EMC CORP Form 10-K February 25, 2014

**UNITED STATES** 

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF  $^\circ$  1034

For the fiscal year ended December 31, 2013

OR

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

For the transition period from

Commission File Number 1-9853

**EMC CORPORATION** 

(Exact name of registrant as specified in its charter)

Massachusetts 04-2680009

to

(State or other jurisdiction of incorporation or

organization)

(I.R.S. Employer Identification Number)

176 South Street

Hopkinton, Massachusetts

01748

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code: (508) 435-1000

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

Title of Each Class

Name of Each Exchange on Which Registered

Common Stock, par value \$.01 per share New York Stock Exchange

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 ý No "

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes "No ý

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  $\circ$  No "Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T ( $\circ$ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  $\circ$  No "

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. "Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ý Accelerated filer "Non-accelerated filer "Ob not check if a smaller reporting company Smaller reporting company "Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes "No ý The aggregate market value of voting stock held by non-affiliates of the registrant was \$49,015,382,041 based upon the closing price on the New York Stock Exchange on the last business day of the registrant's most recently completed second fiscal quarter (June 30, 2013).

The number of shares of the registrant's Common Stock, par value \$.01 per share, outstanding as of January 31, 2014 was 2,025,633,308.

## DOCUMENTS INCORPORATED BY REFERENCE

Information required in response to Part III of Form 10-K (Items 10, 11, 12, 13 and 14) is hereby incorporated by reference to the specified portions of the registrant's Proxy Statement for the Annual Meeting of Shareholders to be held on April 30, 2014.

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#### FACTORS THAT MAY AFFECT FUTURE RESULTS

This Annual Report on Form 10-K contains forward-looking statements, within the meaning of the Federal securities laws, about our business and prospects. The forward-looking statements do not include the potential impact of any mergers, acquisitions, divestitures, securities offerings or business combinations that may be announced or closed after the date hereof. Any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes," "plans," "intends," "expects," "goals" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these words. Our future results may differ materially from our past results and from those projected in the forward-looking statements due to various uncertainties and risks, including, but not limited to, those described in Item 1A of Part I (Risk Factors). The forward-looking statements speak only as of the date of this Annual Report and undue reliance should not be placed on these statements. We disclaim any obligation to update any forward-looking statements contained herein after the date of this Annual Report.

PART I ITEM 1. BUSINESS The Opportunity

Throughout this report, we refer to EMC Corporation, together with its subsidiaries, as "EMC," "we," "us," or "the Company."

EMC's mission is to lead businesses and service providers to transform information technology ("IT") operations to an "as a service" model ("ITaaS"). ITaaS offers a dramatically more efficient delivery model that helps transform IT organizations from cost centers to value drivers that are more agile, more cost-effective and more responsive to business needs.

We manage our business as three federated businesses, each of which plays a vital role in the delivery of ITaaS: EMC Information Infrastructure, Pivotal and VMware Virtual Infrastructure. As data centers move to an ITaaS model, managing information becomes central to their operations. EMC Information Infrastructure provides a foundation for organizations to store, manage, protect, analyze and secure ever-increasing quantities of information, while at the same time improving business agility, lowering cost and increasing competitive advantage. These benefits can be greatly enhanced with virtualization. VMware Virtual Infrastructure, which is represented by EMC's majority equity stake in VMware, Inc. ("VMware"), is the leader in virtualization infrastructure solutions. VMware continues to excel because it is uniquely positioned to help customers move from the client-server era to the mobile-cloud era of computing. As VMware helps customers bridge to this new world, it is enabling them to capture new levels of efficiency, control and agility. EMC's majority-owned Pivotal Software, Inc. ("Pivotal") is a leading provider of application and data infrastructure software, agile development services and data science consulting. Pivotal unites strategic technology, people and programs formerly within EMC and VMware, including Greenplum, Cloud Foundry, Spring, Cetas, Pivotal Labs, GemFire and other products. Pivotal is building a new platform comprising next-generation data fabrics, application fabrics and a cloud-independent platform-as-a-service ("PaaS"). Under our federation model, each of the three businesses operates freely and independently to build its own ecosystem and offer customers the very best technology solutions, free from vendor confinement. At the same time, the federation is aligned in the mission to lead our customers and partners through the transformational shifts occurring in IT. We believe this model creates a distinct competitive advantage by offering tight integration for customers who prefer control and choice of deployment for customers seeking flexibility.

EMC was incorporated in Massachusetts in 1979. Our corporate headquarters are located at 176 South Street, Hopkinton, Massachusetts. EMC supports a broad range of customers, including service providers, around the world in every major industry, in both public and private sectors, and of sizes ranging from the Fortune 500 to small business and individual consumers.

EMC Strategy, Products and Services

**Industry Transformation and Opportunity** 

The IT industry is experiencing one of the most disruptive periods of transition in its history, and the pace of this change is accelerating. Macro trends toward technology that is mobile, social, cloud-based and Big Data-driven are forming what has become known as the third platform of IT. As a result, enterprise customers are investing beyond IT solutions built for the client-server era, known as the second platform, and increasingly building out solutions that accommodate the third platform of IT. While the second platform of IT continues to support the vast majority of enterprise workloads, much of the new data that is being generated, stored and managed by enterprises is best accommodated by third platform technologies. As a result, customers are seeking solutions that bridge the two.

The adoption of the third platform is transforming the way IT is built, operated and consumed. IT leaders around the world are reinventing the way they operate, and forging a new, always-on, data-driven computing infrastructure that can be accessed from anywhere in the world by a highly mobile and social workforce.

Contributing to the rise of the third platform is the unrelenting expansion of the world's data, which is expected to expand at a compound annual growth rate of almost 40% from 2013 to 2020. Cloud infrastructures represent the best platform for organizations to digest and harness the power of the massive quantities of data generated by the proliferation of smart phones, social networks, machine-to-machine communications and sensor networks. For businesses, this new relationship to Big Data is enabling profound opportunities for strategic insights, market research and operational efficiency. The study and use of Big Data is transforming business as well as our understanding of how the world works.

Yet, the increasing sophistication of cyber criminals stands as a primary obstacle to accessing the full benefits of cloud computing and Big Data. To achieve true adoption, applications and services must be delivered on a fully trusted IT infrastructure.

The EMC strategy is to deliver best-of-breed products and services that allow customers to move to the third platform via an ITaaS model through cloud computing, gain value through analysis of Big Data and to do so within a trusted computing environment. This will be achieved while also enabling them to continue to run existing applications more efficiently and reliably.

Whether customers are expanding traditional data centers, providing private cloud services, or relying on public cloud vendors, our portfolio positions us to meet their needs through every phase, from initial assessment to design, delivery and implementation. This includes training and professional certification in the skills required to manage the ITaaS and Big Data-centric work environment.

#### ITaaS and Cloud Computing Transform IT

An organization's ability to achieve revenue goals and operational excellence depends largely on the successful implementation of information technology. The global pervasiveness of smart, mobile devices and the broad exposure of consumers to online retailers, social networks and technology-enhanced entertainment have put pressure on the IT industry to provide highly responsive, always-on applications and services.

The ultimate goal of ITaaS is to make the IT organization more agile and responsive to business and consumer needs. To do this, the IT infrastructure must be made more efficient, so it can act as an enabler of business. This is achieved first through virtualizing the infrastructure - creating shared pools of network, storage and compute resources that any application can exploit. Next, through increased automation, the infrastructure can be made less dependent on manual human intervention. Automation not only increases efficiency, it makes processes run faster and more reliably. The business can then consume IT as a set of services with an understanding of what is being delivered, at what service level, and at what cost.

To achieve maximum efficiency and agility, data centers are becoming more and more driven by policy-based automation that improves the productivity and effectiveness of its operators. Such "software-defined data centers" feature virtualized infrastructure -- consisting of software-defined computing, software-defined networking, software-defined storage and software-defined security, all delivered as a service -- that can respond instantly to changing operating conditions and business imperatives.

Most companies are first building a "private cloud" inside their own data centers - consolidating, standardizing, virtualizing and then automating much of the existing infrastructure and applications. Many organizations also look to hosted cloud services, delivered by service providers, that can run business applications, provide additional compute and storage capacity, and provide business continuity options. These public clouds will continue to provide and expand consumable IT services, especially for emerging development and analytic applications. IT departments are thus coming to rely on a combination of private cloud, hosted services, and public cloud infrastructures - moving to a so-called "hybrid cloud" model.

With this in mind, companies choose EMC as their IT transformation partner for three reasons:

First, we deliver the greatest improvements in efficiency of the IT infrastructure, including much-needed professional skills and certification programs;

Second, we provide IT with a solution that leaves companies in control of critical data and applications; and Third, we offer choice - retaining an open architecture with the ability to run a broad range of applications on both virtual and physical infrastructure.

#### Big Data Transforms Business

The continued growth of data in the digital universe creates a huge challenge for IT departments that must store and manage information, and with only an estimated 50 percent increase in staffing budgets by 2020, according to industry experts. But Big Data also creates huge opportunities for a new generation of applications that help organizations turn massive amounts of data into insight and competitive advantage.

Many business-critical systems have amassed tens or hundreds of terabytes of structured and unstructured data - stored, managed and protected, in many cases, by EMC storage and security infrastructure. Companies want to analyze this data for trends and to gain understanding of customer or organizational behavior. In addition, many would like to use data to change business in real time, using fast-data techniques to adjust prices and product availability and to address changing external conditions. Analysts are also predicting rapid growth in the Internet of Things, where sensors and machinery are also generating steady streams of analyzable data.

To capitalize on the Big Data opportunity, IT leaders are developing applications that require new computing and storage workloads. These emerging workloads represent a new paradigm for data storage products, services and applications. As a long-time leader in storage technology and managing Big Data workloads, EMC is strongly positioned to lead in this critical sector of the new IT economy.

#### Trust Accelerates Transformation

The adoption of IT as a service, cloud computing and Big Data analytics is dependent upon IT's ability to maintain a trustworthy infrastructure and application environment, one that supports business expectations while protecting data assets and intellectual property.

The increasing use of hosted or public cloud services challenges the boundaries that define enterprise IT and the notion of a perimeter-based approach to cyber security. As the value of enterprise information grows, security threats become stealthier and more advanced. A Big Data approach to security analyzes vast flows of information and patterns of behavior in order to spot anomalies in activity. IT must move from an approach of static security to the newer dynamic security in order to secure trust in cloud computing models.

In the cloud era, trust in IT is achieved when an organization can anticipate, identify and repel advanced threats while ensuring availability of applications, systems and data. With our emphasis on innovations like RSA security analytics and forensics, advanced data protection, and next-generation backup, EMC plays a central role in enabling trusted cloud environments.

#### **EMC Information Infrastructure Products and Offerings**

#### **Information Storage Segment**

EMC offers a comprehensive portfolio of enterprise storage systems and software - including high-end EMC VMAX and mid-tier EMC VNX unified storage and a portfolio of backup products that support a wide range of enterprise application workloads. EMC's two additional storage families, EMC Isilon and EMC Atmos, are specifically designed to handle vast quantities of unstructured data. As the foundation of an information infrastructure within traditional data centers, virtual data centers and cloud-based IT infrastructures, EMC storage systems can be deployed in storage-area networks ("SAN"), networked-attached storage ("NAS"), unified storage combining NAS and SAN, object storage and/or direct-attached storage environments.

Customer adoption of EMC's storage products and offerings in 2013 was driven by storage innovations, new features and capabilities and a focused emphasis on expanding EMC's partner ecosystem. EMC storage systems leverage the latest Intel processor technology designed to consume less energy than alternative solutions and are optimized for virtual environments. EMC and VMware products are tightly integrated, which is critical to customers managing and optimizing their storage in virtual data centers. VMware and virtualization integration continues to be a key competitive differentiator and enabler for EMC, helping customers realize the potential of transforming their IT to virtual infrastructures.

EMC continues to lead the high-end storage market. Following a major refresh of the EMC VMAX family in 2012, in 2013, EMC continued building upon the market-leading systems with significant updates to the VMAX operating software (Enginuity), adding multiple new features to the VMAX family, new 16Gb Fibre Channel support, as well as adding more data protection capabilities to our SRDF and RecoverPoint products. In addition, EMC doubled the performance of the VMAX 10K and added the new VMAX 10K Block and File array which adds file capabilities without a complex NAS gateway. The VMAX 10K brings EMC's mission-critical offering within the reach of smaller enterprise customers.

EMC also leads the mid-range storage market with its award-winning EMC VNX unified storage family, which includes the VNX and VNXe. In September 2013, EMC launched the new VNX Series, which delivers up to four-times the performance of the previous generation. The new VNX leverages the latest Intel Sandy Bridge chip and features MCx (multi-core optimization) technology, increases transactional NAS performance, and delivers increased reliability and availability. The flash-centric design of the new VNX enables flash-optimized performance for virtual applications and cloud deployments. This boost to application performance combined with industry-leading integration with virtualization platforms makes the VNX platform well-suited for virtualizing mission-critical applications. VNX solutions are available as part of both VSPEX proven infrastructure and VCE Vblock converged infrastructure to enable fast cloud deployments with integrated servers, storage, network, hypervisor and management in a proven configuration.

Flash continues to be a disruptive technology, driving innovation within the storage market. Through organic innovation and strategically acquired technologies, EMC has developed what we believe to be the most comprehensive flash portfolios in the industry - including flash-optimized hybrid arrays, server-flash solutions and all-flash arrays. EMC is focused on extending its lead in the enterprise flash market, which was established in 2008 with the introduction of the storage industry's first flash-enabled enterprise storage array. In 2013, EMC announced general availability of XtremIO, marking the industry's first all-flash array to provide consistent and predictable high performance to any application workload over any period of time, regardless of whether the array is idle or busy, empty or full. EMC also added a new line of PCIe-based flash cards that dramatically accelerate application performance to the Xtrem Family of flash-optimized server and storage products. In addition, EMC announced a new version of XtremCache software, enabling distributed cache coherency for Oracle RAC environments. This helps maintain data consistency across a server cluster. EMC's comprehensive flash portfolio, plus our latest new emerging technology with ScaleIO, a Server SAN solution, addresses different market segments, use cases, workloads, applications, budgets and deployment scenarios based on customer needs.

EMC Isilon storage systems simplify and reduce the cost to manage Big Data storage environments by offering an innovative scale-out NAS architecture that enables rapid scaling of both capacity and performance while decreasing the need for management resources. In 2013, EMC introduced a new version of its operating system, OneFS 7.1, which includes enhancements that support next-generation workflows and applications such as enterprise IT file based workloads, Big Data analytics and mobility. These enhancements include integration with EMC ViPR software to extend the benefits of Isilon scale-out NAS to object storage, as well as Hadoop Distributed File System ("HDFS") 2.0 integration that supports multiple analytics providers including those such as PivotalHD. Additionally in 2013, EMC executed on-premise Isilon integration with Syncplicity online file sharing which allows Isilon access through the Syncplicity mobile app.

EMC Atmos storage systems offer a scale-out object platform for globally distributed unstructured content. As one of only a few commercially available object storage systems, we believe we hold a market-leadership position in object storage. The ability to store, archive and access such content at scale is a key capability for private, public and hybrid cloud infrastructures.

EMC seeks to align customers' data protection infrastructures to the transformational initiatives underway at IT organizations around the globe. Central to this mission is the migration of customers to Protection Storage Architectures, which are open data protection platforms that maximize flexibility and scale, while eliminating disparate silos of infrastructure. EMC has a broad portfolio of data protection solutions that span the backup, archive and availability categories. These include EMC Avamar and EMC NetWorker backup software, EMC Data Domain deduplication storage systems, EMC RecoverPoint and VPLEX continuous availability solutions, EMC Disk Library for mainframe products, EMC SourceOne archive software and Mozy cloud backup and access. During 2013, EMC continued to deepen the level of integration between its data protection hardware and software products, as well as

with enterprise applications from Oracle, SAP and Microsoft and virtual infrastructure from VMware and Microsoft. This highly integrated approach to delivering solutions for backup and recovery, disaster recovery, continuous availability and archiving helps users address challenges associated with exponential data growth, physical-to-virtual migration and cloud computing initiatives.

In 2013, EMC launched the ViPR Software-Defined Storage platform, which is a key area of opportunity across our federated businesses. EMC ViPR software consists of two distinct components, the ViPR Controller and ViPR Data Services. The ViPR Controller reduces complexity in today's storage environments by abstracting and standardizing the provisioning and management of both EMC and non-EMC arrays. As a result, the storage infrastructure can be highly automated and accessed through a self-service portal - enabling IT departments to offer a simple, public cloud-like experience for application owners. ViPR Data Services provides new storage functionality on top of existing EMC arrays, non-EMC arrays and commodity storage. We expect third-platform infrastructures, including large web-scale content depots, and next-generation application developers to increasingly rely on object storage because of its simplicity, cost and globally distributed nature. Object stores will also likely play a major role underneath Big Data Analytics systems based on Hadoop. ViPR HDFS, used in conjunction with Pivotal, enables customers to build next-generation data "lakes" that provide a comprehensive platform for enterprises to use all available data in decision-

making. Moreover, the availability of ViPR functionality through software that is integrated with VMware solutions will allow customers to use ViPR as the major software-defined storage component in a VMware software-defined data center environment.

#### **EMC Global Services**

EMC Global Services enables customers and partners to transform IT, realize the agility and efficiency of a trusted cloud, and capitalize on the competitive advantage of Big Data. Our 15,000+ services professionals worldwide, plus our global network of partners, deliver the skills, knowledge and experience organizations need to accelerate their cloud, Big Data and trust initiatives and get the maximum value from their EMC technology investments. We provide a broad and comprehensive mix of services capabilities to assist customers with every phase of their journey - from developing a strategy to designing, deploying, operating and supporting their IT environment as well as providing their workforce with the necessary skills, knowledge and certifications.

Global Services continually enhances its services portfolio and skills in support of EMC's strategies of cloud, Big Data and trust and to stay ahead of rapidly evolving market and customer demands. In 2013, we made two significant additions to our portfolio: EMC Continuous Availability Advisory Services ("CAAS") and Hybrid Cloud Automation Services. CAAS is a comprehensive assessment, cost/benefit analysis and roadmap development offering to help organizations significantly reduce server count by combining existing production, high availability and disaster recovery compute platforms into a single virtual storage solution. This proven services methodology that is based on EMC's VPLEX virtual storage enables an always-on-and-available IT infrastructure with reduced capital and operational expenditures. Hybrid cloud automation services leverage new automation and orchestration technologies from VMware - vCloud Suite and IT Business Management Suite - to help customers build a hybrid cloud to reduce costs and increase agility in the Software Defined Data Center ("SDDC"). Interest in hybrid clouds has grown due to the IT cost savings and benefits being realized by running each application where it makes most sense based on functionality, cost and security requirements.

In 2013, EMC launched new courses to give business leaders the knowledge and tools needed to successfully implement cloud or Big Data analytics strategies within their organizations: Cloud and IT as a Service for Business Transformation, and Data Science and Big Data Analytics for Business Transformation. With these additions to the EMC Education Services portfolio, EMC now offers a cloud and data science curriculum for every level of the organization. Also in 2013, the EMC Academic Alliance, which provides universities worldwide with technology curricula to educate and transform the next generation of IT and data science professionals, reached an important milestone with the number of member institutions topping 1,000.

In 2013, Global Services achieved record-high customer satisfaction scores, earning multiple industry awards for our exemplary customer service and customer-centric service culture and our excellence in online service and support. We made significant progress in 2013 improving the customer experience with the rollout of a new operational model focused on simplifying EMC services and aligning them more closely with our sales and engineering functions.

## **RSA Information Security Segment**

RSA, the Security Division of EMC, delivers intelligence-driven security solutions that help the world's leading organizations solve their most complex and sensitive security challenges. RSA offers solutions that are engineered to combine agile controls for identity assurance, fraud detection, and data protection, Security Analytics and industry-leading GRC capabilities, and expert consulting and advisory services. Through these solutions, services and an array of partnerships, RSA helps bring visibility and trust to millions of user identities, the data they create, the transactions they perform, and the IT infrastructure they rely on.

In 2013, RSA strengthened its leadership in the information security market through several strategic initiatives, new solution and service offerings and technology partnerships. Among these strategic initiatives was the acquisition of Aveksa, a leading provider of business-driven Identity and Access Management solutions. The addition of Aveksa improves our ability to manage the complete lifecycle of users' digital identities from a business-driven perspective and utilize more agile, intelligent and scalable "situational perimeters."

