains that were recorded as interest expense within other income (expense), net on our consolidated statements of income (loss).

As of December 31, 2022 and 2021, we had an outstanding aggregate principal amount of $10.4 billion and $9.0 billion, respectively, related to the Notes. The following table summarizes the Notes:

			As of December 31,	
	Maturities	Effective Interest Rate	2022	2021
			(in millions)	
September 2019 debt issuance of $5.0 billion:				
Fixed-rate 2.200% notes	9/26/2022	2.39%	$ —	$ 1,000
Fixed-rate 2.400% notes	10/1/2024	2.52%	1,250	1,250
Fixed-rate 2.650% notes	10/1/2026	2.78%	1,250	1,250
Fixed-rate 2.850% notes	10/1/2029	2.96%	1,500	1,500
May 2020 debt issuance of $4.0 billion:				
Fixed-rate 1.350% notes	6/1/2023	1.55%	418	1,000
Fixed-rate 1.650% notes	6/1/2025	1.78%	1,000	1,000
Fixed-rate 2.300% notes	6/1/2030	2.39%	1,000	1,000
Fixed-rate 3.250% notes	6/1/2050	3.33%	1,000	1,000
May 2022 debt issuance of $3.0 billion:				
Fixed-rate 3.900% notes	6/1/2027	4.06%	500	—
Fixed-rate 4.400% notes	6/1/2032	4.53%	1,000	—
Fixed-rate 5.050% notes	6/1/2052	5.14%	1,000	—
Fixed-rate 5.250% notes	6/1/2062	5.34%	500	—
Total term debt			$ 10,418	$ 9,000
Unamortized premium (discount) and issuance costs, net			(74)	(50)
Less: current portion of term debt[(1)]			(418)	(999)
Total carrying amount of term debt			$ 9,926	$ 7,951

(1) The current portion of term debt is included within accrued expenses and other current liabilities on our consolidated balance sheets.

The effective interest rates for the Notes include interest on the Notes, amortization of debt issuance costs, and amortization of the debt discount. The interest expense recorded for the Notes, including amortization of the debt discount, debt issuance costs, and debt extinguishment net gains, was $290 million, $224 million, and $190 million for the years ended December 31, 2022, 2021, and 2020, respectively.

CREDIT FACILITIES

Five-year revolving credit facility

In September 2019, we entered into a credit agreement (the "Credit Agreement") that provides for an unsecured $5.0 billion, five-year revolving credit facility that includes a $150 million letter of credit sub-facility and a $500 million swingline sub-facility, with available borrowings under the revolving credit facility reduced by the amount of any letters of credit and swingline borrowings outstanding from time to time. Loans borrowed under the Credit Agreement are available in U.S. dollar, Euro, British pound, Canadian dollar, and Australian dollar, and in each case subject to the sub-limits and other limitations provided in the Credit Agreement. We may also, subject to the agreement of the applicable lenders and satisfaction of specified conditions, increase the commitments under the revolving credit facility by up to $2.0 billion. Subject to specific conditions, we may designate one or more of our subsidiaries as additional borrowers under the Credit Agreement, provided PayPal Holdings, Inc. guarantees the portion of borrowings made available and other obligations of any such subsidiaries under the Credit Agreement. As of December 31, 2022, certain subsidiaries were designated as additional borrowers. Funds borrowed under the Credit Agreement may be used for working capital, capital expenditures, acquisitions, and other purposes not in contravention with the Credit Agreement.

We are obligated to pay interest on loans under the Credit Agreement and other customary fees for a credit facility of this size and type, including an upfront fee and an unused commitment fee based on our debt rating. Loans under the Credit Agreement bear interest at either (i) the applicable eurocurrency rate plus a margin (based on our public debt ratings) ranging from 0.875% to 1.375%, (ii) the applicable overnight rate plus a margin (based on our public debt ratings) ranging from 0.875% to 1.375%, (iii) a formula based on the prime rate, the federal funds effective rate, or London Interbank Offered Rate plus a margin (based on our public debt ratings) ranging from zero to 0.375%, or (iv) a formula based on the Euro Short-Term Rate ("ESTR") or the Sterling Overnight Index Average ("SONIA") rate plus a margin (based on our public debt ratings) ranging from 0.875% to 1.375%. In January 2022, an amendment to the agreement was signed which provides for the additional borrowing rate option of utilizing SONIA or ESTR rates. The Credit Agreement will terminate and all amounts owed thereunder will be due and payable in September 2024, unless the commitments are terminated earlier. The Credit Agreement contains customary representations, warranties, affirmative and negative covenants, including a financial covenant, events of default, and indemnification provisions in favor of the lenders. The negative covenants include restrictions regarding the incurrence of liens and the incurrence of subsidiary indebtedness, in each case subject to certain exceptions. The financial covenant requires us to meet a quarterly financial test with respect to a maximum consolidated leverage ratio.

In March 2020, we drew down $3.0 billion under the Credit Agreement. In May 2020, we repaid the $3.0 billion using proceeds from the May 2020 debt issuance. As of December 31, 2022, no borrowings or letters of credit were outstanding under the Credit Agreement. Accordingly, at December 31, 2022, $ 5.0 billion of borrowing capacity was available for the purposes permitted by the Credit Agreement, subject to customary conditions to borrowing. The total interest expense and fees we recorded related to the Credit Agreement was approximately $16 million for the year ended December 31, 2020.

Paidy credit agreement

In February 2022, we entered into a credit agreement (the "Paidy Credit Agreement") with Paidy as co-borrower, which provides for an unsecured revolving credit facility of ¥60.0 billion. In September 2022, the Paidy Credit Agreement was modified to increase the borrowing capacity by ¥30.0 billion for a total borrowing capacity of ¥90.0 billion (approximately $686 million as of December 31, 2022.) Borrowings under the Paidy Credit Agreement are for use by Paidy for working capital, capital expenditures, and other permitted purposes. Loans under the Paidy Credit Agreement bear interest at the Tokyo Interbank Offered Rate plus a margin (based on our public debt rating) ranging from 0.40% to 0.60%. The Paidy Credit Agreement will terminate and all amounts owed thereunder will be due and payable in February 2027, unless the commitments are terminated earlier. The Paidy Credit Agreement contains customary representations, warranties, affirmative and negative covenants, including a financial covenant, events of default, and indemnification provisions in favor of the lenders. The negative covenants include restrictions regarding the incurrence of liens and subsidiary indebtedness, in each case subject to certain exceptions. The financial covenant requires us to meet a quarterly financial test with respect to a maximum consolidated leverage ratio.

In the year ended December 31, 2022, ¥64.3 billion (approximately $491 million) was drawn down under the Paidy Credit Agreement, which was recorded in long-term debt on our consolidated balance sheet. Accordingly, at December 31, 2022, ¥25.7 billion (approximately $195 million) of borrowing capacity was available for the purposes permitted by the Paidy Credit Agreement, subject to customary conditions to borrowing. During the year ended December 31, 2022, the total interest expense and fees we recorded related to the Paidy Credit Agreement were de minimis.

Prior credit agreement

In October 2021, we assumed a credit agreement through our acquisition of Paidy (the "Prior Credit Agreement"), which provided for a secured revolving credit facility of ¥22.8 billion (approximately $198 million at acquisition). As of December 31, 2021, ¥11.3 billion (approximately $98 million) was outstanding under the Prior Credit Agreement, which was recorded in long-term debt on our consolidated balance sheet. In the first quarter of 2022, we terminated the Prior Credit Agreement and repaid all outstanding borrowings. The total interest expense and fees we recorded related to the Prior Credit Agreement were de minimis for the year ended December 31, 2022.