RSA released a number of innovative solutions throughout 2013, most notably one of the industry's first Big Data-driven security monitoring solutions, RSA Security Analytics. The Security Analytics products are the result of our strategy to redefine Security Information Management by combining network monitoring, traditional log management, forensics, and compliance with Big Data management and analytics. RSA also introduced RSA Authentication Manager 8, a major update to its flagship two-factor authentication software that was designed to add new user-friendly authentication options and capabilities to manage RSA SecurID tokens, users and resources across physical sites. RSA also announced significant updates to anti-fraud technology obtained in 2012 through the acquisition of Silver Tail Systems, with the release of RSA Silver Tail 4.0, which was designed to use Big Data to help security and fraud teams detect fraud, security threats and business logic abuse affecting web sites in real-time. Finally,

RSA announced an expanded technology and threat intelligence sharing partnership with Juniper Networks to help enable joint customers to detect and prevent advanced threats and enhance the security and usability of remote access.

#### Information Intelligence Group

EMC's Information Intelligence Group ("IIG") helps global organizations transform their business with software, cloud solutions and services that connect information to work. The division's strategy is comprised of four key elements: supporting the new user in the post-PC era by simplifying the user experience and supporting device mobility; accelerating our customers' journey to the cloud; providing pervasive governance solutions for customers to understand and secure their information; and finally, to help customers transform their business with solutions.

Customers rely on IIG to collaborate, manage, access, distribute and control information securely from anywhere, at any time, from any device. The IIG portfolio is comprised of EMC Documentum xCP for building dynamic business and case management solutions, and can serve as an action engine for Big Data, EMC Captiva for intelligent enterprise capture, EMC Document Sciences for customer communications management, EMC SourceOne Kazeon for eDiscovery, the EMC Documentum platform for creating, managing and deploying business applications and solutions, the EMC OnDemand private cloud deployment model for enterprise-class applications, and EMC Syncplicity, an industry-leading, enterprise-grade file sync and share solution that provides mobile editing, mobile access to file shares, and group level policies for enterprise file sync and share. The portfolio also includes several vertical-specific solutions in the Life Sciences, Energy & Engineering, and Healthcare industries.

In 2013, IIG made major innovations across its entire technology portfolio, resulting in what we believe is the highest quality, easiest to deploy, and most powerful platform available on the market today. A focus of this innovation was on time to value for customers around deployment, application development and content migration. To this end, customers can now reduce deployment time from weeks to hours through OnDemand and develop applications 50 percent faster through xCP and Captiva. They also have a faster and easier path to the cloud through the newly launched Enterprise Migration Appliance, a migration tool that significantly reduces the cost and time of migration to the newest cloud-ready platform, Documentum 7. In addition, IIG acquired Sitrof Technologies to complement and strengthen its consulting portfolio, as well as deepen its expertise in the Life Sciences market. IIG has a rich community of developers and a robust ecosystem of partners with over 80 EMC certified solutions for helping customers develop, deploy and integrate comprehensive business solutions.

## Pivotal Products and Offerings

The industry-wide transition to cloud computing and the vast quantities of Big Data present a significant opportunity for both VMware and EMC to provide thought and technology leadership, not only at the infrastructure level, but also across the rapidly growing and fast-moving application development and Big Data markets. Because software increasingly defines how companies engage with customers in the most meaningful and timely ways, and that engagement is increasingly powered by data insights and new devices, we believe the role that software plays inside an organization will help determine its success. To capitalize on this opportunity, EMC formed Pivotal in the second quarter of 2013. Pivotal unites strategic technology, people and programs from EMC and VMware, including Greenplum, Cloud Foundry, Spring, Cetas, Pivotal Labs, GemFire and other products from the VMware vFabric Suite. With these assets, Pivotal has built a new platform comprising next-generation data fabrics, application fabrics and a cloud-independent PaaS.

As enterprises seek to leverage trends in cloud, mobile computing, social networking and Big Data, software that can run across a variety of infrastructures, clouds and devices is important. Moreover, the development of software that leverages these trends must be agile, flexible, fast and continuous. To meet the rapidly expanding demand from businesses, in November 2013, Pivotal launched Pivotal One, a comprehensive integrated platform that includes a set

of application and data services that run on top of Pivotal CF, the leading enterprise distribution of Cloud Foundry. This platform will enable agile development teams to rapidly build, update and scale applications on cloud infrastructure that can be instantly expanded and upgraded with no downtime, allowing enterprises to innovate at unprecedented speeds. Pivotal is the lead corporate steward of the Cloud Foundry, the open source project which in the past year has been endorsed by much of the industry, including IBM, SAP, Verizon, NTT and Intel. Pivotal's open approach, current support for VMware and Amazon Web Services, and the intention of future support for platforms such as OpenStack, Microsoft and Google Compute, enables customers to retain choice while benefiting from innovation across the ecosystem. In late 2013, Pivotal acquired Xtreme Labs, a software development company, to strengthen its mobile application development capabilities.

#### VMware Virtual and Cloud Infrastructure Products and Offerings

VMware is the leader in virtualization infrastructure solutions utilized by organizations to help transform the way they build, deliver and consume IT resources. VMware develops and markets its product and service offerings within three main product groups, and it also seeks to leverage synergies across these three product areas: SDDC or Software-Defined Data Center, End-User Computing and Hybrid Cloud Computing.

VMware pioneered the development and application of virtualization technologies with x86 server-based computing, separating application software from the underlying hardware. The benefits to our customers include lower IT costs and a more automated and resilient systems infrastructure capable of responding dynamically to variable business demands. VMware's broad and proven suite of virtualization technologies are designed to establish secure and reliable IT environments and address a range of complex IT challenges that include cost reduction, operational inefficiencies, access to cloud computing capacity, business continuity and corporate end-user computing device management. VMware solutions enable organizations to aggregate multiple servers, storage infrastructure and networks together into shared pools of capacity that can be allocated dynamically, securely and reliably to applications as needed. Once created, these internal computing infrastructures, or "clouds," can be dynamically extended by our customers to the public cloud environment. When linked, this results in a "hybrid" computing cloud of highly available internal and external computing resources that organizations can access on demand. VMware's customers' deployments range in size from a single virtualized server for small businesses to thousands of virtual machines for Fortune 1000 enterprise customers.

In 2013, VMware focused on delivering unique customer value in three strategic growth areas: software-defined data center, hybrid cloud and end-user computing. VMware launched a key component of its comprehensive software-defined data center solution with its network virtualization offering. Additionally, VMware enhanced its industry-leading cloud management capabilities with the refresh of vCloud Suite. VMware also launched its vCloud Hybrid Service, which delivers customers a seamless extension from their private cloud to hybrid cloud infrastructure-as-a-service. In end-user computing, VMware continued to bring innovation to VMware Horizon<sup>TM</sup> Suite as one of the industry's most comprehensive and integrated platforms to enable an increasingly mobile workforce.

#### Markets and Distribution Channels

#### Markets

EMC supports a broad range of customers, including service providers, around the world - in every major industry, in both public and private sectors, and of sizes ranging from the Fortune 500 to small business and individual consumers.

#### **Distribution Channels**

We market our products through direct sales and through multiple distribution channels. We have a direct sales presence throughout North America, Latin America, Europe, the Middle East, South Africa and the Asia Pacific region. We also have agreements in place with many partners, including value-added resellers and distributors, cloud service providers, systems integrators, outsourcers, Independent Software Vendors ("ISVs"), and Original Equipment Manufacturers ("OEMs"). These agreements, subject to certain terms and conditions, help us extend our reach in established markets and expand EMC technologies into new markets.

EMC's Business Partner program is focused on partner enablement in a variety of ways, including reselling EMC solutions, providing cloud services powered by EMC technologies, including EMC as part of a strategic business solution, or embedding EMC technologies in their own technology and systems. These partners now contribute over half of EMC's storage revenue. In 2013, EMC continued to add new selling partners to its program.

The success of our Business Partner program can be attributed to having a combination of a broad product portfolio, a program that rewards partners who are trained to effectively position, sell and service EMC products and go-to-market innovations such as our VSPEX program. Sold exclusively through partners, VSPEX Proven Infrastructure experienced significant growth and adoption in 2013 and is now sold by more than 1,700 partners. With thousands of solutions delivered since its launch in April of 2012, VSPEX is the fastest-growing reference architecture program in the industry. VSPEX incorporates storage and data protection technology from EMC, and virtualization, server and networking technology from alliance partners like Brocade, Cisco, Citrix, Microsoft and VMware. In 2013, the VSPEX program expanded its portfolio to include applications such as the Microsoft suite of products and Oracle, as well as expanded support for business continuity and disaster recovery with EMC VPLEX, RecoverPoint, Avamar and Data Domain. VSPEX Labs also enabled several ISVs to validate their software offerings as part of a VSPEX solution, further expanding the VSPEX technology partner ecosystem.

As a core element of EMC's hybrid cloud strategy, EMC continues to establish focused and committed partnerships with service providers around the world to expand the range of options for IT organizations seeking to gain business agility through the efficiency and choice offered by cloud computing, without sacrificing trust or control. EMC's Service Provider Partner program is designed to increase sales, marketing, planning and education benefits for our partners with the singular goal of delivering compelling cloud services to the global IT market. These cloud Service Providers were EMC's fastest-growing vertical market segment throughout 2013. EMC also made available business development and services creation resources to enable partners to develop differentiated offerings built on EMC technology, as well as marketing support including market development funds, campaigns, field execution and sales enablement tools. The Service Provider Partner program is open to cloud service providers of all kinds, including networking and communications companies, managed hosting firms, outsourcers, ISVs, resellers, value-added resellers, distributors and enterprises. The program has evolved to enable qualified partner companies to participate and capture cloud opportunities.

VMware works closely with more than 1,200 technology partners, including leading server, microprocessor, storage, networking, software and security vendors. It shares the economic opportunities surrounding virtualization with its partners by facilitating solution development through open application programming interface formats and protocols and providing access to its source code and technology.

## Technology Alliances

EMC engages in numerous alliances with other technology companies to improve the total customer experience with our products and services.

In 2013, Cisco and EMC increased the level of funding for VCE Company LLC ("VCE"). VCE, formed by Cisco and EMC with investments from VMware and Intel, develops products, services and solutions based on technologies from four established industry leaders for a global partner ecosystem in the rapidly growing converged infrastructure and cloud computing market. VCE accelerates the adoption of converged infrastructure and cloud-based computing models that reduce the cost of IT while improving time to market and increasing business agility for customers. Through its Vblock Systems, VCE delivers the industry's first and only completely pre-integrated, pre-tested and pre-validated IT offering that combines best-of-breed network, compute, storage, management, security and virtualization technologies into a single, fully supported product with end-to-end vendor accountability. VCE Vblock Systems accelerate time to production and significantly reduce the large percentage of IT budgets and resources that today are consumed by routine maintenance, interoperability, patch management and other operations. VCE's prepackaged solutions cover horizontal applications, such as unified communications and analytics; vertical industry offerings, such as electronic health record management and HIPAA compliance; and application development environments for deployments, such as virtual desktop infrastructure (VDI) and SAP, allowing organizations to focus on business innovation instead of integrating, validating and managing IT infrastructure.

In 2013, VCE continued to expand its product and services portfolio. VCE delivered the Vblock Specialized System for SAP HANA, a purpose-built converged infrastructure certified by SAP that is designed to deliver the high levels of performance, scalability, flexibility and security enterprises need to accelerate applications and business processes. VCE also introduced the Vblock System 100 and 200 for remote office/branch office and midsize data center deployments, as well as Vision Intelligent Operations software, which automatically informs management software frameworks about Vblock System configuration and health. VCE also refreshed its Vblock System 300 with the Vblock System 340; introduced a new Vblock Specialized System for High-Performance Databases; and introduced a new Vblock Specialized System for the Extreme Applications product that meets the requirements of the most latency-intensive applications, such as VDI. VCE also enhanced its partner program to help partners develop and expand their businesses around VCE's converged infrastructure solutions and announced new cloud accelerator services to help customers rapidly and efficiently plan, build and implement scalable "as a service" cloud infrastructure

environments.

In 2013, EMC expanded its partner ecosystem in markets globally, strengthening existing relationships and forging new ones with global and regional technology and solutions providers. EMC delivered significant technology integration and new EMC Proven solutions and best practices for SAP, Cisco, Brocade, Citrix, Microsoft, Oracle and VMware to help accelerate customers' journey to private, public or hybrid cloud. Building upon a Memorandum of Understanding signed between EMC, VMware and SAP in 2011, EMC delivered SAP HANA appliance solutions to include backup and recovery and disaster tolerance support to enhance SAP HANA data center readiness, working with Cisco as an OEM partner. Additionally, EMC has delivered a virtual stack solution for SAP applications, encapsulating best practices that optimize SAP customer deployments for performance, resilience and manageability, including guidance for virtualizing SAP environments with an emphasis on private and hybrid clouds. EMC introduced new Microsoft offerings to help companies of all sizes enhance the management of virtualized Microsoft applications and Windows environments, including virtualized Microsoft Exchange Server, Microsoft SQL Server and Microsoft

SharePoint Server, including support for new Microsoft offerings including: Windows Server 2012 R2, Microsoft System Center 2012 R2, Lync Server 2013, Sharepoint Server 2013 and Exchange 2013.

#### Manufacturing and Quality

We conduct operations utilizing a formal, documented quality management system to ensure that our products as well as services satisfy customer needs and expectations. The quality management system also provides the framework for continual improvement of our processes and products. This system is certified to the ISO 9001 International Standard. Several additional ISO 9001 certifications are maintained for sales and service operations worldwide. We have also implemented Lean Six Sigma methodologies to ensure that the quality of our designs, manufacturing, test processes and supplier relationships are continually improved. Our storage systems' manufacturing and test facilities in Massachusetts, North Carolina and Ireland are certified to the ISO 14001 International Standard for environmental management systems. EMC's Franklin, Massachusetts, Apex, North Carolina and Cork, Ireland manufacturing facilities have achieved OHSAS 18001 certification, an international standard for facilities with world-class safety and health management systems. We also maintain Support Center Practices certification for our primary customer support centers. These internationally-recognized endorsements of ongoing quality and environmental management are among the highest levels of certifications available.

We maintain a robust Supplier Code of Conduct, actively manage recycling processes for our returned products, have won an Environmental Steward Award and are also certified by the Environmental Protection Agency as a Smartway Transport Partner.

Our hardware products are assembled and tested primarily at our facilities in the United States and Ireland or at global manufacturing service suppliers. We work closely with our suppliers to design, assemble and test product components in accordance with production standards and quality controls established by us. Our software products are designed, developed and tested primarily at our facilities in the United States and abroad. The products are tested to meet our quality standards.

#### **Product Components**

We purchase many sophisticated components and products from an approved list of qualified suppliers. Our products utilize industry-standard and semi-custom components and subsystems. Among the most important components that we use are disk drives, solid-state drives, high-density memory components, microcontrollers and power supplies. While such components are generally available, we have experienced delivery delays from time to time because of high industry demand or the inability of some vendors to consistently meet our quality or delivery requirements.

#### Research and Development

We continually enhance our existing products and develop new products to meet changing customer requirements. In 2013, 2012 and 2011, our research and development ("R&D") expenses totaled \$2,761 million, \$2,560 million and \$2,151 million, respectively. We support our R&D efforts through state-of-the-art development labs worldwide. See Item 2, Properties.

#### **Backlog**

We produce our products on the basis of our forecast of near-term demand and maintain inventory in advance of receipt of firm orders from customers. We configure to customer specifications and generally deliver products shortly after receipt of the order. Service engagements are also included in certain orders. Customers generally may

reschedule or cancel orders with little or no penalty. We believe that our backlog at any particular time is not meaningful because it is not necessarily indicative of future sales levels.

#### Competition

We compete with many companies in the markets we serve, including companies that offer a broad spectrum of IT products and services and others that offer specific information storage, protection, security, management and intelligence, data analytics or virtualization products or services. We believe that most of these companies compete based on their market presence, products, service or price. Some of these companies also compete by offering information storage, information governance, security or virtualization-related products or services, together with other IT products or services, at minimal or no additional cost in order to preserve or gain market share.

We believe that we have a number of competitive advantages over these companies, including product, distribution and service. We believe the advantages in our products include quality, breadth of offerings, performance, functionality, scalability, availability, interoperability, connectivity, time-to-market enhancements and total value of ownership. We believe our advantages in distribution

include the world's largest information infrastructure-focused direct sales force and a broad network of channel partners. We believe our advantages in service include our ability to provide our customers with a full range of expertise before, during and after their purchase of solutions from us or other vendors.

VMware competes with large and small vendors in different segments of the cloud computing, end-user computing and virtualization markets, and expects that new entrants will continue to enter the market and develop technologies that, if commercialized, may compete with VMware's products and services.

#### Seasonality

We generally experience the lowest demand for our products and services in the first quarter of the year and the greatest demand for our products and services in the last quarter of the year, which is consistent with the seasonality of the IT industry as a whole.

#### Intellectual Property

We generally rely on patent, copyright, trademark and trade secret laws and contract rights to establish and maintain our proprietary rights in our technology and products. While our intellectual property rights are important to our success, we believe that our business as a whole is not materially dependent on any particular patent, trademark, license or other intellectual property right.

We have been granted or own by assignment approximately 4,300 patents issued by the U.S. Patent and Trademark Office, of which approximately 3,800 are owned by EMC, 420 are owned by VMware and 15 are owned by Pivotal. EMC, VMware and Pivotal have approximately 3,600 patent applications pending with the U.S. Patent and Trademark Office. We also have a corresponding number of international patents and patent applications. While the durations of our patents vary, we believe that the durations of our patents are adequate relative to the expected lives of our products.

We have used, registered or applied to register certain trademarks and copyrights in the United States and in other countries. We also license certain technology from third parties for use in our products and processes and license some of our technologies to third parties.

#### **Employees**

As of December 31, 2013, we had approximately 63,900 employees worldwide, of which approximately 14,300 were employed by or working on behalf of VMware. None of our domestic employees is represented by a labor union, and we have never suffered an interruption of business as a result of a labor dispute. We consider our relations with our employees to be good.

Financial Information About Segments, Foreign and Domestic Operations and Export Sales

EMC manages the Company as three federated businesses: EMC Information Infrastructure, Pivotal and VMware Virtual Infrastructure. EMC Information Infrastructure operates in three segments: Information Storage, Information Intelligence Group and RSA Information Security, while Pivotal and VMware Virtual Infrastructure each operate as a single segment.

Sales and marketing operations outside the United States are conducted through sales subsidiaries and branches located principally in Europe, Latin America and the Asia Pacific region. We have five manufacturing facilities: two in Massachusetts, which manufacture storage products and security products for the North American markets; two in Ireland, which manufacture storage products and security products for markets outside of North America; and one in

North Carolina, which manufactures storage products for domestic markets. We also utilize contract manufacturers throughout the world to manufacture or assemble our Data Domain, Isilon, and, in limited amounts, other Information Infrastructure products. See Note S to the consolidated financial statements for information about revenues by segment and geographic area.

# Sustainability

We believe that investing in a sustainable future makes EMC a stronger and healthier company. We seek ways to use our technology and engage our talent to create prosperity, maximize value and provide for the well-being of our shareholders, the planet and society.

Sustainable business practices are creating financial value by producing savings from more efficient products and operations, and generating revenues from leveraging new market opportunities. Incorporating principles of sustainability in our product

designs, operations, and decision-making has enhanced our resilience and agility in the face of global social and environmental events. And our commitment to a healthy future plays an increasingly important role in attracting, retaining and energizing our talent pool.

EMC's sustainability efforts are founded on the principle that virtually all business decisions have economic, environmental, and social implications, and we are on a journey to embed this principle throughout the company. We strive to maximize our impact by focusing on those issues where EMC has the greatest potential to create positive change, holding ourselves accountable by measuring and reporting our progress, maintaining open and candid communication with our internal and external stakeholders, and collaborating with our peer companies and those in our value chain to expand the scale of our contributions.

In 2013, our top priorities continued to be energy use and climate change, material use and waste, supply chain social and environmental responsibility, and access to technical education for underserved communities.

Our primary greenhouse gas ("GHG") emissions arise indirectly from the generation and transmission of electricity needed to run our business and even more, to power our products at customer sites. Therefore, our energy and climate change strategy is focused on increasing energy efficiency in our products as well as our facilities and data centers; supplying technology that enables energy efficient operations in our customers' data centers; engaging with suppliers to reduce emissions in the supply chain; and leveraging the transformative power of technology to reduce global energy demand.

We have set global targets to reduce our energy consumption and GHG emissions with a long-term objective of an absolute reduction of 80% in emissions in accordance with the Intergovernmental Panel on Climate Change's (IPCC's) Fourth Assessment Report recommendations. We have already achieved our goal to reduce by 2015 our GHG intensity 40% per US\$M revenue over 2005. While we missed our goal of a 40% reduction in energy consumed per employee from 2005 to 2012, we are pleased to have achieved a 35% per employee reduction given the expansion of our product portfolio, the major driver of energy consumption in our labs. We submitted our sixth annual GHG disclosure report to the Carbon Disclosure Project ("CDP") in 2013, and were honored to be included in the 2013 Carbon Disclosure Leadership Index for the fifth time, as well as being listed in the Carbon Performance Leadership Index.

Material use and waste is a second major area of impact for the IT industry. We are continuously pursuing opportunities to reduce material used in our products and operations, recycle what cannot be reused, and handle any waste with integrity and responsibility for the environment and human health. We have been working with our suppliers and industry peers to identify substitutes for materials that can damage our ecology and human health, and in 2013 identified a new substitute for brominated flame retardants that meets the higher performance requirements for the latest generation of technology. We were pleased to see strong market acceptance for this material and by the end of 2013 had eliminated halogens in printed circuit boards for all of our new designs.

We continue to work with our suppliers to evaluate alternatives for the use of phthalates, a material of high concern, in our products. While we have identified and qualified a plasticizer for our cable sheathing that is free of halogens, PVCs, and phthalates, demand within the industry is not yet sufficient to mitigate the supply chain risks of switching to this substitute material.

Our global eWaste program offers product take back to all of our customers worldwide to help ensure those products are recycled or disposed of responsibly and in compliance with the law. Our published principles include commitments to avoid shipment of eWaste from countries in the Organisation for Economic Co-operation and Development ("OECD") to non-OECD countries, and to ensure that no prison, child or forced labor is used in the processing of our eWaste. We have required our disposal suppliers to be properly certified by third parties, and in

2013, saw three of those suppliers be the first in their countries to achieve certification to the R2 standard. We also completed independent audits of 100% of EMC's disposal suppliers. In 2014, we will only do business with certified disposal suppliers.

EMC has a relatively small operational water footprint, with our primary usage in general building operations such as drinking, cooling and sanitation. However, water is required to generate and transmit the energy we consume, and energy is used to supply the water we use. Our suppliers also use water in their operations to produce the material components in our products. Because water conservation and efficiency activities save energy and help reduce the carbon emissions generated from these activities, we have taken a conscientious approach to conserving this important resource. In our owned and operated facilities, we minimize water use and manage wastewater streams to protect local water quality, and our manufacturing facilities produce no industrial wastewater. In 2013, we submitted our third water disclosure report to the CDP.

Environmental and social responsibility within our supply chain is central to our sustainability principles. EMC is committed to establishing and maintaining a world-class supply network in a competitive landscape. We work directly with suppliers in more than 20 countries, and rely indirectly on many more. We believe it is critical that conditions in our global supply chain be fair and

legal, and that they protect human health and the environment. In support of these goals, we engage suppliers through our Supply Chain Social and Environmental Responsibility program. Given the complexity of supply chains and supplier relationships, we have different degrees of control and influence on these suppliers. However, we believe we must continually engage with our suppliers to develop a shared mindset and drive positive change throughout our supply chain.

We are committed to the responsible sourcing of minerals. We are working with our suppliers to trace and report on the sources of the tantalum, tin, tungsten and gold in our products and to identify smelters in their supply chain and expect to make required disclosures pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act and Securities and Exchange Commission ("SEC") rules.

We are advancing social sustainability efforts in our workforce and our communities by cultivating a collaborative and inclusive workplace, and building open and honest relationships with stakeholders. EMC and our employees invest time, talent and funds to support global education initiatives to strengthen educational systems, particularly in the area of science, technology, engineering and math education, and we leverage our technology to digitally preserve and protect cultural treasures for future generations. We hold ourselves, our suppliers, and our partners to high standards in protecting human rights and our beliefs, including that freedom of expression is an important human right, are embodied in our Global Labor and Human Rights Principles.

We actively engage with internal and external stakeholders to help improve our performance and sustainability reporting. In 2013, we conducted an in-person stakeholder forum, as well as multiple focused dialogues on key issues, and published our annual sustainability report "Thinking Forward" based upon the Global Reporting Initiative framework, incorporating feedback from our multi-stakeholder forum.

EMC is proud to have been listed in the 2013 Dow Jones Sustainability Index for North America for the third consecutive year.

Please see EMC's most current sustainability report for more information about EMC's sustainability initiatives and performance.

#### **Available Information**

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are made available free of charge on or through our website at www.emc.com as soon as reasonably practicable after such reports are filed with, or furnished to, the SEC. The SEC also maintains a website, www.sec.gov, that contains reports and other information regarding issuers that file electronically with the SEC. Copies of our (i) Corporate Governance Guidelines, (ii) charters for the Audit Committee, Leadership and Compensation Committee, Corporate Governance and Nominating Committee, Mergers and Acquisitions Committee and Finance Committee and (iii) Business Conduct Guidelines (code of business conduct and ethics) are available at

www.emc.com/corporate/investor-relations/governance/corporate-governance.htm. Copies will be provided to any shareholder upon request. Please go to www.emc.com/corporate/investor-relations/index.htm to submit an electronic request, or send a written request to EMC Investor Relations, 176 South Street, Hopkinton, MA 01748. None of the information posted on our website is incorporated by reference into this Annual Report.

#### ITEM 1A. RISK FACTORS

The risk factors that appear below could materially affect our business, financial condition and results of operations. The risks and uncertainties described below are not the only risks and uncertainties facing us. Our business is also subject to general risks and uncertainties that affect many other companies.

We may be unable to keep pace with rapid industry, technological and market changes.

The markets in which we compete are characterized by rapid technological change, frequent new product introductions, evolving industry standards and changing needs of customers. In addition, our industry is experiencing one of the most disruptive periods of transition in its history as we move from IT solutions built for the client-server second platform into the next phase of IT growth and innovation, or the third platform. There can be no assurance that our existing products will be properly positioned in the third platform or that we will be able to introduce new or enhanced products into the market on a timely basis, or at all. We spend a considerable amount of money on research and development and introduce new products from time to time. There can be no assurance that enhancements to existing products and solutions or new products and solutions will receive customer acceptance. As competition in the IT industry increases, it may become increasingly difficult for us to maintain a technological advantage and to leverage that advantage toward increased revenues and profits. In addition, there can be no assurance that our vision of enabling

hybrid cloud computing, Big Data and trust through infrastructure and application transformation will be accepted or validated in the marketplace.

Risks associated with the development and introduction of new products include delays in development and changes in data storage, networking virtualization, infrastructure management, information security and operating system technologies which could require us to modify existing products. Risks inherent in the transition to new products include:

the difficulty in forecasting customer preferences or demand accurately;

the inability to expand production capacity to meet demand for new products;

the inability to successfully manage the interoperability and transition from older products;

the impact of customers' demand for new products on the products being replaced, thereby causing a decline in sales of existing products and an excessive, obsolete supply of inventory; and

delays in initial shipments of new products.

Further risks inherent in new product introductions include the uncertainty of price-performance relative to products of competitors, competitors' responses to the introductions and the desire by customers to evaluate new products for extended periods of time. Our failure to introduce new or enhanced products on a timely basis, keep pace with rapid industry, technological or market changes or effectively manage the transitions to new products or new technologies could have a material adverse effect on our business, results of operations or financial condition.

The markets we serve are highly competitive, and we may be unable to compete effectively.

We compete with many companies in the markets we serve, certain of which offer a broad spectrum of IT products and services and others which offer specific information storage, protection, security, management, virtualization and intelligence products or services. Some of these companies (whether independently or by establishing alliances) may have substantially greater financial, marketing and technological resources, larger distribution capabilities, earlier access to customers and greater opportunity to address customers' various IT requirements than us. In addition, as the IT industry consolidates, companies may improve their competitive position and ability to compete against us. We compete on the basis of our products' features, performance and price as well as our services. Our failure to compete on any of these bases could affect demand for our products or services, which could have a material adverse effect on our business, results of operations or financial condition.

Companies may develop new technologies or products in advance of us or establish business models or technologies disruptive to us. Our business may be materially adversely affected by the announcement or introduction of new products, including hardware and software products and services by our competitors, and the implementation of effective marketing or sales strategies by our competitors. The material adverse effect to our business could include a decrease in demand for our products and services and an increase in the length of our sales cycle due to customers taking longer to compare products and services and to complete their purchases.

We may have difficulty managing operations.

Our future operating results will depend on our overall ability to manage operations, which includes, among other things:

successfully communicating and executing on our unique federation strategy;

retaining and hiring, as required, the appropriate number of qualified employees;

managing, protecting and enhancing, as appropriate, our infrastructure, including but not limited to, our information systems (and such systems' ability to protect confidential information residing on the systems) and internal controls; accurately forecasting revenues;

training our sales force to sell effectively, given the breadth of our offerings;

successfully integrating new acquisitions;

managing inventory levels, including minimizing excess and obsolete inventory, while maintaining sufficient inventory to meet customer demands;

controlling expenses;

managing our manufacturing capacity, real estate facilities and other assets;

meeting our sustainability goals; and

executing on our plans.

An unexpected decline in revenues without a corresponding and timely reduction in expenses or a failure to manage other aspects of our operations could have a material adverse effect on our business, results of operations or financial condition.

Our business could be materially adversely affected as a result of a lessening demand in the information technology market.

Our revenue and profitability depend on the overall demand for our products and services. Delays or reductions in IT spending could materially adversely affect demand for our products and services which could result in decreased revenues or earnings.

Our customers operate in a variety of sectors and across many geographies. Any adverse effects to such markets could materially adversely affect demand for our products and services which could result in decreased revenues or earnings.

Competitive pricing, sales volume, mix and component costs could materially adversely affect our revenues, gross margins and earnings.

Our gross margins are impacted by a variety of factors, including competitive pricing, component and product design costs as well as the volume and relative mixture of product and services revenue including the relative mixture of product revenue which is subscription based. Increased component costs, increased pricing pressures, the relative and varying rates of increases or decreases in component costs and product price, changes in product and services revenue mixture, including the mixture of subscription based product revenue, or decreased volume could have a material adverse effect on our revenues, gross margins or earnings.

The costs of third-party components comprise a significant portion of our product costs. We may have difficulty managing our component and product design costs if supplies of certain components become limited or component prices increase. Any such limitation could result in an increase in our component costs. An increase in component or design costs relative to our product prices could have a material adverse effect on our gross margins and earnings. Moreover, certain competitors may have advantages due to vertical integration of their supply chain, which may include disk drives, microprocessors, memory components and servers.

The markets in which we do business are highly competitive, and we may encounter aggressive price competition for all of our products and services from numerous companies globally. There also has been and may continue to be a willingness on the part of certain competitors to reduce prices or provide information infrastructure and virtual infrastructure products or services, together with other IT products or services, at minimal or no additional cost in order to preserve or gain market share. Such price competition may result in pressure on our product and service prices, and reductions in product and service prices may have a material adverse effect on our revenues, gross margins and earnings.

Our financial performance is impacted by the financial performance of VMware.

Because we consolidate VMware's financial results in our results of operations, our financial performance will be impacted by the financial performance of VMware. VMware's financial performance may be affected by a number of factors, including, but not limited to:

general economic conditions in their domestic and international markets and the effect that these conditions have on VMware's customers' capital budgets and the availability of funding for software purchases;

• fluctuations in demand, adoption rates, sales cycles and pricing levels for VMware's products and services;

fluctuations in foreign currency exchange rates;

changes in customers' budgets for information technology purchases and in the timing of their purchasing decisions; the timing of recognizing revenues in any given quarter, which, as a result of software revenue recognition policies, can be affected by a number of factors, including product announcements, beta programs and product promotions that can cause revenue recognition of certain orders to be deferred until future products to which customers are entitled become available;

the sale of VMware's products and services in the timeframes anticipated, including the number and size of orders in each quarter;

VMware's ability to develop, introduce and ship in a timely manner new products and services and enhancements that meet customer demand, certification requirements and technical requirements;

**♦** Whware's ability to compete effectively;

the introduction of new pricing and packaging models for VMware's product offerings;

the timing of the announcement or release of upgrades or new products and services by VMware or by its competitors;

VMware's ability to maintain scalable internal systems for reporting, order processing, license fulfillment, product delivery, purchasing, billing and general accounting, among other functions;

•VMware's ability to control costs, including its operating expenses;

changes to VMware's effective tax rate;

the increasing scale of VMware's business and its effect on VMware's ability to maintain historical rates of growth;

VMware's ability to attract and retain highly skilled employees, particularly those with relevant experience in software development and sales;

VMware's ability to conform to emerging industry standards and to technological developments by its competitors and customers;

renewal rates and the amounts of the renewals for enterprise license agreements, or ELA's, as original ELA terms expire;

the timing and amount of software development costs that may be capitalized beginning when technological feasibility has been established and ending when the product is available for general release;

unplanned events that could affect market perception of the quality or cost-effectiveness of VMware's products and solutions; and

the recoverability of benefits from goodwill and acquired intangible assets, and the potential impairment of these assets.

Our quarterly revenues and earnings could be materially adversely affected by uneven sales patterns and changing purchasing behaviors.

Our quarterly sales have historically reflected an uneven pattern in which a disproportionate percentage of a quarter's total sales occur in the last month and weeks and days of each quarter. This pattern makes prediction of revenues, earnings and working capital for each financial period especially difficult and uncertain and increases the risk of unanticipated variations in quarterly results and financial condition. We believe this uneven sales pattern is a result of many factors including:

the relative dollar amount of our product and services offerings in relation to many of our customers' budgets, resulting in long lead times for customers' budgetary approval, which tends to be given late in a quarter;

the tendency of customers to wait until late in a quarter to commit to purchase in the hope of obtaining more favorable pricing from one or more competitors seeking their business;

the fourth-quarter influence of customers spending their remaining capital budget authorization prior to new budget constraints in the first nine months of the following year; and seasonal influences.

Our uneven sales pattern also makes it extremely difficult to predict near-term demand and adjust manufacturing capacity or our supply chain accordingly. If predicted demand is substantially greater than orders, there will be excess inventory. Alternatively, if orders substantially exceed predicted demand, the ability to assemble, test and ship orders received in the last weeks and days of each quarter may be limited, which could materially adversely affect quarterly revenues and earnings.

In addition, our revenues in any quarter are substantially dependent on orders booked and shipped in that quarter and our backlog at any particular time is not necessarily indicative of future sales levels. This is because:

we assemble our products on the basis of our forecast of near-term demand and maintain inventory in advance of receipt of firm orders from customers;

we generally ship products shortly after receipt of the order; and

customers may generally reschedule or cancel orders with little or no penalty.

Loss of infrastructure, due to factors such as an information systems failure, loss of public utilities, natural disasters or extreme weather conditions, could impact our ability to book orders or ship products in a timely manner. Delays in product shipping or an unexpected decline in revenues without a corresponding and timely slowdown in expenses, could intensify the impact of these factors on our business, results of operations and financial condition.

In addition, unanticipated changes in our customers' purchasing behaviors such as customers taking longer to negotiate and complete their purchases or making smaller, incremental purchases based on their current needs, also make the prediction of revenues, earnings and working capital for each financial period difficult and uncertain and increase the risk of unanticipated variations in our quarterly results and financial condition.

Our business could be materially adversely affected as a result of general economic and market conditions.

We are subject to the effects of general global economic and market conditions that are beyond our control. If these conditions remain challenging or deteriorate, our business, results of operations or financial condition could be materially adversely affected. Possible consequences from macroeconomic global challenges such as the debt crisis in certain countries in the European Union or slowing economies in parts of Asia, or the impact of continuing uncertainty associated with the budget "sequestration" in the United States government on our business, including insolvency of key suppliers resulting in product delays, inability of customers to obtain credit to finance purchases of our products, customer insolvencies, increased risk that customers may delay payments, fail to pay or default on credit extended to them, and counterparty failures negatively impacting our treasury operations, could have a material adverse effect on our results of operations or financial condition.

Our business may suffer if we are unable to retain or attract key personnel.

Our business depends to a significant extent on the continued service of senior management and other key employees, the development of additional management personnel and the hiring of new qualified employees. There can be no assurance that we will be successful in retaining existing personnel or recruiting new personnel. The loss of one or more key or other employees, our inability to attract additional qualified employees or the delay in hiring key personnel could have a material adverse effect on our business, results of operations or financial condition.

Cybersecurity breaches could expose us to liability, damage our reputation, compromise our ability to conduct business, require us to incur significant costs or otherwise adversely affect our financial results.

We retain sensitive data, including intellectual property, proprietary business information and personally identifiable information, in our secure data centers and on our networks. We face a number of threats to our data centers and networks of unauthorized access, security breaches and other system disruptions. It is critical to our business strategy that our infrastructure remains secure and is perceived by customers and partners to be secure. Despite our security measures, our infrastructure may be vulnerable to attacks by hackers or other disruptive problems, such as the sophisticated cyber attack on our RSA division that we disclosed in March 2011. Any such security breach may compromise information stored on our networks and may result in significant data losses or theft of our, our customers', our business partners' or our employees' intellectual property, proprietary business information or personally identifiable information. In addition, we have outsourced a number of our business functions to third party contractors, and any breach of their security systems could adversely affect us.

A cybersecurity breach could negatively affect our reputation as a trusted provider of information infrastructure by adversely affecting the market's perception of the security or reliability of our products or services. In addition, a cyber attack could result in other negative consequences, including remediation costs, disruption of internal operations, increased cybersecurity protection costs, lost revenues or litigation.

Undetected problems in our products could directly impair our financial results.

If flaws in design, production, assembly or testing of our products (by us or our suppliers) were to occur, we could experience a rate of failure in our products that would result in substantial repair, replacement or service costs and potential damage to our reputation. Continued improvement in manufacturing capabilities, control of material and

manufacturing quality and costs and product testing are critical factors in our future growth. There can be no assurance that our efforts to monitor, develop, modify and implement appropriate test and manufacturing processes for our products will be sufficient to permit us to avoid a rate of failure in our products that results in substantial delays in shipment, significant repair or replacement costs or potential damage to our reputation, any of which could have a material adverse effect on our business, results of operations or financial condition.

Our stock price is volatile and may be affected by the trading price of VMware Class A common stock.

Our stock price, like that of other technology companies, is subject to significant volatility because of factors such as: the announcement of acquisitions, new products, services or technological innovations by us or our competitors;

quarterly variations in our operating results;

changes in revenue or earnings estimates by the investment community; and

speculation in the press or investment community.

The trading price of our common stock has been and likely will continue to be affected by various factors related to VMware, including:

the trading price for VMware Class A common stock;

actions taken or statements made by us, VMware, or others concerning our relationship with VMware;

factors impacting the performance of VMware, including those discussed in the prior risk factor.

In addition, although we own a majority of VMware and consolidate their results, our stock price may not reflect our pro rata ownership interest of VMware.

Due to the global nature of our business, political, economic or regulatory changes or other factors in a specific country or region could impair our international operations, future revenue or financial condition.

A substantial portion of our revenues is derived from sales outside the United States including, increasingly, in rapid growth markets such as Brazil, Russia, India and China. In addition, a substantial portion of our products is manufactured outside of the United States. Accordingly, our future results could be materially adversely affected by a variety of factors relating to our operations outside the United States, including, among others, the following: changes in foreign currency exchange rates;

changes in a specific country's or region's economic conditions;

political or social unrest;

trade restrictions;

import or export licensing requirements;

the overlap of different tax structures or changes in international tax laws;

changes in regulatory requirements;

difficulties in staffing and managing international operations;

stringent privacy policies in some foreign countries;

compliance with a variety of foreign laws and regulations; and

longer payment cycles in certain countries.

Foreign operations, particularly in those countries with developing economies, are also subject to risks of violations of laws prohibiting improper payments and bribery, including the U.S. Foreign Corrupt Practices Act and similar regulations in foreign jurisdictions. Our employees, contractors and agents may take actions in violation of our policies that are designed to ensure compliance with these laws. Any such violations could subject us to civil or criminal penalties or otherwise have an adverse effect on our business and reputation.

In addition, we hold a significant portion of our cash and investments in our international subsidiaries. Potential regulations could impact our ability to transfer the cash and investments to the United States. Should we desire to repatriate cash, we may incur a significant tax obligation.

We operate a Venezuelan sales subsidiary in which the Bolivar is the functional currency. Our operations in Venezuela include U.S. dollar-denominated assets and liabilities which we re-measure to Bolivars. The re-measurement may result in transaction gains or losses. We have used the official exchange rate to remeasure these balances based upon the expected rate at which we believe the items will be settled. As a result of continued hyper-inflation in Venezuela, effective in 2010, we modified the functional currency to be the U.S. dollar. As a result of this change, Bolivar-denominated transactions will be subject to exchange gains and losses that may impact our

earnings. While we do not believe this change will have a material impact on our financial position, results of operations or cash flows, these items could be adversely affected if there is a significant change in exchange rates.

If our suppliers are not able to meet our requirements, we could have decreased revenues and earnings.