Other available facilities

We also maintain uncommitted credit facilities in various regions throughout the world, which had a borrowing capacity of approximately $80 million and $90 million in the aggregate, as of December 31, 2022 and 2021, respectively. This available credit includes facilities where we can withdraw and utilize the funds at our discretion for general corporate purposes. Interest rate terms for these facilities vary by region and reflect prevailing market rates for companies with strong credit ratings. As of December 31, 2022, the majority of the borrowing capacity under these credit facilities was available, subject to customary conditions to borrowing.

FUTURE PRINCIPAL PAYMENTS

As of December 31, 2022, the future principal payments associated with our term debt were as follows (in millions):

2023	$	418
2024		1,250
2025		1,000
2026		1,250
2027		500
Thereafter		6,000
Total	$	10,418

NOTE 13—COMMITMENTS AND CONTINGENCIES

COMMITMENTS

As of December 31, 2022 and 2021, approximately $4.9 billion and $4.1 billion, respectively, of unused credit was available to PayPal Credit account holders in the U.K. While this amount represents the total unused credit available, we have not experienced, and do not anticipate, that all our PayPal Credit account holders will access their entire available credit at any given point in time. In addition, the individual lines of credit that make up this unused credit are subject to periodic review and termination based on, among other things, account usage and customer creditworthiness.

LITIGATION AND REGULATORY MATTERS

Overview

We are involved in legal and regulatory proceedings on an ongoing basis. Many of these proceedings are in early stages and may seek an indeterminate amount of damages or penalties or may require us to change or adopt certain business practices. If we believe that a loss arising from such matters is probable and can be reasonably estimated, we accrue the estimated liability in our financial statements at that time. If only a range of estimated losses can be determined, we accrue an amount within the range that, in our judgment, reflects the most likely outcome; if none of the estimates within that range is a better estimate than any other amount, we accrue the low end of the range. For those proceedings in which an unfavorable outcome is reasonably possible but not probable, we have disclosed an estimate of the reasonably possible loss or range of losses or we have concluded that an estimate of the reasonably possible loss or range of losses arising directly from the proceeding (i.e., monetary damages or amounts paid in judgment or settlement) are not material. If we cannot estimate the probable or reasonably possible loss or range of losses arising from a legal proceeding, we have disclosed that fact. In assessing the materiality of a legal proceeding, we evaluate, among other factors, the amount of monetary damages claimed, as well as the potential impact of non-monetary remedies sought by plaintiffs (e.g., injunctive relief) that may require us to change our business practices in a manner that could have a material adverse impact on our business. With respect to the matters disclosed in this Note 13, we are unable to estimate the possible loss or range of losses that could potentially result from the application of such non-monetary remedies.

Amounts accrued for legal and regulatory proceedings for which we believe a loss is probable and reasonably estimable were not material for the year ended December 31, 2022. Except as otherwise noted for the proceedings described in this Note 13, we have concluded, based on currently available information, that reasonably possible losses arising directly from the proceedings (i.e., monetary damages or amounts paid in judgment or settlement) in excess of our recorded accruals are also not material. Determining legal reserves or possible losses from such matters involves judgment and may not reflect the full range of uncertainties and unpredictable outcomes. We may be exposed to losses in excess of the amount recorded, and such amounts could be material. If any of our estimates and assumptions change or prove to have been incorrect, it could have a material adverse effect on our business, financial position, results of operations, or cash flows.

Regulatory proceedings

We routinely report to the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC") on payments we have rejected or blocked pursuant to legal requirements under OFAC sanctions regulations. Between January 2013 and January 2022, we voluntarily disclosed to OFAC transactions that were inadvertently processed and identified as possible violations of OFAC sanctions regulations and responded to subpoenas and information requests related to certain of these transactions. In January 2023, OFAC notified us that it had completed its review of these matters and closed them with the issuance of a cautionary letter with no monetary penalties or sanctions.

PayPal Australia Pty Limited ("PPAU") self-reported a potential violation to the Australian Transaction Reports and Analysis Centre ("AUSTRAC") on May 22, 2019. This self-reported matter relates to PPAU incorrectly filing required international funds transfer instructions ("IFTIs") over a period of time under the Anti-Money Laundering and Counter-Terrorism Financing Act 2006 ("AML/CTF Act"). On September 23, 2019, PPAU received a notice from AUSTRAC requiring that PPAU appoint an external auditor (a partner of a firm which is not our independent auditor) to review certain aspects of PPAU's compliance with its obligations under the AML/CTF Act. The external auditor was appointed on November 1, 2019. As required under the terms of AUSTRAC's notice, as amended, PPAU issued to AUSTRAC the external auditor's interim reports on December 31, 2019, March 13, 2020, May 6, 2020, and July 7, 2020 and a final report on August 31, 2020.

AUSTRAC has notified PPAU that its enforcement team is investigating the matters reported upon by the external auditor in its August 31, 2020 final report. AUSTRAC continues to engage with PPAU regarding the transaction categories it considers reportable under the AML/CTF Act as IFTIs. PPAU is continuing to cooperate with AUSTRAC in all respects, including remediation activities, ongoing regular engagement with AUSTRAC, and responding to notices and requests for information and documents.

We cannot estimate the potential impact, if any, on our business or financial statements at this time. In the event an adverse outcome arises from any associated enforcement proceeding, or other further matter initiated by AUSTRAC, including in relation to AUSTRAC's determination of reportable IFTIs, then this could result in enforceable undertakings, injunctions, damage awards, fines or penalties, or require us to change our business practices in a manner that could result in a material loss, require significant management time, result in the diversion of significant operational resources, or otherwise harm our business.

We have received Civil Investigative Demands ("CIDs") from the Consumer Financial Protection Bureau ("CFPB") related to Venmo's unauthorized funds transfers and collections processes, and related matters, including treatment of consumers who request payments but accidentally designate an unintended recipient. The CIDs request the production of documents and answers to written questions. We are cooperating with the CFPB in connection with these CIDs.

We previously received a CID from the CFPB related to the marketing and use of PayPal Credit in connection with certain merchants that provide educational services (the "CFPB PayPal Credit Matter"). The CID requested the production of documents, written reports, and answers to written questions. We have been informed by the CFPB that this matter has been formally closed without action.

We are responding to subpoenas and requests for information received from the U.S. Securities and Exchange Commission ("SEC") Enforcement Division relating to whether the interchange rates paid to the bank that issues debit cards bearing our licensed brands were consistent with Regulation II of the Board of Governors of the Federal Reserve System, and to the reporting of marketing fees earned from the PayPal-branded card programs (the "SEC Debit Card Program Matter"). We are cooperating with the SEC Enforcement Division in connection with this investigation.

In February 2022, we received a CID from the Federal Trade Commission ("FTC") related to PayPal's practices relating to commercial customers that submit charges on behalf of other merchants or sellers, and related activities. The CID requests the production of documents and answers to written questions. We are cooperating with the FTC in connection with this CID.

In January 2023, we received notice of an administrative proceeding and a related request for information from the German Federal Cartel Office ("FCO") related to terms in PayPal (Europe) S.à.r.l. et Cie, S.C.A.'s contractual terms with merchants in Germany prohibiting surcharging and requiring parity presentation of PayPal relative to other payment methods. We are cooperating with the FCO in connection with this proceeding.