We purchase or license many sophisticated components and products from one or a limited number of qualified suppliers, including some of our competitors. These components and products include flash drives, disk drives, high density memory components, power supplies and software developed and maintained by third parties. We have experienced delivery delays from time to time because of high industry demand or the inability of some vendors to consistently meet our quality or delivery requirements. Natural disasters have also in the past and may continue to impact our ability to procure certain components in a timely fashion. Current or future social and environmental regulations or critical issues, such as those relating to the sourcing of conflict minerals from the Democratic Republic of the Congo or the need to eliminate environmentally sensitive materials from our products, could restrict the supply of resources used in production or increase our costs. If any of our suppliers were to cancel or materially change contracts or commitments with us or fail to meet the quality or delivery requirements needed to satisfy customer orders for our products, we could lose time-sensitive customer orders, be unable to develop or sell certain products cost-effectively or on a timely basis, if at all, and have significantly decreased quarterly revenues and earnings, which would have a material adverse effect on our business, results of operations and financial condition. Additionally, we periodically transition our product line to incorporate new technologies. The importance of transitioning our customers smoothly to new technologies, along with our historically uneven pattern of quarterly sales, intensifies the risk that the failure of a supplier to meet our quality or delivery requirements will have a material adverse impact on our revenues and earnings. An economic crisis may also negatively affect our suppliers' solvency, which could, in turn, result in product delays or otherwise materially adversely affect our business, results of operations or financial condition.

Our investment portfolio could experience a decline in market value which could adversely affect our financial results.

We held \$9.7 billion in short- and long-term investments as of December 31, 2013. The investments are invested primarily in investment grade debt securities, and we limit the amount of investment with any one issuer. A further deterioration in the economy, including a tightening of credit markets, increased defaults by issuers, or significant volatility in interest rates, could cause the investments to decline in value or could impact the liquidity of the portfolio. If market conditions deteriorate significantly, our results of operations or financial condition could be materially adversely affected.

Risks associated with our distribution channels may materially adversely affect our financial results.

In addition to our direct sales force, we have agreements in place with many distributors, systems integrators, resellers and original equipment manufacturers to market and sell our products and services. We derive a significant percentage of our revenues from such distribution channels. Our financial results could be materially adversely affected if our contracts with channel partners were terminated, if our relationship with channel partners were to deteriorate, if the financial condition of our channel partners were to weaken, if our channel partners were not able to timely and effectively implement their planned actions or if the level of demand for our channel partners' products and services were to decrease. In addition, as our market opportunities change, we may have an increased reliance on channel partners, which may negatively impact our gross margins. There can be no assurance that we will be successful in maintaining or expanding these channels. If we are not successful, we may lose sales opportunities, customers and market share. Furthermore, the partial reliance on channel partners may materially reduce the visibility to our management of potential customers and demand for products and services, thereby making it more difficult to accurately forecast such demand. In addition, there can be no assurance that our channel partners will not develop, market or sell products or services or acquire other companies that develop, market or sell products or services in competition with us in the future.

In addition, as we focus on new market opportunities and additional customers through our various distribution channels, including small-to-medium sized businesses, we may be required to provide different levels of service and support than we typically provided in the past. We may have difficulty managing directly or indirectly through our channels these different service and support requirements and may be required to incur substantial costs to provide such services which may adversely affect our business, results of operations or financial condition.

Our business could be materially adversely affected as a result of the risks associated with alliances.

We have alliances, such as our VCE joint venture, with leading information technology companies, some of whom may be our competitors in other areas, and we plan to continue our strategy of developing key alliances in order to expand our reach into markets. There can be no assurance that we will be successful in our ongoing strategic alliances or that we will be able to find further suitable business relationships as we develop new products and strategies. Any failure to continue or expand such relationships could have a material adverse effect on our business, results of operations or financial condition.

There can be no assurance that companies with which we have strategic alliances, certain of which have substantially greater financial, marketing or technological resources than us, will not develop or market products in competition with us in the future, discontinue their alliances with us or form alliances with our competitors.

Our business may suffer if we cannot protect our intellectual property.

We generally rely upon patent, copyright, trademark and trade secret laws and contract rights in the United States and in other countries to establish and maintain our proprietary rights in our technology and products. However, there can be no assurance that any of our proprietary rights will not be challenged, invalidated or circumvented. In addition, the laws of certain countries do not protect our proprietary rights to the same extent as do the laws of the United States. Therefore, there can be no assurance that we will be able to adequately protect our proprietary technology against unauthorized third-party copying or use, which could adversely affect our competitive position. Further, there can be no assurance that we will be able to obtain licenses to any technology that we may require to conduct our business or that, if obtainable, such technology can be licensed at a reasonable cost.

From time to time, we receive notices from third parties claiming infringement by our products of third-party patent or other intellectual property rights. Responding to any such claim, regardless of its merit, could be time-consuming, result in costly litigation, divert management's attention and resources and cause us to incur significant expenses. In the event there is a temporary or permanent injunction entered prohibiting us from marketing or selling certain of our products or a successful claim of infringement against us requiring us to pay royalties to a third party, and we fail to develop or license a substitute technology, our business, results of operations or financial condition could be materially adversely affected.

In addition, although we believe we have adequate security measures, if our intellectual property or other sensitive data is misappropriated, we could suffer monetary and other losses and reputational harm, which could materially adversely affect our business, results of operations or financial condition. In the past, VMware has been made aware of public postings by hackers of portions of their source code.

We may become involved in litigation that may materially adversely affect us.

From time to time, we may become involved in various legal proceedings relating to matters incidental to the ordinary course of our business, including patent, commercial, product liability, employment, class action, whistleblower and other litigation and claims, and governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management's attention and resources and cause us to incur significant expenses. Furthermore, because litigation is inherently unpredictable, there can be no assurance that the results of any of these actions will not have a material adverse effect on our business, results of operations or financial condition.

Issues arising during the upgrade of our enterprise resource planning system could affect our operating results and ability to manage our business effectively.

We are in the process of upgrading our enterprise resource planning, or ERP, computer system to enhance operating efficiencies and provide more effective management of our business operations. While one phase of our upgrade was implemented in the third quarter of 2012, we still have further planned phases to our upgrade. The upgrade could cause substantial business interruption that could adversely impact our operating results. We are investing significant financial and personnel resources into this project. However, there is no assurance that the design will meet our current and future business needs or that it will operate as designed. We are heavily dependent on such computer systems, and any significant failure or delay in the system upgrade, if encountered, could cause a substantial interruption to our business and additional expense which could result in an adverse impact on our operating results, cash flows and financial condition.

We may have exposure to additional income tax liabilities.

As a multinational corporation, we are subject to income taxes in both the United States and various foreign jurisdictions. Due to economic and political conditions, tax rates in various jurisdictions may be subject to significant change, which might significantly impact our effective income tax rate in the future. Our domestic and international tax liabilities are subject to the allocation of revenues and expenses in different jurisdictions and the timing of recognizing revenues and expenses. Additionally, the amount of income taxes paid is subject to our interpretation of applicable tax laws in the jurisdictions in which we file and changes to tax laws. From time to time, we are subject to income tax audits. While we believe we have complied with all applicable income tax laws, there can be no assurance that a governing tax authority will not have a different interpretation of the law and

assess us with additional taxes. Should we be assessed with additional taxes, there could be a material adverse effect on our results of operations or financial condition.

As part of the current Administration's ongoing negotiations, President Obama and the House of Representatives and Senate Committees have called for a comprehensive tax reform, which might change certain U.S. tax rules for U.S. corporations doing business outside the United States. While the scope of future changes differs among various tax proposals and remains unclear, proposed changes might include limiting the ability of U.S. corporations to deduct certain expenses attributable to offshore earnings, modifying the foreign tax credit rules and taxing currently certain transfers of intangibles offshore. The enactment of some or all of these proposals could increase the Company's effective tax rate and adversely affect our profitability.

During 2010, the IRS announced and finalized Schedule UTP, Uncertain Tax Positions Statement. This schedule is an annual disclosure of certain federal UTPs, ranked in order of magnitude which includes "a concise description of the tax position, including a description of the relevant facts affecting the tax treatment of the position and information that reasonably can be expected to apprise the Service of the identity of the tax position." As a result of this disclosure, the amount of taxes we would have to pay in the future could increase.

Changes in regulations could materially adversely affect us.

Our business, results of operations or financial condition could be materially adversely affected if laws, regulations or standards relating to us or our products are newly implemented or changed. In addition, our compliance with existing regulations may have a material adverse impact on us. Under applicable federal securities laws, including the Sarbanes-Oxley Act of 2002, we are required to evaluate and determine the effectiveness of our internal control structure and procedures for financial reporting. Should we or our independent auditors determine that we have material weaknesses in our internal controls, our results of operations or financial condition may be materially adversely affected or our stock price may decline.

Changes in generally accepted accounting principles may materially adversely affect us.

From time to time, the Financial Accounting Standards Board ("FASB") promulgates new accounting principles that could have a material adverse impact on our results of operations or financial condition. The FASB is currently contemplating a number of new accounting pronouncements which, if approved, could materially change our reported results. Such changes could have a material adverse impact on our results of operations and financial position.

Our business could be materially adversely affected as a result of the risks associated with acquisitions, investments and joint ventures.

As part of our business strategy, we seek to acquire businesses that offer complementary products, services or technologies. These acquisitions are accompanied by the risks commonly encountered in an acquisition of a business, which may include, among other things:

•he effect of the acquisition on our financial and strategic position and reputation;

the failure of an acquired business to further our strategies;

the failure of the acquisition to result in expected benefits, which may include benefits relating to enhanced revenues, technology, human resources, cost savings, operating efficiencies and other synergies;

the difficulty and cost of integrating the acquired business, including costs and delays in implementing common systems and procedures and costs and delays caused by communication difficulties or geographic distances between the two companies' sites;

the assumption of known or unknown liabilities of the acquired business, including litigation-related liability;

the potential impairment of acquired assets;

the lack of experience in new markets, products or technologies or the initial dependence on unfamiliar supply or distribution partners;

the diversion of our management's attention from other business concerns;

the impairment of relationships with customers or suppliers of the acquired business or our customers or suppliers;

the recoverability of benefits from goodwill and intangible assets and the potential impairment of these assets;

the potential loss of key employees of the acquired company; and

the potential incompatibility of business cultures.

These factors could have a material adverse effect on our business, results of operations or financial condition. To the extent that we issue shares of our common stock or other rights to purchase our common stock in connection with any future acquisition, existing shareholders may experience dilution. Additionally, regardless of the form of consideration issued, acquisitions could negatively impact our net income and our earnings per share.

In addition to the risks commonly encountered in the acquisition of a business as described above, we may also experience risks relating to the challenges and costs of closing a transaction or failing to close an announced transaction. Further, the risks described above may be exacerbated as a result of managing multiple acquisitions at the same time.

We also seek to invest in businesses that offer complementary products, services or technologies and to, from time to time, create new joint ventures or alliances. These investments and ventures are accompanied by risks similar to those encountered in an acquisition of a business.

Our pension plan assets are subject to market volatility.

We have a noncontributory defined benefit pension plan assumed as part of our Data General acquisition. The plan's assets are invested in common stocks, bonds and cash. The expected long-term rate of return on the plan's assets was 6.75%. This rate represents the average of the expected long-term rates of return weighted by the plan's assets as of December 31, 2013. We continue to gradually shift the asset allocation to lower the percentage of investment in equity securities and increase the percentage of investments in long-duration fixed-income securities. The effect of such change could result in a reduction in the long-term rate of return on plan assets and an increase in future pension expense. As of December 31, 2013, the ten-year historical rate of return on plan assets was 6.85%, and the inception to date return on plan assets was 9.87%. In 2013, we experienced a 8.69% gain on plan assets. Should we not achieve the expected rate of return on the plan's assets or if the plan experiences a decline in the fair value of its assets, we may be required to contribute assets to the plan which could materially adversely affect our results of operations or financial condition.

Our business could be materially adversely affected by changes in regulations or standards regarding energy use of our products.

We continually seek ways to increase the energy efficiency of our products. Recent analyses have estimated the amount of global carbon emissions that are due to information technology products. As a result, governmental and non-governmental organizations have turned their attention to development of regulations and standards to drive technological improvements and reduce such amount of carbon emissions. There is a risk that the development of these standards will not fully address the complexity of the technology developed by the IT industry or will favor certain technological approaches. Depending on the regulations or standards that are ultimately adopted, compliance could materially adversely affect our business, results of operations or financial condition.

Our business could be materially adversely affected as a result of war, acts of terrorism, natural disasters or climate change.

Terrorist acts, acts of war, natural disasters, or the direct and indirect effects of climate change (such as sea level rise, increased storm severity, drought, flooding, wildfires, pandemics, and social unrest from resource depletion and rising food prices) may cause damage or disruption to our employees, facilities, customers, partners, suppliers, distributors and resellers, which could have a material adverse effect on our business, results of operations or financial condition. Such events may also cause damage or disruption to transportation and communication systems and to our ability to

manage logistics in such an environment, including receipt of components and distribution of products.

Our failure to pay quarterly dividends to our shareholders could materially adversely affect our stock price.

Our ability to pay quarterly dividends will be subject to, among other things, our financial position and results of operations, available cash and cash flow, and capital requirements. Any reduction or discontinuation of quarterly dividends could cause our stock price to decline significantly.

#### ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES
As of December 31, 2013, we owned or leased the facilities described below:

Location	Approxi	mate Sq. Ft.*	Principal Use(s) executive and administrative	Principal Segment(s) Information Storage,	
Hopkinton, MA	owned:	1,681,000	offices, R&D, customer service, sales and marketing	Information Intelligence Group	
Franklin, MA	owned: leased:	922,000 288,000	manufacturing	Information Storage	
Bedford, MA	leased:	328,000	R&D, customer service, sales, administrative offices and marketing	RSA Information Security	
Apex, NC	owned:	390,000	manufacturing	Information Storage	
Palo Alto, CA	owned: leased:	1,410,000 103,000	executive and administrative offices, R&D, sales, marketing and data center	VMware Virtual Infrastructure	
Other North American Locations	owned: leased:	1,361,000 4,027,000	executive and administrative offices, sales, customer service, R&D, data center and marketing	**	
Asia Pacific	leased:	2,900,000	sales, marketing, customer service, R&D, data center and administrative offices	**	
Cork, Ireland	owned: leased:	588,000 180,000	manufacturing, customer service, R&D, administrative offices, sales and marketing	**	
Europe, Middle East and Africa (excluding Cork, Ireland)	owned: leased:	35,000 1,693,000	sales, manufacturing, customer service, R&D, data center, marketing and administrative offices	**	
Latin America	leased:	189,000	sales, customer service and marketing	**	

Of the total square feet owned and leased, approximately 441,000 square feet was vacant, approximately 135,000 \*square feet was leased or subleased to non-EMC businesses and approximately 786,000 square feet were under construction for various VMware projects.

We also own land in Massachusetts and Ireland for possible future expansion purposes. We believe our existing facilities are suitable and adequate for our present purposes. For further information regarding our lease obligations, see Note N to the consolidated financial statements.

#### ITEM 3. LEGAL PROCEEDINGS

See Note N to the consolidated financial statements.

#### ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

<sup>\*\*</sup> All segments of our business generally utilize these facilities.

#### EXECUTIVE OFFICERS OF THE REGISTRANT

Our executive officers are as follows:

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Name	Age	Position
Joseph M. Tucci	66	Chairman, President and Chief Executive Officer
William J. Teuber, Jr.	62	Vice Chairman
Jeremy Burton	46	Executive Vice President, Product Operations and Marketing
Arthur W. Coviello, Jr.	60	Executive Chairman, RSA, the Security Division of EMC
Paul T. Dacier	56	Executive Vice President and General Counsel
Richard R. Devenuti	55	President, Information Intelligence Group
Howard D. Elias	56	President and Chief Operating Officer, Global Enterprise Services
David I. Goulden	54	Chief Executive Officer, EMC Information Infrastructure and Chief Financial Officer
ML Krakauer	57	Executive Vice President, Human Resources
Paul Maritz	55	Chief Executive Officer, Pivotal
William F. Scannell	51	President, Global Sales and Customer Operations
Harry L. You	54	Executive Vice President

Joseph M. Tucci has been the Chairman of the Board of Directors since January 2006 and has been Chief Executive Officer and a Director since January 2001. He has served as President since February 2014, and also from January 2000 to July 2012. He also served as Chief Operating Officer from January 2000 to January 2001. Prior to joining EMC, Mr. Tucci served as Deputy Chief Executive Officer of Getronics N.V., an information technology services company, from June 1999 through December 1999 and as Chairman of the Board and Chief Executive Officer of Wang Global, an information technology services company, from December 1993 to June 1999. Mr. Tucci is the Chairman of the Board of Directors of VMware and a director of Paychex, Inc., a provider of payroll, human resources and benefits outsourcing solutions.

William J. Teuber, Jr. has been our Vice Chairman since May 2006. In this role, Mr. Teuber assists the Chairman and Chief Executive Officer in the day-to-day management of EMC. From 2006 to July 2012, he oversaw EMC Customer Operations, our global sales and distribution organization where he was responsible for driving EMC's growth and market leadership worldwide. Mr. Teuber served as our Vice Chairman and Chief Financial Officer from May 2006 to August 2006 and as Executive Vice President and Chief Financial Officer from November 2001 to May 2006. Mr. Teuber joined EMC in 1995. Prior to serving as our Chief Financial Officer, he served as our Controller. Mr. Teuber is a director of Popular, Inc., a diversified financial services company.

Jeremy Burton has been our Executive Vice President, Product Operations and Marketing since July 2012. Mr. Burton joined EMC in March 2010 as our Chief Marketing Officer. Prior to joining EMC, Mr. Burton was President and Chief Executive Officer of Serena Software, Inc., a global independent software company. Previously, Mr. Burton was Group President of the Security and Data Management Business Unit of Symantec Corporation, a provider of security, storage and systems management solutions, where he was responsible for the company's \$2 billion Enterprise Security product line. Prior to that role, he served as Executive Vice President of the Data Management Group at VERITAS Software Corporation (now a part of Symantec) where he was responsible for the company's backup and archiving products. He also served as VERITAS' Chief Marketing Officer. Earlier in his career, Mr. Burton spent nearly a decade at Oracle Corporation, a large enterprise software company, ultimately in the role of Senior Vice President of Product and Services Marketing.

Arthur W. Coviello, Jr. has been our Executive Chairman, RSA, the Security Division of EMC, since February 2011. Mr. Coviello served as our Executive Vice President and President of RSA from September 2006 to February 2011. Prior to joining EMC, Mr. Coviello served as Chief Executive Officer of RSA Security Inc. from January 2000 to September 2006 and as acting Chief Financial Officer of RSA Security from December 2005 to May 2006. He served

as President of RSA Security from March 1999 to September 2006. Mr. Coviello joined RSA in 1995. Mr. Coviello is a director of EnerNOC, Inc., a provider of demand response systems for energy conservation.

Paul T. Dacier has been our Executive Vice President and General Counsel since May 2006. Mr. Dacier served as Senior Vice President and General Counsel from February 2000 to May 2006 and joined EMC in 1990 as Corporate Counsel. Mr. Dacier is a director of AerCap Holdings N.V., a global aircraft leasing company.

Richard R. Devenuti has been our President, Information Intelligence Group, since October 2010. Mr. Devenuti served as chief operating officer of the Information Intelligence Group division from July 2008 to October 2010. Prior to joining EMC,

Mr. Devenuti spent 19 years at Microsoft Corporation, a manufacturer of software products for computing devices, most recently as its Senior Vice President of Microsoft Services and IT. Prior to joining Microsoft, Mr. Devenuti spent four years at Deloitte as a senior accountant. Mr. Devenuti is a director of St. Jude Medical, Inc., a global cardiovascular medical devices company, and Convergys Corporation, a global relationship management company.

Howard D. Elias has been our President and Chief Operating Officer, Global Enterprise Services since January 2013 and was our President and Chief Operating Officer, EMC Information Infrastructure and Cloud Services from September 2009 to January 2013. Previously, Mr. Elias served as President, EMC Global Services and EMC Ionix from September 2007 to September 2009. Mr. Elias served as our Executive Vice President, Global Services and Resource Management Software Group from May 2006 to September 2007 and served as our Executive Vice President, Global Marketing and Corporate Development from January 2006 to May 2006. He served as Executive Vice President, Corporate Marketing, Office of Technology and New Business Development from January 2004 to January 2006. Prior to joining EMC, Mr. Elias served in various capacities at Hewlett-Packard Company, a provider of information technology products, services and solutions for enterprise customers, most recently as Senior Vice President of Business Management and Operations in the Enterprise Systems Group. Mr. Elias is a director of Gannett Company, Inc., an international news and information company.

David I. Goulden has been Chief Executive Officer of our EMC Information Infrastructure business since January 2014. Prior to this, he was President and Chief Operating Officer overseeing EMC's business units as well as Global Sales and Customer Operations, Global Services, Global Marketing and G&A functions since July 2012. Mr. Goulden has been our Chief Financial Officer since August 2006. Prior to this, Mr. Goulden served as Executive Vice President and Chief Financial Officer from August 2006 to July 2012 and served as our Executive Vice President, Customer Operations from April 2004 to August 2006. He served as Executive Vice President, Customer Solutions and Marketing and New Business Development from November 2003 to April 2004. Prior to joining EMC in 2002, Mr. Goulden served in various capacities at Getronics N.V., an information technology services company, most recently as a member of the Board of Management, President and Chief Operating Officer for the Americas and Asia Pacific. Mr. Goulden is a director of VMware.