Legal proceedings

On August 20, 2021, a putative securities class action captioned Kang v. PayPal Holdings, Inc., et al., Case No. 21-cv-06468, was filed in the U.S. District Court for the Northern District of California (the "Kang Securities Action"). The Kang Securities Action asserts claims relating to our disclosure of the CFPB PayPal Credit Matter and the SEC Debit Card Program Matter in our Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2021. The Kang Securities Action purports to be brought on behalf of purchasers of the Company's stock between February 9, 2017 and July 28, 2021 (the "Class Period"), and asserts claims for violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 against the Company, its Chief Executive Officer, and former Chief Financial Officer. The complaint alleges that certain public statements made by the Company during the Class Period were rendered materially false and misleading (which, allegedly, caused the Company's stock to trade at artificially inflated prices) by the defendants' failure to disclose that, among other things, PayPal's business practices with respect to PayPal Credit and regarding interchange rates paid to its bank partner related to its bank-issued co-branded debit cards were non-compliant with applicable laws and/or regulations. The Kang Securities Action seeks unspecified compensatory damages on behalf of the putative class members. On November 2, 2021, the court appointed a Lead Plaintiff, and on January 25, 2022, the Lead Plaintiff filed an amended complaint. The amended complaint alleges a class period between April 27, 2016 and July 28, 2021 (the "Amended Class Period"), and in addition to the Company, its Chief Executive Officer, and former Chief Financial Officer, also names other Company executives as defendants. The amended complaint alleges that various statements made by the defendants during the Amended Class Period were rendered materially false and misleading, in violation of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, by PayPal's alleged violations of the 2015 consent order with the CFPB, federal consumer financial laws, and Regulation II. On August 8, 2022, the court granted Defendants' motion to dismiss the amended complaint in its entirety, and granted Lead Plaintiff's request for leave to file a further amended complaint. On September 16, 2022, Lead Plaintiff filed a Second Amended Complaint (the "SAC"), which asserts the same claims against the same Defendants based on the same alleged conduct as the prior complaint. Defendants moved to dismiss the SAC on November 3, 2022, and briefing is ongoing.

On December 16, 2021 and January 19, 2022, two related putative shareholder derivative actions captioned Pang v. Daniel Schulman, et al., Case No. 21-cv-09720, and Lalor v. Daniel Schulman, et al., Case No. 22-cv-00370, respectively, were filed in the U.S. District Court for the Northern District of California (the "California Derivative Actions"), purportedly on behalf of the Company. On August 2, 2022, a related putative shareholder derivative action captioned Jefferson v. Daniel Schulman, et al., No. 2022-0684, was filed in the Court of Chancery for the State of Delaware (the "Delaware Derivative Action," and collectively with the California Derivative Actions, the "Derivative Actions"), purportedly on behalf of the Company. The Derivative Actions are based on the same alleged facts and circumstances as the Kang Securities Action, and name certain of our officers, including our Chief Executive Officer and former Chief Financial Officer, and members of our Board of Directors, as defendants. The Derivative Actions allege claims for breach of fiduciary duty, unjust enrichment, abuse of control, gross mismanagement, waste of corporate assets, and violations of the Securities Exchange Act of 1934, and seek to recover damages on behalf of the Company. On February 1, 2022, the court entered an order consolidating the two California Derivative Actions and staying them until all motions to dismiss in the Kang Securities Action are resolved.

On October 4, 2022, a putative securities class action captioned Defined Benefit Plan of the Mid-Jersey Trucking Industry and Teamsters Local 701 Pension and Annuity Fund v. PayPal Holdings, Inc., et al., Case No. 22-cv-5864, was filed in the U.S. District Court for the District of New Jersey. On January 11, 2023, the Court appointed Caisse de dépôt et placement du Québec as lead plaintiff and renamed the action *In re PayPal Holdings, Inc. Securities Litigation* ("PPH Securities Action"). The PPH Securities Action asserts claims relating to our public statements with respect to net new active accounts ("NNA") results and guidance, and the detection of illegitimately created accounts. The PPH Securities Action purports to be brought on behalf of purchasers of the Company's stock between February 3, 2021 and February 1, 2022 (the "Class Period"), and asserts claims for violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 against the Company, its Chief Executive Officer, and former Chief Financial Officer. The complaint alleges that certain public statements made by the Company during the Class Period were rendered materially false and misleading (which, allegedly, caused the Company's stock to trade at artificially inflated prices) by the defendants' failure to disclose that, among other things, the Company's incentive campaigns were susceptible to fraud and led to the creation of illegitimate accounts, which allegedly affected the Company's NNA results and guidance. The PPH Securities Action seeks unspecified compensatory damages on behalf of the putative class members.

On November 2, 2022, a putative shareholder derivative action captioned Shah v. Daniel Schulman, et al., Case No. 22-cv-1445, was filed in the U.S. District Court for the District of Delaware (the "Shah Action"), purportedly on behalf of the Company. The Shah Action is based on the same alleged facts and circumstances as the PPH Securities Action, and names certain of our officers, including our Chief Executive Officer and former Chief Financial Officer, and members of our Board of Directors, as defendants. The Shah Action alleges claims for breach of fiduciary duty, aiding and abetting breach of fiduciary duty, unjust enrichment, waste of corporate assets, and violations of the Securities Exchange Act of 1934, and seeks to recover damages on behalf of the Company.

General matters

Other third parties have from time to time claimed, and others may claim in the future, that we have infringed their intellectual property rights. We are subject to patent disputes and expect that we will increasingly be subject to additional patent infringement claims involving various aspects of our business as our products and services continue to expand in scope and complexity. Such claims may be brought directly or indirectly against our companies and/or against our customers (who may be entitled to contractual indemnification under their contracts with us), and we are subject to increased exposure to such claims as a result of our acquisitions, particularly in cases where we are introducing new products or services in connection with such acquisitions. We have in the past been forced to litigate such claims, and we believe that additional lawsuits alleging such claims will be filed against us. Intellectual property claims, whether meritorious or not, are time-consuming and costly to defend and resolve, could require expensive changes in our methods of doing business, or could require us to enter into costly royalty or licensing agreements on unfavorable terms or make substantial payments to settle claims or to satisfy damages awarded by courts.

From time to time, we are involved in other disputes or regulatory inquiries that arise in the ordinary course of business, including suits by our customers (individually or as class actions) or regulators alleging, among other things, improper disclosure of our prices, rules, or policies, that our practices, prices, rules, policies, or customer/user agreements violate applicable law, or that we have acted unfairly or not acted in conformity with such prices, rules, policies, or agreements. In addition to these types of disputes and regulatory inquiries, our operations are also subject to regulatory and legal review and challenges that may reflect the increasing global regulatory focus to which the payments industry is subject and, when taken as a whole with other regulatory and legislative action, such actions could result in the imposition of costly new compliance burdens on our business and customers and may lead to increased costs and decreased transaction volume and revenue. Further, the number and significance of these disputes and inquiries are increasing as our business has grown and expanded in scale and scope, including the number of active accounts and payments transactions on our platform, the range and increasing complexity of the products and services that we offer, and our geographical operations. Any claims or regulatory actions against us, whether meritorious or not, could be time consuming, result in costly litigation, settlement payments, damage awards (including statutory damages for certain causes of action in certain jurisdictions), fines, penalties, injunctive relief, or increased costs of doing business through adverse judgment or settlement, require us to change our business practices in expensive ways, require significant amounts of management time, result in the diversion of significant operational resources, or otherwise harm our business.

INDEMNIFICATION PROVISIONS

Our agreements with eBay governing our separation from eBay provide for specific indemnity and liability obligations for both eBay and us. Disputes between eBay and us have arisen and others may arise in the future, and an adverse outcome in such matters could materially and adversely impact our business, results of operations, and financial condition. In addition, the indemnity rights we have against eBay under the agreements may not be sufficient to protect us, and our indemnity obligations to eBay may be significant.

In the ordinary course of business, we include indemnification provisions in certain of our agreements with parties with whom we have commercial relationships. Under these contracts, we generally indemnify, hold harmless, and agree to reimburse the indemnified party for losses suffered or incurred by the indemnified party in connection with claims by any third party with respect to our domain names, trademarks, logos, and other branding elements to the extent that such marks are related to the subject agreement. We have provided an indemnity for other types of third-party claims, which may include indemnities related to intellectual property rights, confidentiality, willful misconduct, data privacy obligations, and certain breach of contract claims, among others. We have also provided an indemnity to our payments processors in the event of card association fines against the processor arising out of conduct by us or our customers. It is not possible to determine the maximum potential loss under these indemnification provisions due to our limited history of prior indemnification claims and the unique facts and circumstances involved in each particular situation.

PayPal has participated in the U.S. Government's Paycheck Protection Program administered by the U.S. Small Business Administration. Loans made under this program are funded by an independent chartered financial institution that we partner with. We receive a fee for providing services in connection with these loans and retain operational and audit risk related to those activities. We have agreed, under certain circumstances, to indemnify the chartered financial institution and its assignee of a portion of these loans in connection with the services provided for loans made under this program.

To date, no significant costs have been incurred, either individually or collectively, in connection with our indemnification provisions.

OFF-BALANCE SHEET ARRANGEMENTS

As of December 31, 2022 and 2021, we had no off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on our consolidated financial condition, results of operations, liquidity, capital expenditures, or capital resources.

PROTECTION PROGRAMS

We provide merchants and consumers with protection programs for certain transactions completed on our payments platform. These programs are intended to protect both merchants and consumers from loss primarily due to fraud and counterparty performance. Our Purchase Protection Program provides protection to consumers for qualifying purchases by reimbursing the consumer for the full amount of the purchase if a purchased item does not arrive or does not match the seller's description. Our Seller Protection Programs provide protection to merchants against claims that a transaction was not authorized by the buyer or claims that an item was not received by covering the seller for the full amount of the payment on eligible sales. These protection programs are considered assurance-type warranties under applicable accounting standards for which we estimate and record associated costs in transaction and credit losses during the period the payment transaction is completed.

At December 31, 2022 and 2021, the allowance for transaction losses was $66 million and $121 million, respectively. The allowance for negative customer balances was $212 million and $234 million at December 31, 2022 and 2021, respectively. The following table shows changes in the allowance for transaction losses and negative customer balances related to our protection programs for the years ended December 31, 2022 and 2021:

	As of December 31,	
	2022	2021
	(In millions)	
Beginning balance	$ 355	$ 414
Provision	1,170	1,153
Realized losses	(1,417)	(1,331)
Recoveries	170	119
Ending balance	$ 278	$ 355

NOTE 14—STOCK REPURCHASE PROGRAMS

In April 2017, our Board of Directors authorized a stock repurchase program that provided for the repurchase of up to $5 billion of our common stock, with no expiration from the date of authorization. In July 2018, our Board of Directors authorized an additional stock repurchase program that provides for the repurchase of up to $10 billion of our common stock, with no expiration from the date of authorization. This program became effective in the first quarter of 2020 upon completion of the April 2017 stock repurchase program. In June 2022, our Board of Directors authorized an additional stock repurchase program that provides for the repurchase of up to $15 billion of our common stock, with no expiration from the date of authorization. Our stock repurchase programs are intended to offset the impact of dilution from our equity compensation programs and, subject to market conditions and other factors, may also be used to make opportunistic repurchases of our common stock to reduce outstanding share count. Any share repurchases under our stock repurchase programs may be made through open market transactions, block trades, privately negotiated transactions, including accelerated share repurchase agreements, or other means at times and in such amounts as management deems appropriate and will be funded from our working capital or other financing alternatives. Moreover, any stock repurchases are subject to market conditions and other uncertainties, and we cannot predict if or when any stock repurchases will be made. We may terminate our stock repurchase programs at any time without prior notice.

During the year ended December 31, 2022, we repurchased approximately 41 million shares of our common stock for approximately $4.2 billion at an average cost of $103.47. These shares were purchased in the open market under our stock repurchase program authorized in July 2018. As of December 31, 2022, a total of approximately $861 million and $15.0 billion remained available for future repurchases of our common stock under our July 2018 and June 2022 stock repurchase programs, respectively.

During the year ended December 31, 2021, we repurchased approximately 15 million shares of our common stock for approximately $3.4 billion at an average cost of $219.75. These shares were purchased in the open market under our stock repurchase program authorized in July 2018. As of December 31, 2021, a total of approximately $5.1 billion remained available for future repurchases of our common stock under our July 2018 stock repurchase program.

During the year ended December 31, 2020, we repurchased approximately 12 million shares of our common stock for approximately $1.6 billion at an average cost of $136.19. These shares were purchased in the open market under our stock repurchase programs authorized in April 2017 and July 2018. As of December 31, 2020, a total of approximately $8.4 billion remained available for future repurchases of our common stock under our July 2018 stock repurchase program.

Shares of common stock repurchased for the periods presented were recorded as treasury stock for the purposes of calculating net income (loss) per share and were accounted for under the cost method. No repurchased shares of common stock have been retired.

NOTE 15—STOCK-BASED AND EMPLOYEE SAVINGS PLANS

EQUITY INCENTIVE PLANS

Under the terms of the Amended and Restated PayPal Holdings, Inc. 2015 Equity Incentive Award Plan (the "Plan"), equity awards, including restricted stock units ("RSUs"), restricted stock awards, performance based restricted stock units ("PBRSUs"), stock options, deferred stock units, and stock payments, may be granted to our directors, officers, and employees. At December 31, 2022, 47 million shares were authorized under the Plan and approximately 31 million shares were available for future grant. Shares issued as a result of stock option exercises and the release of stock awards were funded primarily with the issuance of new shares of common stock.

In 2022, the Company adopted a plan for which equity-based incentive awards may be granted to new employees (the "Inducement Plan"). Grants under the Inducement Plan are in addition to the Plan mentioned above. As of December 31, 2022, 5 million shares were authorized under the Inducement Plan and approximately 3 million shares were available for future grant.

RSUs are granted to eligible employees under the Plan. RSUs issued prior to January 1, 2022 generally vest in equal annual installments over a period of three years. RSUs issued on or after January 1, 2022 generally vest over three years at a rate of 33% after one year, then in equal quarterly installments thereafter. RSUs are subject to an employee's continuing service to us, and do not have an expiration date. The cost of RSUs granted is determined using the fair market value of PayPal's common stock on the date of grant.

Certain of our executives and non-executives are eligible to receive PBRSUs, which are equity awards that may be earned based on an initial target number. The final number of PBRSUs may vest and settle depending on the Company's performance against pre-established performance metrics over a predefined performance period. PBRSUs granted under the Plan generally have one to three-year performance periods with cliff vesting following the completion of the performance period, subject to the Compensation Committee's approval of the level of achievement against the pre-established performance targets. Over the performance period, the number of PBRSUs that may be issued and related stock-based compensation expense that is recognized is adjusted upward or downward based upon the probability of achieving the approved performance targets against the performance metrics. Depending on the probability of achieving the pre-established performance targets, the number of PBRSUs issued could range from 0% to 200% of the target amount.

All stock options under the Plan were assumed in connection with acquisitions on the same terms and conditions (including vesting) applicable to such acquired companies' equity awards. The cost of stock options was determined using the Black-Scholes option pricing model.

EMPLOYEE STOCK PURCHASE PLAN

Under the terms of the Employee Stock Purchase Plan ("ESPP"), shares of our common stock may be purchased over an offering period with a maximum duration of two years at 85% of the lower of the fair market value on the first day of the applicable offering period or on the last business day of each six-month purchase period within the offering period. Employees may contribute between 2% and 10% of their gross compensation during an offering period to purchase shares, but not more than the statutory limitation of $25,000 per year. All company stock purchased through the ESPP is considered outstanding and is included in the weighted-average outstanding shares for purposes of computing basic and diluted net income (loss) per share. For the years ended December 31, 2022, 2021, and 2020, our employees purchased 1.9 million, 1.4 million, and 1.7 million shares under the ESPP at an average per share price of $73.20, $114.36, and $80.36, respectively. As of December 31, 2022, approximately 46 million shares were reserved for future issuance under the ESPP.