ML Krakauer has been our Executive Vice President, Human Resources since April 2012. Ms. Krakauer served as Chief Operating Officer, Technical Solutions and Services from April 2011 to April 2012. She joined EMC as Senior Vice President, Technical Solutions and Services in September 2008. Prior to joining EMC, she held multiple executive leadership roles at Hewlett-Packard Company. Before joining Hewlett-Packard, she was at Compaq, Digital Equipment and other technology companies.

Paul Maritz has been Chief Executive Officer of Pivotal Software, Inc., an entity jointly owned by EMC and VMware, since April 2013. Prior to this, he served as Chief Strategist of EMC from September 2012 to March 2013. Mr. Maritz was Chief Executive Officer at VMware from July 2008 to August 2012 and he also also served as VMware's President from July 2008 to January 2011. Prior to joining VMware, he was President of EMC's Cloud Infrastructure and Services Division after EMC acquired Pi Corporation in February 2008. Mr. Maritz was a founder of Pi and served as its Chief Executive Officer. Pi was a software company focused on building cloud-based solutions. Before founding Pi, he spent 14 years working at Microsoft Corporation, where he served as a member of the five-person Executive Committee that managed the overall company. As Vice President of the Platform Strategy and Developer Group, among other roles, he oversaw the development and marketing of System Software Products (including Windows 95, Windows NT, and Windows 2000), Development Tools (Visual Studio) and Database Products (SQL Server) and the complete Office and Exchange Product Lines. Prior to Microsoft, he spent five years working at Intel Corporation as a software and tools developer. Mr. Maritz is a director of VMware.

William F. Scannell has been our President, Global Sales and Customer Operations since July 2012. He is responsible for driving EMC's global growth and continued market leadership by delivering and supporting the full range of EMC

products, services and solutions to organizations in established and new markets around the world. Mr. Scannell was Executive Vice President, Americas and EMEA Sales from March 2011 to July 2012, in which role he oversaw customer operations in the Americas and EMEA, and he was Executive Vice President, Americas from August 2010 to March 2011. He served as Executive Vice President, Sales Americas and Global Sales Programs from March 2007 to August 2011. Mr. Scannell joined EMC in 1986 and has held various positions including Senior Vice President, Worldwide Sales and Vice President, North America Regional Sales.

Harry L. You has been our Executive Vice President since February 2008. In this role, Mr. You focuses on EMC's corporate strategy. Prior to joining EMC, Mr. You served as Chief Executive Officer of BearingPoint, Inc., a management and technology consulting firm, from March 2005 to December 2007 and as BearingPoint's Interim Chief Financial Officer from July 2005 to October 2006. From 2004 to 2005, Mr. You was Executive Vice President and Chief Financial Officer of Oracle Corporation, a large enterprise software company, and from 2001 to 2004, he was the Chief Financial Officer of Accenture Ltd, a global management consulting, technology services and outsourcing company. Mr. You is a director of Korn/Ferry International, a global executive recruiting company.

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EMC, EMC Proven, EMC RecoverPoint, Archer, Atmos, Avamar, Aveksa, Captiva, Data Domain, Document Sciences, Documentum, Enginuity, Ionix, Isilon, Kazeon, MCx, NetWitness, NetWorker, OneFS, RSA, RSA Security, ScaleIO, SecurID, Silver Tail, SourceOne, SRDF, Syncplicity, Symmetrix, Vblock, ViPR, VMAX, VNX, VNXe, VPLEX, VSPEX, Xtrem, XtremCache and XtremIO are either registered trademarks or trademarks of EMC Corporation in the United States and other countries. Cloud Foundry, GemFire, Greenplum, Pivotal, Pivotal Labs and Pivotal One are either registered trademarks or trademarks of Pivotal Software, Inc. in the United States and/or other jurisdictions. Mozy is a registered trademark of Mozy Corporation in the United States. VMware, VMware vCloud, vCloud Hybrid Service, vSphere, Horizon Suite, NSX, Nicira and Virsto are registered trademarks or trademarks of VMware, Inc. in the United States and/or other jurisdictions. Iomega is a registered trademark of Iomega Corporation. Other trademarks are either registered trademarks or trademarks of their respective owners.

#### PART II

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

Our common stock, par value \$.01 per share, trades on the New York Stock Exchange under the symbol EMC. The following table sets forth the range of high and low sales prices of our common stock on the New York Stock Exchange for the past two years during the fiscal periods shown and the dividends declared per share during such periods:

Fiscal 2013	High	Low	Dividends
First Quarter	\$25.75	\$22.76	N/A
Second Quarter	25.38	21.45	\$0.10
Third Quarter	27.34	23.25	0.10
Fourth Quarter	25.84	23.15	0.10
Fiscal 2012	High	Low	Dividends
First Quarter	\$30.00	\$21.60	N/A
6 10 4	20.00	22.77	N/A
Second Quarter	29.98	22.77	IN/A
Second Quarter Third Quarter	29.98 28.18	22.77	N/A N/A

We had 9,845 holders of record of our common stock as of February 24, 2014.

In May 2013, our Board of Directors approved the initiation of a quarterly cash dividend to EMC shareholders. Our Board of Directors declared quarterly cash dividends of \$0.10 per share of common stock in each of the second, third and fourth quarters of 2013. We currently expect that comparable cash dividends will continue to be paid in the future. Additionally, we use cash to repurchase our common stock.

# ISSUER PURCHASES OF EQUITY SECURITIES IN THE FOURTH QUARTER OF 2013 (table in millions, except per share amounts)

				Total Number of	Maximum Number (or	
Period	Total Numbe	~**	Average	Shares Purchased as	Approximate Dollar	
	of Shares		Price	Part of Publicly	Value) of Shares that	
	Purchased <sup>(1)</sup>	Paid		Announced Plans	May Yet Be Purchased	
	Purchased		per Share	or	Under the Plans or	
				Programs	Programs	
October 1, 2013 – October 31, 2013	17		\$24.40	17	180	
November 1, 2013 – November 30, 2013	3 24		23.89	24	156	
December 1, 2013 – December 31, 2013	1		23.73	1	155	
Total	42	(2)	\$24.09	42	155	

Except as noted in note (2), all shares were purchased in open-market transactions pursuant to our previously (1) announced authorization by our Board of Directors in February 2013 to repurchase 250 million shares of our common stock. This repurchase authorization does not have a fixed termination date.

<sup>(2)</sup> Includes shares withheld from employees for the payment of taxes.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA FIVE YEAR SELECTED CONSOLIDATED FINANCIAL DATA (in millions, except per share amounts)

	Year Ended December 31,				
	2013(1)	$2012^{(2)}$	$2011^{(4)}$	$2010^{(5)}$	$2009^{(6)}$
Summary of Operations:					
Revenues	\$23,222	\$21,714	\$20,008	\$17,015	\$14,026
Operating income	4,150	3,964	3,442	2,683	1,414
Net income attributable to EMC	2,889	2,733	2,461	1,900	1,088
Corporation	2,009	2,733	2,401	1,900	1,000
Net income attributable to EMC					
Corporation per weighted average share,	\$1.39	\$1.31	\$1.20	\$0.92	\$0.54
basic					
Net income attributable to EMC					
Corporation per weighted average share,	\$1.33	\$1.23	\$1.10	\$0.88	\$0.53
diluted					
Weighted average shares, basic	2,074	2,093	2,056	2,056	2,022
Weighted average shares, diluted	2,160	2,206	2,229	2,148	2,055
Dividend declared per common share	\$0.30	<b>\$</b> —	<b>\$</b> —	<b>\$</b> —	<b>\$</b> —
Balance Sheet Data:					
Working capital	\$5,479	\$1,745	\$1,179	\$372	\$5,370
Total assets	45,849	37,962	34,469	30,833	26,812
Current obligations <sup>(3)</sup>	1,665	1,652	3,305	3,215	_
Long-term obligations	5,494	_	_	_	3,100
Total shareholders' equity	23,786	23,524	20,280	18,634	16,560

<sup>(1)</sup> In 2013, EMC acquired all of the outstanding shares of 8 companies (see Note C to the consolidated financial statements).

<sup>(2)</sup> In 2012, EMC acquired all of the outstanding shares of 17 companies (see Note C to the consolidated financial statements).

<sup>(3)</sup> Current obligations relate to the convertible debt and notes converted and payable, which were classified as current at December 31, 2013, 2012, 2011 and 2010 (see Note E to the consolidated financial statements).

In 2011, EMC acquired all of the outstanding shares of 7 companies (see Note C to the consolidated financial statements).

<sup>(5)</sup> In 2010, EMC acquired all of the outstanding shares of 10 companies.

<sup>(6)</sup> In 2009, EMC acquired all of the outstanding shares of 5 companies.

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

#### **OPERATIONS**

This Management's Discussion and Analysis ("MD&A") of Financial Condition and Results of Operations should be read in conjunction with our consolidated financial statements and notes thereto which appear elsewhere in this Annual Report on Form 10-K.

Certain tables may not add or recalculate due to rounding.

#### INTRODUCTION

We manage our business as three federated businesses, each of which plays a vital role in the delivery of IT-as-a-service ("ITaaS"): EMC Information Infrastructure, Pivotal and VMware Virtual Infrastructure. This approach allows each of the three businesses to individually build products, go-to-market capabilities and ecosystems that they need to succeed in their respective markets while sharing the same ultimate goal of helping customers manage information which is becoming central to their operations as data centers move to an ITaaS model. In 2014, we will continue investing in the best technology and building the most complete portfolio to transition customers from the second platform of IT to the emerging and rapidly growing third platform of IT. The second platform of IT continues to support the vast majority of enterprise workloads and customers contained at these environments. We are a leader in this market and we believe we will continue to gain share in the second platform. At the same time, we believe we have more offerings in the third platform of IT than anyone else and are better equipped to help customers bridge the gap as they transition from the second to third platform of IT. The third platform of IT includes cloud computing, Big Data, mobile, and social networking, which to operate successfully requires Trusted IT to establish security, privacy and trust in IT solutions. By dividing our strategy and executional focus across these three businesses, we can focus on each of their respective missions and offer customers horizontal solutions and more choices than they get from our competitors to maximize control, efficiency and choice. We believe this strategy provides us with the opportunity to take advantage of the solid growth opportunity of EMC Information Infrastructure and the faster growth opportunities of VMware Virtual Infrastructure and Pivotal.

We believe we are well-positioned in these markets to continue assisting our customers in storing, managing and unlocking the value contained within their information and to enable them to leverage our data-centric approach to security to take full advantage of the existing second platforms while starting to transition to the third platform of the ITaaS model.

## **EMC** Information Infrastructure

Our EMC Information Infrastructure business consists of three segments: Information Storage, Information Intelligence and RSA Information Security. The objective for our EMC Information Infrastructure business is to simultaneously increase our market share through our strong and ever expanding portfolio of offerings while investing in the business. During 2013, we continued to innovate and invest in expanding our total addressable market through increased internal research and development ("R&D"). Our investment in new technologies and solutions is reflected in our products successfully launched during 2013, as well as in our roadmap for 2014, with numerous innovations, refreshes and brand-new products as well as business acquisitions. We have developed a product portfolio with customers' current and future needs in mind which will continue to evolve as the largest transformation in IT history is creating enormous opportunities in cloud computing, Big Data and Trusted IT.

Our go to market model, where we continue to leverage our direct sales force and services organization, as well as our channel and services partners and service providers, positions us well to help enable customers to transition to cloud computing and benefit from Big Data in the most advantageous manner for their businesses. As IT headcount grows at a fraction of the pace of data and the demands from the data center escalate, customers continue to look for simple and scalable ways to build out their ITaaS function. We offer three alternatives to help our customers transition to cloud architectures and leverage Big Data to meet these needs: our best-of-breed infrastructure products, proven infrastructure through VSPEX and converged infrastructure with Vblock from VCE Company LLC, our joint venture with Cisco, and other investors VMware and Intel, which continues to gather momentum in one of the fastest growing

areas in IT. Our service provider program continues to be an important part of our strategy to lead our customers to the public cloud.

**Pivotal** 

In April 2013, we, along with VMware and an investment from General Electric Company ("GE"), officially formed Pivotal, which is focused on building a platform comprising the next generation of data fabrics, application fabrics and a cloud independent platform-as-a-service ("PaaS") to support cloud computing and Big and Fast Data Applications. The first version of this integrated technology platform, Pivotal One was launched at the end of 2013 and will be a cornerstone offering in 2014. The foundation of Pivotal One, Cloud Foundry, continues to gain momentum as an open platform for developing and operating new cloud applications

that can be run on multiple leading private and public clouds in addition to our own and not lock a customer into any one cloud in particular. On top of this platform, Pivotal will offer its own suite of big and fast data capabilities, featuring game changing innovations that use HDFS and scalar processing technologies. Additionally, its development services business will help existing customers and digital era startups build industrial-strength applications with more agility, much faster, with better quality. As expected, 2013 was a transition year for Pivotal, and we believe we are positioning the business for rapid growth in the future.

#### VMware Virtual Infrastructure

VMware is the leader in virtualization infrastructure solutions utilized by organizations to help transform the way they build, deliver and consume IT resources. VMware develops and markets its product and service offerings within three main product groups, and it also seek to leverage synergies across these three product areas: SDDC or Software-Defined Data Center, End-User Computing and Hybrid Cloud Computing.

VMware pioneered the development and application of virtualization technologies with x86 server-based computing, separating application software from the underlying hardware. The benefits to our customers include lower IT costs and a more automated and resilient systems infrastructure capable of responding dynamically to variable business demands. VMware expects to grow its business by building long-term relationships with its customers which includes selling its solutions through enterprise license agreements ("ELAs").

VMware has articulated a vision for the software-defined data center ("SDDC"), where increasingly infrastructure is virtualized and delivered as a service, enabling control of the data center to be entirely automated by software. The SDDC is designed to transform the data center into an on-demand service that addresses application requirements by abstracting, pooling, and automating the services that are required from the underlying hardware. SDDC promises to dramatically simplify data center operations and lower costs. The VMware vCloud Suite, which is its first integrated solution toward realizing the SDDC vision and is based upon its VMware vSphere virtualization platform, was initially introduced in late 2012.

On a consolidated basis, given our position and strength, we are working with a very large installed base of loyal customers with leading-edge technology for every layer of the IT stack, products and services for the infrastructure layer that include best-of-breed storage arrays, software defined storage, converged infrastructure and information security. Solutions for the virtualization layer that enable the software defined data center, hybrid cloud and end-user computing and a cloud agnostic PaaS offering in less than a year have become the PaaS offerings of choice for enterprises looking to build out next-gen apps to harness the power of Big Data. This combination provides a strong portfolio of offerings and solutions in the second platform which will continue to support the majority of workloads for several years to come as the market transitions to the third platform with leading technologies and product as a services offerings and a powerful capability to bridge the gap between the two. Our vision, strategy, market leading assets within our portfolio which continues to be expanded with our recent and upcoming product launches, as well as our go-to market capabilities positions us to continue to anticipate and capitalize on the mega trends of cloud computing and Big Data, while addressing the mobile and social networking trends, with the necessary Trusted IT needs in 2014 and beyond. As a result, we believe our federated businesses will continue to grow faster than the markets we serve in 2014, while simultaneously investing in the business and growing earnings per share.

#### **RESULTS OF OPERATIONS**

Revenues

The following table presents total revenue by our segments (in millions):

				Percentage Change				
	2013	2012	2011	2013 vs 2012	2012 vs 2011			
Information Storage	\$16,132	\$15,440	\$14,684	5 %	5 %			
Information Intelligence Group	647	640	661	1	(3)			
RSA Information Security	987	889	828	11	7			
Pivotal	309	270	130	15	108			
VMware Virtual Infrastructure	5,147	4,475	3,705	15	21			

Total revenues \$23,222 \$21,714 \$20,008 7 % 9

Consolidated product revenues increased 5% to \$13,690 million in 2013. Although IT spending was lower than we had expected and several of our larger peers in the technology industry experienced declining revenues, we experienced growth during the year across each of the segments within our federation of businesses. The growth was driven by the continued demand for our best-of-breed portfolio of offerings to address the storage, data analysis and virtualization needs for continued information growth,

particularly as customers continue to build out their data centers to support their private or public cloud infrastructures and begin to transition from the second to the third platform of IT.

The Information Storage segment's product revenues increased 4% to \$10,694 million in 2013. Revenue from the high-end storage business, which primarily includes revenues from EMC VMAX, increased 2% due to increasing demand from existing and new customers for storage solutions with the highest level of data services and predictable performance for mission critical, transaction oriented workloads in demanding virtual data center environments, many of which are evolving into private clouds or are powering public clouds. Revenue from the Unified and Backup Recovery business increased 4% in 2013 primarily driven by demand for our market leading Data Domain, purpose-built backup appliance which continued to gain market share. The challenging macro-environment internationally and the anticipation of the launch of the next generation VNX product which occurred late in the third quarter negatively impacted our Unified Storage business in the first half of 2013 however, revenues grew solidly in the fourth quarter. Revenue from the Emerging Storage business increased 54% for 2013 primarily due to strong growth of EMC Isilon, EMC Atmos and EMC VPLEX as well as a very successful launch of EMC XtremIO. EMC Isilon, with its scale-out file offering, delivered strong revenue growth in its traditional areas of strength and expanded its presence in enterprise environments and EMC Atmos, the object-based cloud storage solution, more than tripled revenues in 2013 largely due to demand from service providers.

The Pivotal segment's product revenues increased 4% to \$110 million in 2013. Pivotal has made good progress since its formal launch on April 1, 2013 with its existing products such as Greenplum and GemFire continuing to have significant wins. In the fourth quarter of 2013, Pivotal launched Pivotal One, comprising next-generation data fabrics, application fabrics and Cloud Foundry, a cloud-independent PaaS, which is gaining momentum to become the standard for PaaS.

The VMware Virtual Infrastructure segment's product revenues increased 9% to \$2,253 million in 2013. VMware's license revenues increased in 2013 primarily due to overall increased sales volumes, slightly offset by the disposition of certain lines of business under its realignment plan. ELAs comprised 35% and 27% of their overall sales during 2013 and 2012, respectively, with the balance represented by non-ELA, or transactional business.

The RSA Information Security segment's product revenues increased 10% to \$453 million in 2013. The increase in product revenue was driven by growth in both our Identity and Protection and Security Management and Compliance businesses. Security continues to become increasingly more important in IT decisions and RSA continues to benefit from this trend with its advanced, data driven security offerings.

The Information Intelligence Group segment's product revenues decreased 10% to \$180 million in 2013. The year-over-year decrease in product revenues was primarily due to delayed purchases due to customers' limited budgets somewhat offset by demand increases in the three months ended December 31, 2013. This business continues to make progress as it continues to innovate to meet customers' demand for technologies that work seamlessly in mobile cloud environments, like xCP and Syncplicity.

Consolidated product revenues increased 4% to \$13,061 million in 2012. The consolidated product revenues increase was primarily driven by the Information Storage and VMware Virtual Infrastructure segments' product revenue. The overall growth in product revenue in 2012 was due to a continued higher demand for our portfolio of offerings to address the storage, data analysis and virtualization needs for continued information growth, particularly as customers continued to build out their own data centers to develop and support their private or public cloud infrastructures.

Consolidated services revenues increased 10% to \$9,532 million in 2013. The consolidated services revenues increase was primarily driven by the Information Storage and VMware Virtual Infrastructure segments' services revenues resulting from increased revenue associated with maintenance services and increased demand for professional services

as we continue to provide expertise to customers on effective ways to enable cloud computing and to leverage their Big Data assets.

The Information Storage segment's services revenues increased 5% to \$5,438 million in 2013. The increase in services revenues was primarily attributable to higher revenue associated with maintenance services due to a larger installed base as well as increased professional services. In addition, there has been a growing demand for professional services as we assist with customers' transitions to cloud architectures, transforming IT infrastructures and virtualizing mission-critical applications, which also contributed to the increase in services revenues.

The Pivotal segment's services revenues increased 22% to \$199 million in 2013. The increase in services revenues was primarily attributable to higher demand for both professional and maintenance services.

The VMware Virtual Infrastructure segment's services revenues increased 20% to \$2,894 million in 2013. The increase in services revenues was primarily attributable to growth in VMware's software maintenance revenues which benefited from strong renewals, multi-year software maintenance contracts sold in previous periods and additional maintenance contracts sold in conjunction with new software license sales. Additionally, VMware experienced increased demand in their professional services, driven by the growth in their license sales and installed base.

The RSA Information Security segment's services revenues increased 12% to \$534 million in 2013. Services revenues increased due to an increase in professional services and maintenance revenues resulting from continued demand for support from our installed base. The Information Intelligence Group segment's services revenues increased 6% to \$467 million in 2013. The increase in services revenues was due to increased customer demand for the new initiatives and strategic services and increased maintenance revenues.