RSU, PBRSU, AND RESTRICTED STOCK ACTIVITY

The following table summarizes RSU, PBRSU, and restricted stock activity under the Plan and the Inducement Plan as of December 31, 2022 and changes during the year ended December 31, 2022:

	Units		Weighted Average Grant-Date Fair Value (per share)
	(In thousands, except per share amounts)		
Outstanding at January 1, 2022	17,534	$	172.55
Awarded and assumed[1]	17,238	$	105.20
Vested[1]	(9,930)	$	145.75
Forfeited/cancelled[2]	(5,254)	$	147.81
Outstanding at December 31, 2022	19,588	$	133.27
Expected to vest	17,507		

[1] Includes approximately 0.5 million of additional PBRSUs issued during 2022 due to the achievement of company performance metrics on awards granted in previous years.
[2] Includes approximately 1.0 million of PBRSUs cancelled during 2022 resulting from a change in the method of payout of the Company portion of our Annual Incentive Plan from equity to cash for certain employees.

During the years ended December 31, 2022, 2021, and 2020, the aggregate intrinsic value of RSUs and PBRSUs vested under the Plan was $935 million, $3.4 billion, and $1.7 billion, respectively.

In the year ended December 31, 2022, the Company granted 1.5 million PBRSUs with a one-year performance period (fiscal 2022) of which 1.0 million were subsequently cancelled due to the change in method of payout as mentioned above. As such, 0.5 million will become fully vested following the completion of the performance period in February 2023 (one year from the annual incentive award cycle grant date). In the year ended December 31, 2022, the Company also granted 1.1 million PBRSUs with a three-year performance period.

In the year ended December 31, 2021, the Company granted 0.7 million PBRSUs with a one-year performance period (fiscal 2021), which became fully vested following the completion of the performance period in February 2022 (one year from the annual incentive award cycle grant date), and 0.5 million PBRSUs with a three-year performance period.

STOCK OPTION ACTIVITY

The following table summarizes stock option activity of our employees under the Plan for the year ended December 31, 2022:

	Shares		Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)		Aggregate Intrinsic Value
	(In thousands, except per share amounts and years)					
Outstanding at January 1, 2022	339	$	17.55			
Assumed	3	$	55.55			
Exercised	(190)	$	20.62			
Forfeited/expired/cancelled	(11)	$	13.66			
Outstanding at December 31, 2022	141	$	14.56	4.93	$	8,080
Expected to vest	24	$	23.89	7.46	$	1,172
Options exercisable	117	$	12.60	4.40	$	6,875

The weighted average grant date fair value of options assumed from acquisitions during the years ended December 31, 2022, 2021, and 2020 was $147.92, $237.26 and $108.61, respectively. The aggregate intrinsic value was calculated as the difference between the exercise price of the underlying options and the quoted price of our common stock at December 31, 2022. During the years ended December 31, 2022, 2021, and 2020, the aggregate intrinsic value of options exercised under the Plan was $16 million, $81 million, and $66 million, respectively, determined as of the date of option exercise. At December 31, 2022, substantially all outstanding options were in-the-money.

STOCK-BASED COMPENSATION EXPENSE

Stock-based compensation expense for the Plan and the Inducement Plan is measured based on estimated fair value at the time of grant, and recognized over the award's vesting period.

The impact on our results of operations of recording stock-based compensation expense under the Plan for the years ended December 31, 2022, 2021, and 2020 was as follows:

	Year Ended December 31, 2022	2021	2020
	(In millions)		
Customer support and operations	$ 269	$ 263	$ 250
Sales and marketing	151	175	172
Technology and development	512	515	529
General and administrative	383	468	460
Total stock-based compensation expense	$ 1,315	$ 1,421	$ 1,411
Capitalized as part of internal use software and website development costs	$ 52	$ 68	$ 48
Income tax benefit recognized for stock-based compensation arrangements	$ 209	$ 221	$ 226

As of December 31, 2022, there was approximately $1.4 billion of unearned stock-based compensation estimated to be expensed primarily from 2023 through 2025. If there are any modifications or cancellations of the underlying unvested awards, we may be required to accelerate, increase, or cancel all or a portion of the remaining unearned stock-based compensation expense. Future unearned stock-based compensation will increase to the extent we grant additional equity awards, change the mix of equity awards we grant, or assume unvested equity awards in connection with acquisitions.

EMPLOYEE SAVINGS PLANS

Under the terms of the PayPal Holdings, Inc. Deferred Compensation Plan, which also qualifies under Section 401(k) of the Code, participating U.S. employees may contribute up to 50% of their eligible compensation, but not more than statutory limits. Under the PayPal plan, eligible employees received one dollar for each dollar contributed, up to 4% of each employee's eligible salary, subject to a maximum employer contribution per employee of $12,200 in 2022 and $11,600 in both 2021 and 2020. Our non-U.S. employees are covered by other savings plans. For the years ended December 31, 2022, 2021, and 2020, the matching contribution expense for our U.S. and international savings plans was approximately $83 million, $81 million, and $72 million, respectively.

NOTE 16—INCOME TAXES

The components of income before income taxes are as follows:

	Year Ended December 31, 2022	2021	2020
	(In millions)		
United States	$ (155)	$ 290	$ 1,504
International	3,521	3,809	3,561
Income before income taxes	$ 3,366	$ 4,099	$ 5,065

The income tax expense (benefit) is composed of the following:

	Year Ended December 31,		
	2022	2021	2020
		(In millions)	
Current:			
Federal	$ 688	$ 6	$ 310
State and local	104	80	143
Foreign	966	326	245
Total current portion of income tax expense	$ 1,758	$ 412	$ 698
Deferred:			
Federal	$ (563)	$ (401)	$ 259
State and local	(101)	(45)	(32)
Foreign	(147)	(36)	(62)
Total deferred portion of income tax expense (benefit)	(811)	(482)	165
Income tax expense (benefit)	$ 947	$ (70)	$ 863

The following is a reconciliation of the difference between the effective income tax rate and the federal statutory rate:

	Year Ended December 31,		
	2022	2021	2020
Federal statutory rate	21.0 %	21.0 %	21.0 %
Domestic income taxed at different rates	(0.6)%	(1.7)%	—%
State taxes, net of federal benefit	—%	0.9 %	2.2 %
Foreign income taxed at different rates	(12.2)%	(13.4)%	(7.4)%
Stock-based compensation expense	4.1 %	(7.3)%	(1.2)%
Tax credits	(0.4)%	(2.4)%	(2.0)%
Change in valuation allowances	2.2 %	0.5 %	0.1 %
Intra-group transfer of intellectual property	10.0 %	0.7 %	4.1 %
Other	4.0 %	—%	0.2 %
Effective income tax rate	28.1 %	(1.7)%	17.0 %

For the year ended December 31, 2022, the difference between the effective income tax rate of 28.1% and the U.S. federal statutory rate of 21% to income before income taxes was primarily the result of tax expense related to the intra-group transfer of intellectual property and non-deductible stock-based compensation, partially offset by foreign income taxed at different rates. For the year ended December 31, 2021, the difference between the effective income tax rate of (1.7)% and the U.S. federal statutory rate of 21% to income before income taxes was primarily the result of foreign income taxed at different rates and stock-based compensation deductions. For the year ended December 31, 2020, the difference between the effective income tax rate of 17.0% and the U.S. federal statutory rate of 21% to income before income taxes was primarily the result of foreign income taxed at different rates, partially offset by tax expense related to the intra-group transfer of intellectual property.