Consolidated services revenues increased 17% to \$8,653 million in 2012. The consolidated services revenues increase was primarily driven by the Information Storage and the VMware Virtual Infrastructure segments' services revenues resulting from increased revenue associated with maintenance-related services. In addition, we continued to provide expertise to customers on effective ways to enable cloud computing and to leverage their Big Data assets.

Consolidated revenues by geography were as follows (in millions):

				Percentage Change			
	2013	2012	2011	2013 vs	2012	2012 v	s 2011
United States	\$12,230	\$11,510	\$10,550	6	%	9	%
Europe, Middle East and Africa	6,355	5,908	5,668	8	%	4	%
Asia Pacific	3,193	3,017	2,639	6	%	14	%
Latin America, Mexico and Canada	1,444	1,279	1,151	13	%	11	%

Revenues increased in 2013 compared to 2012 and in 2012 compared to 2011 in all of our markets due to greater demand for our products and services offerings.

Changes in exchange rates negatively impacted the total revenue increase by 1% in 2013 compared to 2012. The impact of the change in rates was most significant in the Asia Pacific markets, primarily Australia and Japan, Brazil and South Africa, partially offset by the Euro. Changes in exchange rates negatively impacted the total revenue increase by 1% in 2012 compared to 2011. The impact of the change in rates was most significant in the Euro zone and Latin America markets, and in particular, Brazil.

Costs and Expenses

The following table presents our costs and expenses, other income and net income attributable to EMC Corporation (in millions):

				Percentage Change		ange		
	2013	2012	2011	2013 vs 2	2012	2012 vs 2	2011	
Cost of revenue:								
Information Storage	\$7,050	\$6,580	\$6,393	7	%	3	%	
Information Intelligence Group	228	208	236	9		(12	)	
RSA Information Security	332	285	358	17		(20	)	
Pivotal	191	117	54	64		117		
VMware Virtual Infrastructure	558	499	516	12		(3	)	
Corporate reconciling items	390	387	282	1		37		
Total cost of revenue	8,749	8,076	7,839	8		3		
Gross margins:								
Information Storage	9,082	8,860	8,291	3		7		
Information Intelligence Group	419	432	425	(3	)	2		
RSA Information Security	655	604	470	9		28		
Pivotal	118	153	76	(23	)	101		
VMware Virtual Infrastructure	4,589	3,976	3,189	15		25		
Corporate reconciling items	(390	) (387	) (282	) 1		37		
Total gross margin	14,473	13,638	12,169	6		12		
Operating expenses:								
Research and development <sup>(1)</sup>	2,761	2,560	2,151	8		19		
Selling, general and administrative <sup>(2)</sup>	7,338	7,004	6,479	5		8		
Restructuring and acquisition-related charges	224	110	97	102		14		
Total operating expenses	10,323	9,674	8,727	7		11		
Operating income	4,150	3,964	3,442	5		15		
Investment income, interest expense and	(205	) (160	\ (102	) 78		(17	`	
other expenses, net	(285	) (160	) (193	) 78		(17	)	
Income before income taxes	3,865	3,804	3,249	2		17		
Income tax provision	772	918	640	(16	)	43		
Net income	3,093	2,886	2,609	7		11		
Less: Net income attributable to the	(204	) (152	) (149	) 22		1		
non-controlling interest in VMware, Inc.	(204	) (153	) (148	) 33		4		
Net income attributable to EMC Corporation	\$2,889	\$2,733	\$2,461	6	%	11	%	

<sup>(1)</sup> Amount includes corporate reconciling items of \$365 million, \$334 million and \$315 million for the years ended December 31, 2013, 2012 and 2011, respectively.

#### **Gross Margins**

Our gross margin percentages were 62.3%, 62.8% and 60.8% in 2013, 2012 and 2011, respectively. The decrease in the gross margin percentage in 2013 compared to 2012 was attributable to the Information Storage segment, which decreased overall gross margins by 93 basis points, the Pivotal segment, which decreased overall gross margins by 27 basis points, the Information Intelligence Group segment, which decreased overall gross margins by 8 basis points, and the RSA Information Security segment, which decreased overall gross margins by 4 basis points, somewhat offset by VMware Virtual Infrastructure segment, which increased overall gross margins by 86 basis points. The increase in corporate reconciling items, consisting of stock-based compensation, acquisition-related intangible asset amortization,

<sup>(2)</sup> Amount includes corporate reconciling items of \$603 million, \$626 million and \$581 million for the years ended December 31, 2013, 2012 and 2011, respectively.

restructuring and acquisition-related charges and amortization of VMware's capitalized software from prior periods, decreased the consolidated gross margin percentage by 2 basis points. The increase in the gross margin percentage in 2012 compared to 2011 was attributable to the VMware Virtual Infrastructure segment,

which increased overall gross margins by 141 basis points, the RSA Information Security segment, which increased overall gross margins by 52 basis points, the Information Storage segment, which increased overall gross margins by 21 basis points, and the Information Intelligence Group segment, which increased overall gross margins by 13 basis points, somewhat offset by the Pivotal segment, which decreased overall gross margins by 12 basis points. The increase in corporate reconciling items, consisting of stock-based compensation, acquisition-related intangible asset amortization, restructuring and acquisition-related charges and amortization of VMware's capitalized software from prior periods, decreased the consolidated gross margin percentage by 60 basis points.

For segment reporting purposes, stock-based compensation, intangible asset amortization, restructuring and

acquisition-related charges and amortization of VMware's capitalized software from prior periods are recognized as corporate expenses and are not allocated among our various operating segments. The increase of \$3 million in the corporate reconciling items in 2013 was attributable to a \$33 million increase in intangible asset amortization expense, partially offset by a \$28 million decrease in amortization of VMware's capitalized software from prior periods and a \$2 million decrease in stock-based compensation expense. The \$33 million increase in intangible asset amortization expense was due to a larger intangible asset balance resulting from business acquisitions. The decrease in amortization of VMware's capitalized software from prior periods was due to the balance being fully amortized towards the end of 2013 compared to an entire year of amortization during 2012. The increase of \$105 million in the corporate reconciling items in 2012 was attributable to a \$61 million increase in amortization of VMware's capitalized software from prior periods, a \$42 million increase in intangible asset amortization expense and a \$2 million increase in stock-based compensation expense. The \$61 million increase in amortization of VMware's capitalized software from prior periods was due to a full year of amortization being excluded during 2012 as VMware changed their go-to-market strategy during the third quarter of 2011. The \$42 million increase in intangible asset amortization expense was due to a larger intangible asset balance resulting from business acquisitions. The gross margin percentages for the Information Storage segment were 56.3%, 57.4% and 56.5% in 2013, 2012 and 2011, respectively. The decrease in gross margin percentage in 2013 compared to 2012 was due to a decrease in product and service margins. The decrease in product margins was due to higher execution costs related to increasingly back-end loaded quarters. Service margins decreased due to higher costs to support increased field service activity. The increase in gross margin percentage in 2012 compared to 2011 was primarily attributable to improved product gross margins driven by a shift in mix towards higher margin products and higher sales volume. The gross margin percentages for the Pivotal segment were 38.0%, 56.7% and 58.6% in 2013, 2012 and 2011, respectively. The decrease in gross margin percentage in 2013 compared to 2012 was primarily due to a decrease in services margins resulting from the continued build-up of services capabilities as Pivotal works with customers to determine how best to leverage newer technologies such as Pivotal CF and Pivotal One. The decrease in gross margin percentage in 2012 compared to 2011 was primarily attributable to a shift in mix towards services from the build-up of services capabilities.

The gross margin percentages for the VMware Virtual Infrastructure segment were 89.2%, 88.9% and 86.1% in 2013, 2012 and 2011, respectively. The increase in gross margin percentage in 2013 compared to 2012 was primarily attributable to improvements in product margins due to a decrease in software capitalized amortization expense and a decrease in royalty and licensing costs for technology licensed from third-party providers that is used in its products. The increase in gross margin percentage in 2012 compared to 2011 was attributable to improvements in services margins due to growth in maintenance revenue as well as improved license margins resulting from decreased software capitalized amortization expense.

The gross margin percentages for the RSA Information Security segment were 66.4%, 68.0% and 56.8% in 2013, 2012 and 2011, respectively. The decrease in the gross margin percentage in 2013 compared to 2012 and the increase in gross margin percentage in 2012 compared to 2011 was primarily due to an atypically higher gross margin in 2012 due to the release of the residual reserve related to the one-time impact of RSA remediation associated with working with customers to implement remediation programs which occurred in the three months ended June 30, 2012. The gross margin percentages for the Information Intelligence Group segment were 64.8%, 67.5% and 64.2% in 2013, 2012 and 2011, respectively. The decrease in gross margin percentage in 2013 compared to 2012 was attributable to a

decrease in product revenue. The increase in gross margin percentage in 2012 compared to 2011 was attributable to a continued containment of fixed costs and services margin improvement.

#### Research and Development

As a percentage of revenues, R&D expenses were 12%, 12% and 11% in 2013, 2012 and 2011, respectively. R&D expenses increased \$201 million in 2013 primarily due to an increase in personnel-related costs, which are expenses driven by incremental headcount from strategic hiring and business acquisitions, depreciation expense, infrastructure costs and business development costs. Personnel-related costs increased by \$181 million, depreciation expense increased by \$32 million, infrastructure costs increased by \$26 million and business development costs increased by \$8 million. Partially offsetting these increases were higher capitalization of software development costs of \$48 million which decreased overall R&D expenses. R&D expenses increased \$410 million in 2012 primarily due to an increase in personnel-related costs, which are expenses driven by incremental headcount from strategic hiring and business acquisitions, business development costs, infrastructure costs and depreciation expense. Personnel-related costs increased by \$330 million, business development costs increased by \$18 million, infrastructure costs increased by \$15 million and depreciation expense increased by \$11 million. Also increasing these costs was a decrease in capitalized software development costs of \$23 million.

Corporate reconciling items within R&D, which consist of stock-based compensation and intangible asset amortization, increased \$31 million and \$19 million to \$365 million and \$334 million in 2013 and 2012, respectively. Stock-based compensation expense increased \$32 million and \$25 million in 2013 and 2012, respectively. Acquisition-related intangible asset amortization decreased \$1 million and \$6 million in 2013 and 2012, respectively. The increase in stock-based compensation expense in 2013 and 2012 was primarily driven by VMware's issuance of restricted stock in connection with the acquisition of Nicira in the third quarter of 2012.

R&D expenses within EMC's Information Infrastructure business, as a percentage of EMC's Information Infrastructure business revenues, were 8% in 2013, 2012 and 2011. R&D expenses increased \$52 million in 2013 primarily due to changes in personnel-related costs, which are expenses driven by incremental headcount from strategic hiring and business acquisitions, depreciation expense, infrastructure costs and business development expense. Personnel-related costs increased by \$55 million, depreciation expense increased by \$26 million, infrastructure costs increased by \$19 million and business development expense increased by \$7 million. Somewhat offsetting these increased costs was an increase in capitalization of software development costs of \$57 million. The increase in capitalized software development costs was primarily due to the timing of products reaching technological feasibility. R&D expenses increased \$186 million in 2012 primarily due to an increase in personnel-related costs, business development expense and depreciation expense. Personnel-related costs increased by \$181 million, business development expense increased by \$17 million and depreciation expense increased by \$13 million. Partially offsetting these increased costs was an increase in capitalized software development costs of \$43 million.

R&D expenses within the Pivotal business, as a percentage of Pivotal's revenues, were 38%, 46% and 54% in 2013, 2012 and 2011, respectively. R&D expenses decreased \$7 million in 2013 and increased \$54 million in 2012 primarily due to fluctuations in personnel-related costs as the business continues to transition to its new strategic focus.

R&D expenses within the VMware Virtual Infrastructure business, as a percentage of VMware's revenues, were 16%, 16% and 15% in 2013, 2012 and 2011, respectively. R&D expenses increased \$126 million in 2013 primarily due to increases in personnel-related costs of \$110 million driven by incremental headcount from strategic hiring as well as increases in depreciation costs of \$8 million and increases in infrastructure costs of \$7 million. R&D expenses increased \$150 million in 2012 largely due to an increase in personnel-related costs of \$60 million and an increase in infrastructure costs of \$14 million. Also increasing R&D expenses was a decrease in VMware's capitalized software development costs of \$74 million in 2012 as a result of a change in VMware's go-to-market strategy and the timing of products reaching technological feasibility.

Selling, General and Administrative

As a percentage of revenues, selling, general and administrative ("SG&A") expenses were 32% in 2013, 2012 and 2011. SG&A expenses increased by \$334 million in 2013 primarily due to increases in personnel-related costs, which are expenses driven by incremental headcount from strategic hiring and business acquisitions including variable compensation bonuses and increases in commissions, business development, infrastructure and travel expenses. Personnel-related costs increased by \$279 million, business development costs increased by \$24 million, infrastructure costs increased by \$22 million and travel increased by \$9 million. SG&A expenses increased by \$525 million in 2012 primarily due to increases in personnel-related costs, business development, infrastructure, travel and depreciation expenses. Personnel-related costs increased by \$364 million, business development costs increased by \$67 million, infrastructure costs increased by \$30 million, travel increased by \$23 million and depreciation expense increased by \$22 million in 2012.

Corporate reconciling items within SG&A, which consist of stock-based compensation and intangible asset amortization, decreased \$23 million to \$603 million in 2013 and increased \$45 million to \$626 million in 2012. In 2013, stock-based compensation expense decreased by \$16 million and intangible asset amortization decreased by \$7 million. In 2012, stock-based compensation expense increased \$57 million, somewhat offset by decreases in intangible asset amortization of \$13 million. Stock-based compensation expense decreased in 2013 as a result of a lower impact of expense from previous large acquisitions and increased in 2012 primarily due to VMware's issuance of restricted stock in connection with the acquisition of Nicira.

SG&A expenses within EMC's Information Infrastructure business, as a percentage of EMC's Information Infrastructure business revenues, were 26%, 26% and 27% in 2013, 2012 and 2011, respectively. SG&A expenses increased \$83 million in 2013 primarily due to increases in personnel-related costs, which are expenses driven by incremental headcount from strategic hiring and business acquisitions, and increases in infrastructure, business development and depreciation expense. Personnel-related costs increased by \$45 million, infrastructure costs increased by \$18 million, business development costs increased by \$16 million and depreciation expense increased by \$5 million in 2013. SG&A expenses increased \$136 million in 2012 primarily due to increases in personnel-related costs, commissions, depreciation expense, business development costs and infrastructure costs. Personnel-related costs increased slightly due to careful discretionary spending exceeding increases in salary resulting from strategic hiring and business acquisitions. Personnel-related costs increased by \$44 million, depreciation expense increased by \$35 million, business development costs increased \$16 million and infrastructure costs increased by \$11 million in 2012.

SG&A expenses within the Pivotal business, as a percentage of Pivotal's revenues, were 54%, 57% and 92% in 2013, 2012 and 2011, respectively. SG&A expenses increased \$10 million in 2013 when compared to the same period in 2012 and \$35 million when compared to the same period in 2011 primarily due to fluctuations in personnel-related costs as the business continues to transition to its new strategic focus.

SG&A expenses within the VMware Virtual Infrastructure business, as a percentage of VMware's revenues, were 39% in 2013, 2012 and 2011. SG&A expenses increased \$264 million in 2013 primarily due to growth in personnel-related expenses of \$259 million driven by incremental headcount. In addition, there were increases to business development costs of \$3 million and increases to infrastructure costs of \$3 million in 2013. SG&A expenses increased \$309 million in 2012 primarily due to growth in personnel-related expenses driven by incremental headcount and by higher commission expense due to increased sales volume as well as an increase in the costs of marketing programs. Restructuring and Acquisition-Related Charges

In 2013, 2012 and 2011, we incurred restructuring and acquisition-related charges of \$224 million, \$110 million and \$97 million, respectively. In 2013, EMC incurred \$139 million of restructuring charges, primarily related to our current year restructuring programs and \$8 million of charges in connection with acquisitions for financial, advisory, legal and accounting services. In 2012, EMC incurred \$101 million of net restructuring charges, comprising of \$109 million related to our 2012 restructuring programs and an adjustment of \$8 million related to other programs. In addition, we incurred \$9 million of charges in connection with acquisitions for financial, advisory, legal and accounting services. In 2011, EMC incurred \$86 million of restructuring charges, of which \$63 million primarily related to our 2011 restructuring program, and \$11 million of charges in connection with acquisitions for financial, advisory, legal and accounting services. In 2013, VMware incurred \$54 million of restructuring charges related to workforce reductions as part of its current year restructuring program and \$5 million of charges in connection with acquisitions for financial, advisory, legal and accounting services. In addition, VMware incurred \$18 million of impairment charges related to its business realignment in 2013. VMware had no such charges in 2012 or 2011. During 2013, 2012 and 2011, EMC implemented restructuring programs to create further operational efficiencies which will result or have resulted in workforce reductions of approximately 1,917, 1,163 and 787 positions, respectively. The actions impact positions around the globe covering our Information Storage, RSA Information Security and Information Intelligence Group segments. All of these actions are expected to be completed or were completed within a year of the start of each program.

During 2013, VMware approved and initiated a business realignment plan to streamline its operations. The plan included the elimination of approximately 710 positions across all major functional groups and geographies. All of these actions are expected to be completed within a year of the start of the program.

During 2013, 2012 and 2011, we recognized \$18 million, \$21 million and \$26 million, respectively, of lease termination costs for facilities vacated in the period in accordance with our plan as part of all of our restructuring programs and for costs associated with terminating other contractual obligations. These costs are expected to be utilized by the end of 2015. The remaining cash portion owed for these programs in 2014 is approximately \$9 million, plus an additional \$5 million over the period from 2015 and beyond.

In January 2014, EMC announced a restructuring plan which consists of a reduction in force impacting our Information Storage, RSA Information Security and Information Intelligence Group segments which will be substantially completed by the end of the first quarter of 2014 and fully completed by the end of 2014. The total charge resulting from this plan is expected to be approximately \$100 million to \$120 million, with total cash payments associated with the plan expected to be in the range of \$95 million to \$114 million.

#### **Investment Income**

Investment income was \$128 million, \$115 million and \$129 million in 2013, 2012 and 2011, respectively. Investment income increased in 2013 due to an increase in net realized gains. Investment income decreased in 2012 primarily due to a decrease in coupon income. Net realized gains were \$17 million, \$9 million and \$10 million in 2013, 2012 and 2011, respectively. Interest income was \$106 million, \$103 million and \$116 million in 2013, 2012 and 2011, respectively.

## Interest Expense

Interest expense was \$156 million, \$79 million and \$170 million in 2013, 2012 and 2011, respectively. Interest expense consists primarily of interest on the \$1.725 billion 1.75% convertible senior notes due 2011 (the "2011 Notes") and the \$1.725 billion 1.75% convertible senior notes due 2013 (the "2013 Notes"), which we issued in November 2006, and the \$5.5 billion senior notes (the "Notes") which we issued in June 2013. Interest expense related to the Notes was \$80 million for the year ended December 31, 2013. Included in interest expense are non-cash interest charges related to amortization of the debt discount attributable to the conversion feature of \$58 million, \$61 million and \$116 million in 2013, 2012 and 2011, respectively, as we have accreted the 2013 Notes and 2011 Notes to their stated values over their terms. Also included in interest expense is the amortization of the debt discount and debt issuance fees attributable to the Notes. The increase in interest expense from 2012 to 2013 is due to interest related to the Notes which were issued during 2013. The decrease in interest expense from 2011 to 2012 is due to the settlement of the 2011 Notes in the first quarter of 2012. See Note E to the consolidated financial statements.

#### Other Income (Expense), Net

Other income (expense), net was \$(257) million, \$(196) million and \$(152) million in 2013, 2012 and 2011, respectively. Our other income (expense), net primarily consists of our consolidated share of the losses from our converged infrastructure joint venture, VCE Company LLC, of \$298 million, \$245 million and \$209 million in 2013, 2012 and 2011, respectively, and foreign exchange losses. In addition, during 2013, VMware recorded net gains on the divestiture of business and investments of \$31 million. Our 2012 other income (expense), net also includes losses on interest rate swaps which are partially offset by our net gains from the sale of strategic investments including a non-recurring gain on our investment in XtremIO of \$32 million as well as the divestiture of a business. Our 2011 other income (expense), net includes a non-recurring gain on the sale of VMware's investment in Terremark Worldwide, Inc. of \$56 million.

The VCE joint venture is accounted for under the equity method and our consolidated share of VCE's losses is based upon our portion of the overall funding, which was approximately 63% at December 31, 2013, and represents our share of the net losses of the joint venture net of equity accounting adjustments. The losses recognized from the joint venture exclude our consolidated revenues and gross margins from sales of products and services to VCE, and any additional related selling expenses. See Note J to the consolidated financial statements.