Deferred tax assets and liabilities are recognized for the future tax consequences of differences between the carrying amounts of assets and liabilities and their respective tax basis using enacted tax rates in effect for the year in which the differences are expected to reverse. Significant deferred tax assets and liabilities consist of the following:

	As of December 31, 2022	As of December 31, 2021
	(In millions)	
Deferred tax assets:		
Net operating loss and credit carryforwards	$ 355	$ 317
Accruals, allowances, and prepaids	427	622
Lease liabilities	173	176
Partnership investment	—	5
Stock-based compensation	154	188
Net unrealized losses	151	23
Acquired intangibles	38	—
Fixed assets and other intangibles	655	84
Total deferred tax assets	1,953	1,415
Valuation allowance	(341)	(274)
Net deferred tax assets	$ 1,612	$ 1,141
Deferred tax liabilities:		
Unremitted foreign earnings	$ (42)	$ (35)
Acquired intangibles	—	(240)
ROU lease assets	(138)	(154)
Partnership investment	(12)	—
Net unrealized gains	(135)	(351)
Total deferred tax liabilities	(327)	(780)
Net deferred tax assets	$ 1,285	$ 361

The following table shows the deferred tax assets and liabilities within our consolidated balance sheets:

	Balance Sheet Location	As of December 31, 2022	As of December 31, 2021
		(In millions)	
Total deferred tax assets (non-current)	Other assets	$ 1,310	$ 547
Total deferred tax liabilities (non-current)	Deferred tax liability and other long-term liabilities	(25)	(186)
Total net deferred tax assets		$ 1,285	$ 361

As of December 31, 2022, our federal, state, and foreign net operating loss carryforwards for income tax purposes were approximately $6 million, $156 million, and $634 million, respectively. The federal and state net operating loss carryforwards are subject to various limitations under Section 382 of the Code. If not utilized, the federal net operating loss carryforwards will begin to expire in 2025, and the state net operating loss carryforwards will begin to expire in 2023. Approximately $197 million of the foreign net operating loss carryforwards will begin to expire in 2024, $191 million will begin to expire in 2034, and $246 million may be carried forward indefinitely. As of December 31, 2022, our federal and state tax credit carryforwards for income tax purposes were approximately $24 million and $374 million, respectively. If not utilized, the federal tax credits will begin to expire in 2029. Approximately $49 million of the state tax credits will begin to expire from 2023 through 2028, $8 million will begin to expire in 2038, and $317 million may be carried forward indefinitely.

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that all or some portion of the deferred tax assets will not be realized. We have elected the tax law ordering approach to assess the realizability of our net operating losses. During the years ended December 31, 2022 and 2021, we increased our valuation allowance by $67 million and $108 million, respectively, and during the year ended December 31, 2020, we decreased our valuation allowance by $18 million. At December 31, 2022, 2021, and 2020, we maintained a valuation allowance with respect to our net deferred tax assets in certain states, operating losses in certain state and foreign jurisdictions, and certain federal and state tax credits that we believe are not likely to be realized.

At December 31, 2022, none of our approximately $11.0 billion of unremitted foreign earnings are considered to be indefinitely reinvested. We have accrued $42 million of deferred U.S. state income and foreign withholding taxes on the $11.0 billion of undistributed foreign earnings.

We benefit from agreements concluded in certain jurisdictions, most significantly Singapore. In December 2019, a new agreement was concluded in Singapore. The new agreement took effect January 1, 2021 and will be in effect from 2021 through 2030. This agreement results in significantly lower rates of taxation on certain classes of income and requires various thresholds of investment and employment in those jurisdictions. We review our compliance on an annual basis to ensure we continue to meet our obligations under this agreement. This agreement resulted in tax savings of approximately $510 million, $327 million, and $596 million in 2022, 2021, and 2020, respectively. The benefit of this agreement on our net income (loss) per share (diluted) was approximately $0.44, $0.28, and $0.50 in 2022, 2021, and 2020, respectively.

The following table reflects changes in unrecognized tax benefits for the periods presented below:

	Year Ended December 31,		
	2022	2021	2020
	(In millions)		
Gross amounts of unrecognized tax benefits as of the beginning of the period	$ 1,678	$ 1,479	$ 1,141
Increases related to prior period tax positions	52	172	92
Decreases related to prior period tax positions	(185)	(187)	(78)
Increases related to current period tax positions	337	232	360
Settlements	(2)	(15)	(34)
Statute of limitation expirations	(3)	(3)	(2)
Gross amounts of unrecognized tax benefits as of the end of the period	$ 1,877	$ 1,678	$ 1,479

If the remaining balance of unrecognized tax benefits were realized in a future period, it would result in a tax benefit of $1.2 billion.

For the years ended December 31, 2022, 2021, and 2020, we recognized net interest and penalties of $119 million, $6 million, and $40 million, respectively, related to uncertain tax positions in income tax expense. This expense is reflected in the “Other” line of our effective income tax rate schedule. The amount of interest and penalties accrued as of December 31, 2022 and 2021 was approximately $342 million and $212 million, respectively.

We are subject to taxation in the U.S. and various state and foreign jurisdictions. We are currently under examination by certain tax authorities for the 2010 to 2021 tax years. The material jurisdictions in which we are subject to examination by tax authorities for tax years after 2009 primarily include the U.S. (Federal and California), Australia, Germany, India, Israel, and Singapore. We believe that adequate amounts have been reserved for any adjustments that may ultimately result from our open examinations.

Although the timing of the resolution of these audits is uncertain, we do not expect the total amount of unrecognized tax benefits as of December 31, 2022 will materially change in the next 12 months. However, given the number of years remaining subject to examination and the number of matters being examined, we are unable to estimate the full range of possible adjustments to the balance of gross unrecognized tax benefits.

In connection with our separation from eBay in 2015, we entered into various agreements that govern the relationship between the parties going forward, including a tax matters agreement. Under the tax matters agreement, eBay is generally responsible for all additional taxes (and will be entitled to all related refunds of taxes) imposed on eBay and its subsidiaries (including subsidiaries that were transferred to PayPal pursuant to the separation) arising after the separation date with respect to the taxable periods (or portions thereof) ended on or prior to July 17, 2015, except for those taxes for which PayPal has reflected an unrecognized tax benefit in its financial statements on the separation date.

NOTE 17—RESTRUCTURING AND OTHER CHARGES

During the first quarter of 2022, management initiated a strategic reduction of the existing global workforce intended to streamline and optimize our global operations to enhance operating efficiency. This effort focused on reducing redundant operations and simplifying our organizational structure. The associated restructuring charges in 2022 were $121 million. We primarily incurred employee severance and benefits costs, as well as associated consulting costs under the 2022 strategic reduction. The strategic actions associated with this plan were substantially completed by the fourth quarter of 2022.

The following table summarizes the restructuring reserve activity during the year ended December 31, 2022:

	Employee Severance and Benefits and Other Associated Costs	
	(In millions)	
Accrued liability as of January 1, 2022	$	5
Charges		121
Payments		(102)
Accrued liability as of December 31, 2022	$	24

During the first quarter of 2020, management approved a strategic reduction of the existing global workforce as part of a multiphase process to reorganize our workforce concurrently with the redesign of our operating structure, which spanned multiple quarters. The associated restructuring charges in 2021 and 2020 were $27 million, and $109 million, respectively. We primarily incurred employee severance and benefits costs, as well as associated consulting costs under the 2020 strategic reduction, which was substantially completed in 2021.

Additionally, we are continuing to review our real estate and facility capacity requirements due to our new and evolving work models. We incurred asset impairment charges of $81 million, $26 million, and $30 million in 2022, 2021, and 2020, respectively, due to exiting of certain leased properties which resulted in a reduction of ROU lease assets and related leasehold improvements. See “Note 6—Leases” for additional information.

NOTE 18—SUBSEQUENT EVENTS

In January 2023, management initiated a global workforce reduction intended to focus resources on core strategic priorities, and improve our cost structure and operating efficiency. We estimate that this reduction will impact approximately 7% of our employees and will result in approximately $100 million of restructuring charges, primarily related to employee severance and benefits costs. The actions associated with this plan are expected to be substantially completed by the first quarter of 2023.

FINANCIAL STATEMENT SCHEDULE

The Financial Statement Schedule II—VALUATION AND QUALIFYING ACCOUNTS is filed as part of this Annual Report on Form 10-K.

	Balance at Beginning of Period	Charged/ (Credited) to Net Income	Charged to Other Accounts[1]	Charges Utilized/ (Write-offs)	Balance at End of Period
			(In millions)		
Allowance for Transaction Losses and Negative Customer Balances					
Year Ended December 31, 2020	$ 399	$ 1,135	$ —	$ (1,120)	$ 414
Year Ended December 31, 2021	$ 414	$ 1,153	$ —	$ (1,212)	$ 355
Year Ended December 31, 2022	$ 355	$ 1,170	$ —	$ (1,247)	$ 278
Allowance for Loans and Interest Receivable					
Year Ended December 31, 2020	$ 258	$ 689	$ 210	$ (319)	$ 838
Year Ended December 31, 2021	$ 838	$ (104)	$ —	$ (243)	$ 491
Year Ended December 31, 2022	$ 491	$ 437	$ —	$ (330)	$ 598

[1] The amount is related to the impact of the adjustment recorded for adoption of the current expected credit loss standard.

INDEX OF EXHIBITS

Exhibit Number	Exhibit Description	Filed with this Form 10-K	Incorporated by Reference	
			Form	Date Filed
2.01	Separation and Distribution Agreement by and between eBay Inc. and PayPal Holdings, Inc.		10-12B/A	6/26/2015
3.01	PayPal Holdings, Inc. Restated Certificate of Incorporation		10-Q	7/27/2017
3.02	PayPal Holdings, Inc. Amended and Restated Bylaws effective January 17, 2019		8-K	1/18/2019
4.01	Description of Securities		10-K	2/6/2020
4.02	Indenture, dated as of September 26, 2019, by and between PayPal Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee		8-K	9/26/2019
4.03	Officer's Certificate, dated as of September 26, 2019, pursuant to the Indenture, dated as of September 26, 2019, by and between PayPal Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee		8-K	9/26/2019
4.04	Form of 2022 Note (included in Exhibit 4.03)		8-K	9/26/2019
4.05	Form of 2024 Note (included in Exhibit 4.03)		8-K	9/26/2019
4.06	Form of 2026 Note (included in Exhibit 4.03)		8-K	9/26/2019
4.07	Form of 2029 Note (included in Exhibit 4.03)		8-K	9/26/2019
4.08	Officer's Certificate, dated as of May 18, 2020, pursuant to the Indenture, dated as of September 26, 2019, by and between PayPal Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee		8-K	5/18/2020
4.09	Form of 2023 Note (included in Exhibit 4.08)		8-K	5/18/2020
4.10	Form of 2025 Note (included in Exhibit 4.08)		8-K	5/18/2020
4.11	Form of 2030 Note (included in Exhibit 4.08)		8-K	5/18/2020
4.12	Form of 2050 Note (included in Exhibit 4.08)		8-K	5/18/2020
4.13	Officer's Certificate, dated as of May 23, 2022, pursuant to the Indenture, dated as of September 26, 2019, by and between PayPal Holdings, Inc. and Wells Fargo Bank, National Association, as Trustee		8-K	5/23/2022
4.14	Form of 2027 Note (included in Exhibit 4.2)		8-K	5/23/2022
4.15	Form of 2032 Note (included in Exhibit 4.2)		8-K	5/23/2022
4.16	Form of 2052 Note (included in Exhibit 4.2)		8-K	5/23/2022
4.17	Form of 2062 Note (included in Exhibit 4.2)		8-K	5/23/2022
10.01	Tax Matters Agreement by and between eBay Inc. and PayPal Holdings, Inc. dated July 17, 2015		8-K	7/20/2015
10.02	Credit Agreement, dated as of September 11, 2019, among PayPal Holdings, Inc., the Designated Borrowers party thereto, the Lenders party thereto and JPMorgan Chase Bank, N.A., J.P. Morgan Securities Australia Limited, JPMorgan Chase Bank, N.A., Toronto Branch, and J.P. Morgan Europe Limited, as the Administrative Agents		8-K	9/12/2019
10.03	364-Day Credit Agreement, dated as of September 11, 2019, among PayPal Holdings, Inc., the Lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent		8-K	9/12/2019
10.04+	PayPal Employee Incentive Plan, as amended and restated		DEF 14A	4/14/2016
10.05+	PayPal Holdings, Inc. Amended and Restated 2015 Equity Incentive Award Plan		8-K	5/25/2018
10.06+	PayPal Holdings, Inc. Amended and Restated Deferred Compensation Plan effective November 6, 2018		10-K	2/7/2019

Exhibit Number	Exhibit Description	Filed with this Form 10-K	Incorporated by Reference	
			Form	Date Filed
10.07+	PayPal Holdings, Inc. Executive Change in Control and Severance Plan, as amended and restated, effective as of September 27, 2021		10-Q	11/9/2021
10.08+	Form of Indemnity Agreement between PayPal Holdings, Inc. and individual directors and officers		10-12B/A	5/14/2015
10.09+	Form of Global Restricted Stock Unit Award Grant Notice and Restricted Stock Unit Award Agreement under the PayPal Holdings, Inc. 2015 Equity Incentive Award Plan		10-12B/A	5/14/2015
10.10+	Form of Global Performance Based Restricted Stock Unit Award Grant Notice and Performance Based Restricted Stock Unit Award Agreement under the PayPal Holdings, Inc. 2015 Equity Incentive Award Plan, as amended and restated		10-Q	4/27/2017
10.11+	Form of Global Notice of Grant of Stock Option and Stock Option Agreement under the PayPal Holdings, Inc. 2015 Equity Incentive Award Plan		10-12B/A	5/14/2015
10.12+	Form of Director Annual Award Agreement under the PayPal Holdings, Inc. 2015 Equity Incentive Award Plan		10-12B/A	5/14/2015
10.13+	Form of Electing Director Quarterly Award Agreement under the PayPal Holdings, Inc. 2015 Equity Incentive Award Plan		10-12B/A	5/14/2015
10.14+	PayPal Holdings, Inc. Amended and Restated Employee Stock Purchase Plan		8-K	5/25/2018
10.15+	Amendment to PayPal Holdings, Inc. Amended and Restated Employee Stock Purchase Plan		10-Q	11/9/2021
10.16+	PayPal Holdings, Inc. 2022 Inducement Plan		10-Q	8/2/2022
10.17+	Offer Letter dated September 29, 2014 between eBay Inc. and Daniel Schulman		10-12B/A	5/14/2015
10.18+	Amendment dated December 31, 2014 to Offer Letter between eBay Inc. and Daniel Schulman		10-12B/A	5/14/2015
10.19+	Letter dated April 7, 2015 from eBay Inc. to Louise Pentland		10-K	2/11/2016
10.20+	Letter dated April 13, 2015 from eBay Inc. to Jonathan Auerbach		10-K	2/11/2016
10.21+	Letter Agreement dated July 29, 2015 between John Rainey and PayPal Holdings, Inc.		10-Q	10/29/2015
10.22+	Letter Agreement, dated April 17, 2016, between Aaron Karczmer and PayPal Holdings, Inc.		10-Q	4/27/2017
10.23+	Letter Agreement effective February 20, 2019 between Mark Britto and PayPal Holdings, Inc.		10-Q	4/25/2019
10.24+	Letter Agreement effective July 13, 2022, between Blake Jorgensen and PayPal Holdings, Inc.		10-Q	8/2/2022
10.25+	Letter Agreement dated June 15, 2022 between Gabrielle Rabinovitch and PayPal Holdings, Inc.		8-K	6/17/2022
10.26+	Letter Agreement dated September 27, 2022 between Gabrielle Rabinovitch and PayPal Holdings, Inc.		8-K	10/3/2022
10.27+	Letter Agreement dated September 1, 2022 between John Kim and PayPal Holdings, Inc.		10-Q	11/3/2022
10.28+	Independent Director Compensation Policy		10-K	2/5/2021
10.29+	PayPal Holdings, Inc. Executive Change in Control and Severance Plan, as amended and restated		10-Q	7/29/2021