Provision for Income Taxes

Our effective income tax rate was 20.0%, 24.1% and 19.7% in 2013, 2012 and 2011, respectively. The effective income tax rate is based upon income before provision for income taxes for the year, composition of the income in different countries, effect of tax law changes and adjustments, if any, for potential tax consequences, benefits and/or resolutions of tax audits or other tax contingencies. Our aggregate income tax rate in foreign jurisdictions is lower than our income tax rate in the United States; substantially all of our income before provision for income taxes from foreign operations has been earned by our Irish subsidiaries. We do not believe that any recent or currently expected developments in non-U.S. tax jurisdictions are reasonably likely to have a material impact on our effective income tax

rate. Our effective income tax rate may be adversely affected by earnings being lower than anticipated in countries where we have lower statutory income tax rates and higher than anticipated in countries where we have higher statutory income tax rates.

In 2013, the lower aggregate income tax rate in foreign jurisdictions reduced our effective income tax rate by 15.2 percentage points compared to our statutory federal tax rate of 35.0%. On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law. Some of the provisions were retroactive to January 1, 2012 including an extension of the U.S. federal tax credit

for increasing research activities through December 31, 2013. Because the extension was enacted after December 31, 2012, our 2013 income tax provision included the federal tax credit for increasing research activities for 2012 as well as for 2013, which reduced our 2013 effective income tax rate by 3.5 percentage points. The U.S. federal tax credit for increasing research activities expired on December 31, 2013. If it is not renewed, our future effective income tax rate could be materially impacted. The net effect of other tax credits, state taxes, non-deductible permanent differences, prior year true up adjustments, change in tax contingency reserves and other items collectively increased the effective income tax rate by 3.7 percentage points.

In 2012, the lower aggregate income tax rate in foreign jurisdictions reduced our effective income tax rate by 13.6 percentage points compared to our statutory federal tax rate of 35.0%. The net effect of tax credits, state taxes, non-deductible permanent differences, prior year true up adjustments, change in tax contingency reserves and other items collectively increased the effective income tax rate by 2.7 percentage points. Our 2012 effective income tax rate did not reflect our 2012 federal tax credit for increasing research activities even though it was reported on our 2012 federal income tax returns.

In 2011, the lower aggregate income tax rate in foreign jurisdictions reduced our effective income tax rate by 14.4 percentage points compared to our statutory federal tax rate of 35.0%. The net effect of tax credits, state taxes, non-deductible permanent differences, resolution of income tax audits and reversal of reserves associated with the expiration of statutes of limitations and other items collectively decreased the effective income tax rate by 0.9 percentage points.

The effective income tax rate decreased from 2012 to 2013 by 4.1%, from 24.1% to 20.0%, respectively. This decrease was principally attributable to the retroactive renewal of the U.S. federal tax credit for increasing research activities on January 2, 2013 as discussed above. The effective income tax rate increased from 2011 to 2012 by 4.4%, from 19.7% to 24.1%, respectively. This increase was principally attributable to the U.S. federal tax credit for increasing research activities as well as a decrease in unrecognized tax benefits as a result of various tax audit closures recorded in 2011 with no comparable amounts in 2012.

Non-controlling Interest in VMware, Inc.

The net income attributable to the non-controlling interest in VMware was \$204 million, \$153 million and \$148 million in 2013, 2012 and 2011, respectively. The increases year over year were due to increases in VMware's net income. VMware's reported net income was \$1,014 million, \$746 million and \$724 million in 2013, 2012 and 2011, respectively. The weighted-average non-controlling interest in VMware was approximately 20% in 2013, 2012 and 2011. As of December 31, 2013, EMC has purchased approximately 16 million shares of VMware common stock for \$1.2 billion.

#### **Financial Condition**

Cash provided by operating activities was \$6,923 million, \$6,262 million and \$5,669 million for 2013, 2012 and 2011, respectively. Cash received from customers was \$24,319 million, \$22,585 million and \$21,145 million in 2013, 2012 and 2011, respectively. The increase in cash received from customers from 2012 to 2013 was attributable to an increase in sales volume and strong customer collections. The increase in cash received from customers from 2011 to 2012 was attributable to an increase in sales volume and higher cash proceeds from the sale of multi-year maintenance contracts, which are typically billed and paid in advance of services being rendered. Cash paid to suppliers and employees was \$16,708 million, \$16,019 million and \$15,219 million in 2013, 2012 and 2011, respectively. The increase in cash paid to suppliers and employees from 2011 to 2012 and from 2012 to 2013 was primarily due to a general growth in the business to support the increased revenue base. Income taxes paid was \$761 million, \$374 million and \$323 million in 2013, 2012 and 2011, respectively. These payments are comprised of estimated taxes for the current year, extension payments for the prior year and refunds or payments associated with income tax filings and tax audits. Tax payments were higher in 2013 due to lower allowable deductions.

Cash used in investing activities was \$5,760 million, \$3,906 million and \$3,542 million in 2013, 2012 and 2011, respectively. Cash used for business acquisitions, net of cash acquired, was \$770 million, \$2,136 million and \$537

million in 2013, 2012 and 2011, respectively. This activity varies from period to period based upon the number and size of acquisitions in a given period. Net cash used for strategic and other related investments was \$96 million, \$47 million and \$299 million in 2013, 2012 and 2011, respectively. In 2011, cash used for strategic and other related investments included \$113 million spent on the purchase of patents from Novell. During 2013, we provided funding of \$411 million to our joint venture, VCE Company LLC. In 2012 and 2011, we provided VCE funding of \$228 million and \$383 million, respectively. During 2013, we received \$38 million from the dispositions of certain lines of business and during 2012, we received \$58 million in cash proceeds from the divestiture of our Iomega business. During 2011, VMware purchased a leasehold interest for \$151 million. Capital additions were \$943 million, \$819 million and \$801 million in 2013, 2012 and 2011, respectively. Capitalized software development costs were \$465 million, \$419 million and \$442 million in 2013, 2012 and 2011, respectively. The increase in 2013 compared to 2012 was primarily attributable to EMC Information Infrastructure's software development activities. The decrease in 2012 compared to 2011 was primarily attributable to VMware's change in its go-to-market strategy, somewhat offset by EMC Information Infrastructure's

efforts on its software development activities. Net purchases of investments were \$3,113 million, \$315 million and \$929 million in 2013, 2012 and 2011, respectively. This activity varies from period to period based upon our cash collections, cash requirements and maturity dates of our investments as well as cash available after the issuance and payment of debt.

Cash used in financing activities was \$2,076 million, \$2,149 million and \$1,719 million in 2013, 2012 and 2011, respectively. In 2013, we received \$5,460 million in proceeds through the issuance of long-term notes. In 2012, we spent \$1,715 million for repayment of our long- and short-term obligations including convertible debt. We have continued to spend more cash on share repurchases as part of a long-term strategy to reinvest in the business. In 2013, 2012 and 2011, cash used to repurchase 122 million, 27 million and 82 million shares of EMC common stock was \$3,015 million, \$685 million and \$2,000 million, respectively. In addition, in 2013, 2012 and 2011, cash used to purchase 2 million, 3 million and 5 million shares of VMware common stock was \$160 million, \$290 million and \$400 million, respectively, and in 2013, 2012 and 2011, VMware spent \$508 million, \$468 million and \$526 million to repurchase 7 million, 5 million and 6 million shares of its common stock, respectively. In 2013, 2012 and 2011, we generated \$539 million, \$813 million and \$1,011 million, respectively, from the issuance of common stock and we generated \$116 million, \$261 million and \$362 million, respectively, of excess tax benefits from stock-based compensation. During 2013, EMC instituted a quarterly dividend and paid dividends of \$415 million to shareholders. In addition, in April 2013, Pivotal received a \$105 million capital contribution from GE. In 2012 and 2011, we spent \$70 million and \$141 million, respectively, on the settlement of interest rate contracts.

In May 2013, our Board of Directors approved the initiation of a quarterly cash dividend to EMC shareholders. Our Board of Directors declared quarterly cash dividends of \$0.10 per share of common stock in each of the second, third and fourth quarters of 2013. On January 23, 2014, EMC paid a cash dividend of \$202 million to shareholders of record as of the close of business on January 8, 2014, which was declared on December 12, 2013.

We expect to continue to generate positive cash flows from operations and to use cash generated by operations as our primary source of liquidity. We believe that existing cash and cash equivalents, together with any cash generated from operations, will be sufficient to meet normal operating requirements for the next twelve months.

In June 2013, we issued \$5.5 billion aggregate principal amount of senior notes (collectively, the "Notes") which pay a fixed rate of interest semi-annually in arrears. The first interest payment occurred on December 2, 2013. The proceeds from the Notes have been used to satisfy the cash payment obligation of the converted 2013 Notes as well as for general corporate purposes including stock repurchases, dividend payments, working capital needs and other business opportunities. The Notes of each series are senior, unsecured obligations of EMC and are not convertible or exchangeable. Unless previously purchased and canceled, we will repay the Notes of each series at 100% of the principal amount, together with accrued and unpaid interest thereon, at maturity. However, EMC has the right to redeem any or all of the Notes at specified redemption prices. As of December 31, 2013, we were in compliance with all debt covenants, which are customary in nature.

The 2011 Notes matured and a majority of the noteholders exercised their right to convert the outstanding 2011 Notes at the end of 2011. Pursuant to the settlement terms, the majority of the converted 2011 Notes settled on January 9, 2012. At that time, we paid the noteholders \$1.7 billion in cash for the outstanding principal and 30 million shares for the \$661 million excess of the conversion value over the principal amount, as prescribed by the terms of the 2011 Notes.

As of December 31, 2013, the 2013 Notes had matured and a majority of the noteholders exercised their rights to convert the outstanding 2013 Notes. Pursuant to the settlement terms, the majority of the converted 2013 Notes settled on January 7, 2014. At that time, we paid the noteholders \$1.7 billion in cash for the outstanding principal and 35 million shares for the \$858 million excess of the conversion value over the principal amount, as prescribed in the terms of the 2013 Notes.

In connection with the issuance of the 2011 Notes and 2013 Notes, we entered into separate convertible note hedge transactions with respect to our common stock (the "Purchased Options"). The Purchased Options allow us to receive shares of our common stock and/or cash related to the excess conversion value that we would pay to the holders of the 2011 Notes and 2013 Notes upon conversion. The Purchased Options will cover, subject to customary anti-dilution adjustments, approximately 215 million shares of our common stock. We paid an aggregate amount of \$669 million of the proceeds from the sale of the 2011 Notes and 2013 Notes for the Purchased Options that was recorded as additional paid-in-capital in shareholders' equity. In the fourth quarter of 2011, we exercised 107 million of the Purchased Options in conjunction with the planned settlements of the 2011 Notes, and we received 30 million shares of net settlement on January 9, 2012, representing the excess conversion value of the options. In the fourth quarter of 2013, we exercised the remaining 107 million of the Purchased Options in conjunction with the settlements of the 2013 Notes, and we received 35 million shares of net settlement on January 7, 2014, representing the excess conversion value of the options.

We also entered into separate transactions in which we sold warrants to acquire, subject to customary anti-dilution adjustments, approximately 215 million shares of our common stock at an exercise price of approximately \$19.55 per share of our common stock. We received aggregate proceeds of \$391 million from the sale of the associated warrants. Upon exercise, the value of the warrants is required to be settled in shares. Half of the associated warrants were exercised between February 15, 2012 and March 14, 2012 and the remaining half of the associated warrants have expiration dates between February 18, 2014 and March 17, 2014. During the first quarter of 2012, the exercised warrants were settled with 32 million shares of our common stock. Beginning February 18, 2014, a percentage of the remaining 108 million warrants become exercisable each day over the course of the settlement period through March 17, 2014. These warrants will be settled with shares of our common stock.

At December 31, 2013, our total cash, cash equivalents, and short-term and long-term investments were \$17.6 billion. This balance includes approximately \$6.2 billion held by VMware, of which \$4.1 billion is held outside of the U.S., and \$4.3 billion held by EMC in entities outside of the U.S. If these overseas funds are needed for our operations in the U.S., we would be required to accrue and pay U.S. taxes to repatriate these funds. However, our intent is to permanently reinvest these funds outside of the U.S. and our current plans do not demonstrate a need to repatriate them to fund our U.S. operations. On January 31, 2014, EMC loaned VMware \$1.1 billion in domestic cash in the form of a loan to finance its acquisition of AirWatch LLC.

Use of Non-GAAP Financial Measures and Reconciliations to GAAP Results

The financial statements are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). EMC uses certain non-GAAP financial measures, which exclude stock-based compensation, intangible asset amortization, restructuring and acquisition-related charges, the amortization of VMware's capitalized software from prior periods, infrequently occurring gains, losses, benefits and charges, and special tax items to measure its gross margin, operating margin, net income and diluted earnings per share for purposes of managing our business. In addition, the benefit of the U.S. research and development ("R&D") tax credit for 2012 is included in the non-GAAP results for the fourth quarter of 2012. EMC also assesses its financial performance by measuring its free cash flow which is also a non-GAAP financial measure. Free cash flow is defined as net cash provided by operating activities, less additions to property, plant and equipment and capitalized software development costs. These non-GAAP financial measures should be considered in addition to, not as a substitute for, measures of EMC's financial performance or liquidity prepared in accordance with GAAP. EMC's non-GAAP financial measures may be defined differently from time to time and may be defined differently than similar terms used by other companies, and accordingly, care should be exercised in understanding how EMC defines its non-GAAP financial measures.

EMC's management uses the non-GAAP financial measures to gain an understanding of EMC's comparative operating performance (when comparing such results with previous periods or forecasts) and future prospects and excludes these items from its internal financial statements for purposes of its internal budgets and each reporting segment's financial goals. These non-GAAP financial measures are used by EMC's management in their financial and operating decision-making because management believes they reflect EMC's ongoing business in a manner that allows meaningful period-to-period comparisons. EMC's management believes that these non-GAAP financial measures provide useful information to investors and others (a) in understanding and evaluating EMC's current operating performance and future prospects in the same manner as management does, if they so choose, and (b) in comparing in a consistent manner EMC's current financial results with EMC's past financial results.

Our non-GAAP operating results for the three months and years ended December 31, 2013 and 2012 were as follows (in millions):

	For the Three M	lonths Ended	For the Year Ended		
	December 31,	December 31,	December 31,	December 31,	
	2013	2012	2013	2012	
Gross margin	\$4,317	\$3,991	\$14,864	\$14,001	

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Gross margin percentage	64.6	% 66.2	% 64.0	% 64.5	%
Operating income	1,828	1,656	5,732	5,397	
Operating income percentage	27.4	% 27.5	% 24.7	% 24.9	%
Income tax provision	386	358	1,228	1,234	
Net income attributable to EMC	1,276	1,194	3,893	3,759	
Diluted earnings per share attributable to EMC	\$0.60	\$0.54	\$1.80	\$1.70	

The improvements in the non-GAAP gross margin were attributable to higher sales volume. The decrease in gross margin percentage for the three and twelve months ended December 31, 2013 was attributable to a decrease in both Information Storage product and services margins. The product margins for the three months ended December 31, 2013 were negatively impacted by

the fact that the orders we were able to ship were lower in margin when compared to the orders shipped in the three months ended December 31, 2012. In the twelve months ended December 31, 2013, product margins were also impacted by higher execution costs related to increasingly back-end loaded quarters. Service margins decreased due to higher costs to support increased field service activity. The improvements in the non-GAAP operating income for the three and twelve months ended December 31, 2013 were attributable to higher sales volume. Non-GAAP operating income percentage for the three and twelve months ended December 31, 2013 were relatively flat due primarily to good cost controls of operating expenses which offset declines in gross margin percentages.

The reconciliation of the above financial measures from GAAP to non-GAAP is as follows (in millions): For the Three Months Ended December 31, 2013

		Amortization								
	GAAP	Stock-based compensation	Intangible asset amortization	Restructuring and acquisition- related charges	of VMware's capitalized software from prior periods	Special tax items	Non-GAAP			
Gross margin	\$4,224	\$ 32	\$ 59	\$—	\$1	<b>\$</b> —	\$4,317			
Operating income	1,461	239	98	29	1	<del>-</del>	1,828			
Income tax provision	298	41	32	10	_	5	386			
Net income attributable to EMC	1,022	176	62	19	1	(4)	1,276			
Diluted earnings per share attributable to EMC	\$0.48	\$ 0.08	\$ 0.03	\$0.01	\$	\$—	\$0.60			

For the Three Months Ended December 31, 2012

					Amortization	n		
				Restructuring				
		Stock-based	asset	and	VMware's	Special	R&D	
	GAAP			acquisition-	capitalized	tax	tax	Non-GAAP
		compensation	<sup>1</sup> amortizatior	related	software	items	credit	
				charges	from prior			
					periods			
Gross margin	\$3,890	\$31	\$ 57	\$	\$ 13	<b>\$</b> —	<b>\$</b> —	\$ 3,991
Operating income	1,269	246	98	30	13			1,656
Income tax provision	327	70	29	7	4	(12)	(66 )	358
Net income attributable	870	159	64	23	7	11	60	1,194
to EMC	070	137	04	23	,	11	00	1,174
Diluted earnings per								
share attributable to	\$0.39	\$ 0.07	\$ 0.03	\$0.01	\$ —	\$0.01	\$0.03	\$ 0.54
EMC								

For the Twelve Months Ended December 31, 2013

				Amortization	o Net gain			
]		Restructurin	ngf	on				
GAAP Stock-bit compen	Stools board In	ntangible	and	VMware's	disposition	Special	R&D	
	Stock-based as	asset	acquisition-	capitalized	of certain	tax	tax	Non-GAAP
	amorti	mortizatio	nelated	software	lines of	items	credit	
			charges	from prior	business			
				periods	and other			

Gross margin Operating income	\$14,473 4,150	\$ 124 935	\$ 232 389	\$ — 224	\$ 34 34	\$ — —		\$— —	\$— —	\$ 14,864 5,732
Income tax provision	772	226	117	57	11	(3	)	(18)	66	1,228
Net income attributable to EMC	2,889	636	256	156	18	(21	)	19	(60 )	3,893
Diluted earnings per share attributable to EMC	\$1.33	\$ 0.30	\$ 0.12	\$ 0.07	\$ 0.01	\$ (0.01	)	\$0.01	\$(0.03)	\$ 1.80
42										

For the Twelve Months Ended December 31, 2012

#### Amortization

	GAAP	Stock-bas compensa	Intangibl sed asset ation amortizat	eand	of ring VMware' capitalize on- software from prior periods	dspecial		Loss on interest rate swaps	Gain on strategic investm	С	Special tax nitems	R&D tax credit	Non-GAAP
Gross margin	\$13,638	\$ 126	\$ 199	\$ <i>—</i>	\$ 62	\$ (24	)	\$—	\$—		\$—	\$—	\$ 14,001
Operating income	3,964	920	365	111	62	(24	)	_	_		_	_	5,397
Income tax provision Net income	918	230	112	22	20	(6	)	15			(12 )	(66 )	1,234
attributable to EMC Diluted	2,733	623	238	87	33	(18	)	24	(32	)	11	60	3,759
earnings per share attributable to EMC	\$1.23	\$ 0.28	\$ 0.11	\$ 0.04	\$ 0.02	\$ (0.01	)	\$0.01	\$ (0.01	)	\$0.01	\$0.03	\$ 1.70

We also monitor our ability to generate free cash flow in relationship to our non-GAAP net income attributable to EMC over comparable periods. For the year ended December 31, 2013, our free cash flow was \$5,515 million, an increase of 10% compared to the free cash flow generated for the year ended December 31, 2012. The free cash flow for the year ended December 31, 2013 exceeded our non-GAAP net income attributable to EMC by \$1,622 million. EMC uses free cash flow, among other measures, to evaluate the ability of its operations to generate cash that is available for purposes other than capital expenditures and capitalized software development costs. Management believes that information regarding free cash flow provides investors with an important perspective on the cash available to make strategic acquisitions and investments, fund joint ventures, repurchase shares, service debt, pay dividends and fund ongoing operations. As free cash flow is not a measure of liquidity calculated in accordance with GAAP, free cash flow should be considered in addition to, but not as a substitute for, the analysis provided in the statements of cash flows.

The reconciliation of the above free cash flow from GAAP to non-GAAP is as follows (in millions):

	For the Three N	Months Ended	For the Year Ended			
	December 31,	December 31,	December 31,	December 31,		
	2013	2012	2013	2012		
Cash Flow from Operations	\$2,190	\$1,899	\$6,923	\$6,262		
Capital Expenditures	(270)	(296)	(943)	(819)		
Capitalized Software Development Costs	(123)	(103)	(465)	(419)		
Free Cash Flow	\$1,797	\$1,500	\$5,515	\$5,024		

Free cash flow represents a non-GAAP measure related to operating cash flows. In contrast, our GAAP measures of cash flow consist of three components. These are cash flows provided by operating activities of \$6,923 million and \$6,262 million for the years ended December 31, 2013 and 2012, respectively, cash used in investing activities of \$5,760 million and \$3,906 million for the years ended December 31, 2013 and 2012, respectively, and net cash used in financing activities of \$2,076 million and \$2,149 million for the years ended December 31, 2013 and 2012,

respectively.