Exhibit Number	Exhibit Description	Filed with this Form 10-K	Incorporated by Reference	
			Form	Date Filed
10.30	First Amendment, dated as of March 23, 2020, to the Credit Agreement, dated as of September 11, 2019, among PayPal Holdings, Inc., the Designated Borrowers party thereto, the Lenders party thereto and JPMorgan Chase Bank, N.A., J.P. Morgan Securities Australia Limited, JPMorgan Chase Bank, N.A., Toronto Branch, and J.P. Morgan Europe Limited, as the Administrative Agents		10-Q	5/7/2020
10.31	First Amendment, dated as of March 23, 2020, to the 364-Day Credit Agreement, dated as of September 11, 2019, among PayPal Holdings, Inc., the Lenders party thereto and JPMorgan Chase Bank, N.A., as the Administrative Agent		10-Q	5/7/2020
10.32	Joinder Agreement, dated as of March 25, 2020, among PayPal International Treasury Centre S.à r.l., PayPal Holdings, Inc., and J.P. Morgan Securities Australia Limited, JPMorgan Chase Bank, N.A., J.P. Morgan Europe Limited, and JPMorgan Chase Bank, N.A., Toronto Branch, as the Administrative Agents, to the Credit Agreement, dated as of September 11, 2019, among PayPal Holdings, Inc., the Designated Borrowers party thereto, the Lenders party thereto and the Administrative Agents		10-Q	5/7/2020
10.33	Joinder Agreement, dated as of March 25, 2020, among PayPal (Europe) S.à r.l. et Cie, S.C.A., PayPal Holdings, Inc., and J.P. Morgan Securities Australia Limited, JPMorgan Chase Bank, N.A., J.P. Morgan Europe Limited, and JPMorgan Chase Bank, N.A., Toronto Branch, as the Administrative Agents, to the Credit Agreement, dated as of September 11, 2019, among PayPal Holdings, Inc., the Designated Borrowers party thereto, the Lenders party thereto and the Administrative Agents		10-Q	5/7/2020
10.34	Joinder Agreement, dated as of March 27, 2020, among PayPal Pte. Ltd., PayPal Holdings, Inc., and J.P. Morgan Securities Australia Limited, JPMorgan Chase Bank, N.A., J.P. Morgan Europe Limited, and JPMorgan Chase Bank, N.A., Toronto Branch, as the Administrative Agents, to the Credit Agreement, dated as of September 11, 2019, among PayPal Holdings, Inc., the Designated Borrowers party thereto, the Lenders party thereto and the Administrative Agents		10-Q	5/7/2020
10.35	Joinder Agreement, dated as of March 31, 2020, among PayPal Australia Pty Limited, PayPal Holdings, Inc., and J.P. Morgan Securities Australia Limited, JPMorgan Chase Bank, N.A., J.P. Morgan Europe Limited, and JPMorgan Chase Bank, N.A., Toronto Branch, as the Administrative Agents, to the Credit Agreement, dated as of September 11, 2019, among PayPal Holdings, Inc., the Designated Borrowers party thereto, the Lenders party thereto and the Administrative Agents		10-Q	5/7/2020
10.36	Second Amendment, dated as of January 7, 2022, to the Credit Agreement, dated as of September 11, 2019, among PayPal Holdings, Inc., the Designated Borrowers party thereto, the Lenders party thereto and JPMorgan Chase Bank, N.A., J.P. Morgan Securities Australia Limited, JPMorgan Chase Bank, N.A., Toronto Branch, and J.P. Morgan AG, as the Administrative Agents		10-K	2/3/2022
21.01	List of Subsidiaries	X		
22.01	PricewaterhouseCoopers LLP consent	X		
23.01	Power of Attorney (see signature page)	X		
31.01	Certification of PayPal Holdings, Inc.'s Chief Executive Officer, as required by Section 302 of the Sarbanes-Oxley Act of 2002	X		
31.02	Certification of PayPal Holdings, Inc.'s Chief Financial Officer, as required by Section 302 of the Sarbanes-Oxley Act of 2002	X		
32.01	Certification of PayPal Holdings, Inc.'s Chief Executive Officer, as required by Section 906 of the Sarbanes-Oxley Act of 2002	X		

Exhibit Number	Exhibit Description	Filed with this Form 10-K	Incorporated by Reference	
			Form	Date Filed
32.02	Certification of PayPal Holdings, Inc.'s Chief Financial Officer, as required by Section 906 of the Sarbanes-Oxley Act of 2002	X		
101	The following financial information related to the Company's Annual Report on Form 10-K for the year ended December 31, 2022, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income (Loss), (iii) the Consolidated Statements of Comprehensive Income (Loss), (iv) the Consolidated Statements of Stockholders' Equity, (v) the Consolidated Statements of Cash Flows; and (vi) the related Notes to Consolidated Financial Statements	X		
104	Cover Page Interactive Data File, formatted in iXBRL and contained in Exhibit 101	X		

+ Indicates a management contract or compensatory plan or arrangement

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 9, 2023.

PayPal Holdings, Inc.

By: */s/ Daniel H. Schulman*

Name:	Daniel H. Schulman
Title:	President, Chief Executive Officer and Director

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Daniel H. Schulman, Gabrielle Rabinovitch, Bimal Patel, Brian Y. Yamasaki and Jeffrey W. Karbowski, and each or any one of them, each with the power of substitution, his or her attorney-in-fact, to sign any amendments to this report, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on February 9, 2023.

Principal Executive Officer:

By: */s/ Daniel H. Schulman*
Daniel H. Schulman
President, Chief Executive Officer and Director

Principal Financial Officer:

By: */s/ Gabrielle Rabinovitch*
Gabrielle Rabinovitch
Acting Chief Financial Officer and Senior Vice President, Investor Relations and Treasurer

Principal Accounting Officer:

By: */s/ Jeffrey W. Karbowski*
Jeffrey W. Karbowski
Vice President, Chief Accounting Officer

Additional Directors

By: */s/ Rodney C. Adkins*
Rodney C. Adkins
Director

By: */s/ Jonathan Christodoro*
Jonathan Christodoro
Director

By: */s/ John J. Donahoe*
John J. Donahoe
Director

By: */s/ David W. Dorman*
David W. Dorman
Director

By: */s/ Belinda Johnson*
Belinda Johnson
Director

By: */s/ Enrique Lores*
Enrique Lores
Director

By: */s/ Gail J. McGovern*
Gail J. McGovern
Director

By: */s/ Deborah M. Messemer*
Deborah M. Messemer
Director

By: */s/ David M. Moffett*
David M. Moffett
Director

By: */s/ Ann M. Sarnoff*
Ann M. Sarnoff
Director

By: */s/ Frank D. Yeary*
Frank D. Yeary
Director