All of the foregoing non-GAAP financial measures have limitations. Specifically, the non-GAAP financial measures that exclude the items noted above do not include all items of income and expense that affect EMC's operations or cash flows. Further, these non-GAAP financial measures are not prepared in accordance with GAAP, may not be comparable to non-GAAP financial measures used by other companies and do not reflect any benefit that such items may confer on EMC. Management compensates for these limitations by also considering EMC's financial results as determined in accordance with GAAP.

Investments
The following table summarizes the composition of our investments at December 31, 2013 (in millions):

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	Amortized	Unrealized	Unrealized		Aggregate
	Cost	Gains	(Losses)		Fair Value
U.S. government and agency obligations	\$3,726	\$4	\$(3	)	\$3,727
U.S. corporate debt securities	2,260	8	(2	)	2,266
High yield corporate debt securities	515	19	(3	)	531
Municipal obligations	860	3	_		863
Auction rate securities	63	_	(3	)	60
Foreign debt securities	2,152	6	(3	)	2,155
Total fixed income securities	9,576	40	(14	)	9,602
Publicly traded equity securities	72	24	(1	)	95
Total	\$9,648	\$64	\$(15	)	\$9,697

Our fixed income and equity investments are classified as available for sale and recorded at their fair market values. At December 31, 2013, with the exception of our auction rate securities, the vast majority of our investments were priced by third-party pricing vendors. These pricing vendors utilize the most recent observable market information in pricing these securities or, if specific prices are not available for these securities, use other observable inputs like market transactions involving identical or comparable securities. In the event observable inputs are not available, we assess other factors to determine the security's market value, including broker quotes or model valuations. Each month, we perform independent price verifications of all of our fixed income holdings. In the event a price fails a pre-established tolerance check, it is researched so that we can assess the cause of the variance to determine what we believe is the appropriate fair market value.

For all of our securities where the amortized cost basis was greater than the fair value at December 31, 2013, we have concluded that currently we neither plan to sell the security nor is it more likely than not that we would be required to sell the security before its anticipated recovery. In making the determination as to whether the unrealized loss is other-than-temporary, we considered the length of time and extent the investment has been in an unrealized loss position, the financial condition and near-term prospects of the issuers, the issuers' credit rating, third party guarantees and the time to maturity.

Off-Balance Sheet Arrangements, Contractual Obligations, Contingent Liabilities and Commitments Contractual Obligations

We have various contractual obligations impacting our liquidity. The following represents our contractual obligations as of December 31, 2013 (in millions):

,	Payments Due By Period							
	Total	Less than 1 year	1-2 years*	3-4 years**	More than 4 years			
Operating leases	\$1,612	\$ 294	\$411	\$228	\$679			
Notes converted and payable	1,665	1,665	_	_				
Long-term debt	5,574	_	_	_	5,574			
Product warranty obligations	289		_					
Other long-term obligations, including								
notes payable and current portion of long-term obligations and post retirement	352	211	1	_	1			
obligations								
Purchase orders	2,548							
Uncertain tax positions and related interest	308							
Total	\$12,348	\$ 2,170	\$412	\$228	\$6,254			

<sup>\*</sup>Includes payments from January 1, 2015 through December 31, 2016.

<sup>\*\*</sup>Includes payments from January 1, 2017 through December 31, 2018.

As of December 31, 2013, we had \$289 million of product warranty obligations, \$139 million of long-term post retirement obligations, \$2,548 million of purchase orders and \$308 million of liabilities for uncertain tax positions. We are not able to provide

a reasonably reliable estimate of the timing of future payments relating to these obligations. The purchase orders are for manufacturing and non-manufacturing related goods and services. While the purchase orders are generally cancellable without penalty, certain vendor agreements provide for percentage-based cancellation fees or minimum restocking charges based on the nature of the product or service. Our operating leases are primarily for office space around the world. We believe leasing such space in most cases is more cost-effective than purchasing real estate. The notes converted and payable pertains to the 2013 Notes. As of December 31, 2013, the 2013 Notes had matured and a majority of the noteholders exercised their rights to convert the outstanding 2013 Notes. Due to the settlement terms, the majority of the converted 2013 Notes were not settled until January 7, 2014. At that time, we paid the noteholders \$1.665 billion in cash for the outstanding principal and 35 million shares for the \$858 million excess of the conversion value over the principal amount, as prescribed in the terms of the 2013 Notes. The long-term debt pertains to the \$5.5 billion aggregate principal amount of senior notes issued in June 2013.

We have no other off-balance sheet arrangements.

Guarantees and Indemnification Obligations

EMC's subsidiaries have entered into arrangements with financial institutions for such institutions to provide guarantees for rent, taxes, insurance, leases, performance bonds, bid bonds and customs duties aggregating \$159 million as of December 31, 2013. The guarantees vary in length of time. In connection with these arrangements, we have agreed to guarantee substantially all of the guarantees provided by these financial institutions. EMC and certain of its subsidiaries have also entered into arrangements with financial institutions in order to facilitate the management of currency risk. EMC has agreed to guarantee the obligations of its subsidiaries under these arrangements. We enter into agreements in the ordinary course of business with, among others, customers, resellers, joint ventures,

We enter into agreements in the ordinary course of business with, among others, customers, resellers, joint ventures, OEMs, systems integrators and distributors. Most of these agreements require us to indemnify the other party against third-party claims alleging that an EMC product infringes a patent and/or copyright. Certain agreements in which we grant limited licenses to specific EMC-trademarks require us to indemnify the other party against third-party claims alleging that the use of the licensed trademark infringes a third-party trademark. Certain of these agreements require us to indemnify the other party against certain claims relating to the loss or processing of data, to real or tangible personal property damage, personal injury or the acts or omissions of EMC, its employees, agents or representatives. In addition, from time to time, we have made certain guarantees regarding the performance of our systems to our customers. We have also made certain guarantees for obligations of affiliated third parties.

We have agreements with certain vendors, financial institutions, lessors and service providers pursuant to which we have agreed to indemnify the other party for specified matters, such as acts and omissions of EMC, its employees, agents or representatives.

We have procurement or license agreements with respect to technology that is used in our products and agreements in which we obtain rights to a product from an OEM. Under some of these agreements, we have agreed to indemnify the supplier for certain claims that may be brought against such party with respect to our acts or omissions relating to the supplied products or technologies.

We have agreed to indemnify the directors, executive officers and certain other officers of EMC and our subsidiaries, to the extent legally permissible, against all liabilities reasonably incurred in connection with any action in which such individual may be involved by reason of such individual being or having been a director or officer.

In connection with certain acquisitions, we have agreed to indemnify the current and former directors, officers and employees of the acquired company in accordance with the acquired company's by-laws and charter in effect immediately prior to the acquisition or in accordance with indemnification or similar agreements entered into by the acquired company and such persons. In a substantial majority of instances, we have maintained the acquired company's directors' and officers' insurance, which should enable us to recover a portion of any future amounts paid. These indemnities vary in length of time.

Based upon our historical experience and information known as of December 31, 2013, we believe our liability on the above guarantees and indemnities at December 31, 2013 is not material.

Pension

We have a noncontributory defined benefit pension plan that was assumed as part of the Data General acquisition, which covers substantially all former Data General employees located in the United States. This plan has been frozen

resulting in employees no longer accruing pension benefits for future services. The assets for this defined benefit plan are invested in common stocks and bonds. The market related value of the plan's assets is based upon the assets' fair value. The expected long-term rate of return on assets for the year ended December 31, 2013 remains at 6.75%. As market conditions permit, we expect to continue

to shift the asset allocation to lower the percentage of investments in equities and increase the percentage of investments in long-duration fixed-income securities.

The effect of such a change could result in a reduction to the long-term rate of return on plan assets and an increase in future pension expense. The actual long-term rate of return for the ten years ended December 31, 2013 was 6.85%. Based upon current market conditions, the expected long-term rate of return for 2014 will be 6.75%. A 25 basis point change in the expected long-term rate of return on the plans' assets would have approximately a \$1 million impact on the 2014 pension expense.

As of December 31, 2013, the pension plan had a \$164 million unrecognized actuarial loss that will be expensed over the average future working lifetime of active participants. For the year ended December 31, 2013, the discount rate to determine the benefit obligation was 4.66%. The discount rate selected was based on highly rated long-term bond indices and yield curves that match the duration of the plan's benefit obligations. The bond indices and yield curve analyses reflect high quality bond yields in effect at December 31, 2013. The discount rate reflects the rate at which the pension benefits could be effectively settled. A 25 basis point change in the discount rate would have approximately a \$1 million impact on the 2014 pension expense.

## **Critical Accounting Policies**

Our consolidated financial statements are based on the selection and application of generally accepted accounting principles which require us to make estimates and assumptions about future events that affect the amounts reported in our financial statements and the accompanying notes. Future events and their effects cannot be determined with certainty. Therefore, the determination of estimates requires the exercise of judgment. Actual results could differ from those estimates, and any such differences may be material to our financial statements. We believe that the areas set forth below may involve a higher degree of judgment and complexity in their application than our other accounting policies and represent the critical accounting policies used in the preparation of our financial statements. If different assumptions or conditions were to prevail, the results could be materially different from our reported results. Our significant accounting policies are presented within Note A to the consolidated financial statements.

### Revenue Recognition

The application of the appropriate guidance within the Accounting Standards Codification to our revenue is dependent upon the specific transaction and whether the sale or lease includes information systems, including hardware storage and hardware-related devices, software, including required storage operating systems and optional value-added software application programs, and services, including installation, professional, software and hardware maintenance and training, or a combination of these items. As our business evolves, the mix of products and services sold will impact the timing of when revenue and related costs are recognized. Additionally, revenue recognition involves judgments, including estimates of fair value and selling price in arrangements with multiples deliverables, assessments of expected returns and the likelihood of nonpayment. We analyze various factors, including a review of specific transactions, the credit-worthiness of our customers, our historical experience and market and economic conditions. Changes in judgments on these factors could materially impact the timing and amount of revenue and costs recognized. Should market or economic conditions deteriorate, our actual return experience could exceed our estimate. Warranty Costs

We accrue for systems warranty costs at the time of shipment. We estimate systems warranty costs based upon historical experience, specific identification of system requirements and projected costs to service items under warranty. While we engage in extensive product quality programs and processes, our warranty obligation is affected by product failure rates, material usage and service delivery costs. To the extent that our actual systems warranty costs differed from our estimates by 5 percent, consolidated pre-tax income would have increased/decreased by approximately \$14 million in 2013 and 2012.

### **Asset Valuation**

Asset valuation includes assessing the recorded value of certain assets, including accounts and notes receivable, investments, inventories, goodwill and other intangible assets. We use a variety of factors to assess valuation, depending upon the asset.

Accounts and notes receivable are evaluated based upon the credit-worthiness of our customers, our historical experience, the age of the receivable and current market and economic conditions. Should current market and

economic conditions deteriorate, our actual bad debt experience could exceed our estimate.

The market value of our short- and long-term investments is based primarily upon the listed price of the security. At December 31, 2013, with the exception of our auction rate securities, the vast majority of our investments were priced by pricing vendors. These pricing vendors utilize the most recent observable market information in pricing these securities or, if specific prices are not available for these securities, use other observable inputs such as market transactions involving identical or comparable

securities. In the event observable inputs are not available, we assess other factors to determine the security's market value, including broker quotes or model valuations. Each month, we perform independent price verifications of all of our fixed income holdings. In the event a price fails a pre-established tolerance check, it is researched so that we can assess the cause of the variance to determine what we believe is the appropriate fair market value. In the event the fair market values that we determine are not accurate or we are unable to liquidate our investments in a timely manner, we may not realize the recorded value of our investments. We hold investments whose market values are below our cost. The determination of whether unrealized losses on investments are other-than-temporary is based upon the type of investments held, market conditions, financial condition and near-term prospects of the issuers, the time to maturity, length of the impairment, magnitude of the impairment and ability and intent to hold the investment to maturity. Should current market and economic conditions deteriorate, our ability to recover the cost of our investments may be impaired.

The recoverability of inventories is based upon the types and our levels of inventory held, forecasted demand, pricing, competition and changes in technology. Should current market and economic conditions deteriorate, our actual recovery could be less than our estimate.

Other intangible assets are evaluated based upon the expected period the asset will be utilized, forecasted cash flows, changes in technology and customer demand. Changes in judgments on any of these factors could materially impact the value of the asset. We perform an assessment of the recoverability of goodwill, at least annually, in the fourth quarter of each year. Our assessment is performed at the reporting unit level which, for certain of our operating segments, is one step below our segment reporting level. We employ both qualitative and quantitative tests of our goodwill. For some of our reporting units, we performed a qualitative assessment on goodwill to determine whether a quantitative assessment was necessary and determined there were no indicators of potential impairment. For other reporting units we evaluated goodwill using a quantitative model. For all of our goodwill assessments we determined that there was sufficient market value above the carrying value of those reporting units so that we would not expect any near term changes in the operating results that would trigger an impairment. The determination of relevant comparable industry companies impacts our assessment of fair value. Should the operating performance of our reporting units change in comparison to these companies or should the valuation of these companies change, this could impact our assessment of the fair value of the reporting units. Our discounted cash flow analyses factor in assumptions on revenue and expense growth rates. These estimates are based upon our historical experience and projections of future activity, factoring in customer demand, changes in technology and a cost structure necessary to achieve the related revenues. Additionally, these discounted cash flow analyses factor in expected amounts of working capital and weighted average cost of capital. Changes in judgments on any of these factors could materially impact the value of the reporting unit.

## Restructuring Charges

We recognized restructuring charges in 2013, 2012, 2011 and prior years. The restructuring charges include, among other items, estimated employee termination benefit costs, subletting leased facilities and the cost of terminating various contracts. In addition, during 2013, VMware incurred impairment charges related to its business realignment. The amount of the actual obligations may be different than our estimates due to various factors, including market conditions, negotiations with third parties and finalization of severance agreements with employees. Should the actual amounts differ from our estimates, the amount of the restructuring charges could be materially impacted. Accounting for Income Taxes

As part of the process of preparing our financial statements, we are required to estimate our provision for income taxes in each of the jurisdictions in which we operate. This process involves estimating our actual current tax exposure, including assessing the risks associated with tax audits, together with assessing temporary differences resulting from the different treatment of items for tax and financial reporting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheets. We assess the likelihood that our deferred tax assets will be realized through future taxable income and record a valuation allowance to reduce gross deferred tax assets to an amount we believe is more likely than not to be realized. In the event that actual results differ from these estimates, our provision for income taxes could be materially impacted.

## Accounting for Stock-Based Compensation

For our share-based payment awards, we make estimates and assumptions to determine the underlying value of stock options, including volatility, expected life and forfeiture rates. Additionally, for awards which are performance-based, we make estimates as to the probability of the underlying performance being achieved. Changes to these estimates and assumptions may have a significant impact on the value and timing of stock-based compensation expense recognized, which could have a material impact on our consolidated financial statements.

## ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK Market Risk

We are exposed to market risk, primarily from changes in foreign exchange rates, interest rates and credit risk. To manage the volatility relating to foreign exchange risk, we enter into various derivative transactions pursuant to our policies to hedge against known or forecasted market exposures.

Foreign Exchange Risk Management

As a multinational corporation, we are exposed to changes in foreign exchange rates. Any foreign currency transaction, defined as a transaction denominated in a currency other than the U.S. dollar, will be reported in U.S. dollars at the applicable exchange rate. Assets and liabilities are translated into U.S. dollars at exchange rates in effect at the balance sheet date and income and expense items are translated using daily rates. The primary foreign currency denominated transactions include revenue and expenses with the related accounts receivable and accounts payable balances reflected on our balance sheet. Therefore, the change in the value of the U.S. dollar as compared to foreign currencies will have either a positive or negative effect on our financial position and results of operations. We enter into derivative contracts with the sole objective of decreasing the volatility of the impact of currency fluctuations. These exposures may change over time and could have a material adverse impact on our financial results. Historically, our primary exposure has related to sales denominated in the euro, the Japanese yen and the pound sterling. Additionally, we have exposure to emerging market economies, particularly in Latin America and Southeast Asia. We use foreign currency forward and option contracts to manage the risk of exchange rate fluctuations. In all cases, we use these derivative instruments to reduce our foreign exchange risk by essentially creating offsetting market exposures. The success of the hedging program depends on our forecasts of transaction activity in the various currencies. To the extent that these forecasts are overstated or understated during periods of currency volatility, we could experience unanticipated currency gains or losses. The instruments we hold are not leveraged and are not held for trading or speculative purposes.

We performed sensitivity analyses as of December 31, 2013, 2012 and 2011 based on scenarios in which market spot rates are hypothetically changed in order to produce a potential net exposure loss. The hypothetical change was based on a 10 percent strengthening or weakening in the U.S. dollar, whereby all other variables are held constant. The analyses include all of our foreign currency contracts outstanding as of December 31 for each year, as well as the offsetting underlying exposures. The sensitivity analyses indicated that a hypothetical 10 percent adverse movement in foreign currency exchange rates would result in a foreign exchange loss of \$12 million, \$19 million and \$31 million at December 31, 2013, 2012 and 2011, respectively.

## Interest Rate Risk

We maintain an investment portfolio consisting of debt and equity securities of various types and maturities. The investments are classified as available-for-sale and are all denominated in U.S. dollars. These securities are recorded on the consolidated balance sheets at market value, with any unrealized gain or temporary non-credit related loss recorded in other comprehensive loss. These instruments are not leveraged and are not held for trading purposes. We employ a Historical Value-At-Risk calculation to calculate value-at-risk for changes in interest rates for our combined investment portfolios. This model assumes that the relationships among market rates and prices that have been observed daily over the last 180 days are valid for estimating risk over the next trading day. This model measures the potential loss in fair value that could arise from changes in interest rates, using a 95% confidence level and assuming a one-day holding period. The value-at-risk on the debt portion of the investment portfolio was \$3 million as of December 31, 2013 and \$2 million as of December 31, 2012. The average, high and low value-at-risk amounts for 2013 and 2012 were as follows (in millions):

	Average	High	Low
2013	\$4	\$8	\$1
2012	\$3	\$6	\$2

The average value represents an average of the quarter-end values. The high and low valuations represent the highest and lowest values of the quarterly amounts.

Credit Risk

Financial instruments that potentially subject us to concentration of credit risk consist principally of bank deposits, money market investments, short- and long-term investments, accounts and notes receivable, and foreign currency exchange contracts. Deposits held with banks in the United States may exceed the amount of FDIC insurance provided on such deposits. Deposits held with banks outside the United States generally do not benefit from FDIC insurance. The majority of our day-to-day banking operations globally are maintained with Citibank. We believe that Citibank's position as a primary clearing bank, coupled with

the substantial monitoring of their daily liquidity, both by their internal processes and by the Federal Reserve and the FDIC, mitigate some of our risk.

Our money market investments are placed with money market funds that are 2a-7 qualified. Rule 2a-7, adopted by the SEC under the Investment Company Act of 1940, establishes strict standards for quality, diversity and maturity, the objective of which is to maintain a constant net asset value of a dollar. We limit our investments in money market funds to those that are primarily associated with large, money center financial institutions and limit our exposure to Prime funds. Our short- and long-term investments are invested primarily in investment grade securities, and we limit the amount of our investment in any single issuer and institution. Due to the European financial crisis, in the fourth quarter of 2011, we took steps to limit exposure to investments and financial institutions in this region. We provide credit to customers in the normal course of business. Credit is extended to new customers based upon checks of credit references, credit scores and industry reputation. Credit is extended to existing customers based on prior payment history and demonstrated financial stability. The credit risk associated with accounts and notes receivables is generally limited due to the large number of customers and their broad dispersion over many different industries and geographic areas. We establish an allowance for the estimated uncollectible portion of our accounts and notes receivable. The allowance was \$65 million and \$72 million at December 31, 2013 and 2012, respectively. We customarily sell the notes receivable we derive from our leasing activity. Generally, we do not retain any recourse on the sale of these notes. Our sales are generally dispersed to a large number of customers, minimizing the reliance on

The counterparties to our foreign currency exchange contracts consist of a number of major financial institutions. In addition to limiting the amount of contracts we enter into with any one party, we monitor the credit quality of the counterparties on an ongoing basis.

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any particular customer or group of customers.

ITEM 8	. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	
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Note:	All other financial statement schedules are omitted because they are not applicable or the required information is included in the consolidated financial statements or notes thereto.	l
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#### MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of EMC is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) or 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, the company's principal executive and principal financial officers and effected by the company's board of directors, management and other personnel, 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 in the United States of America and includes those policies and procedures that:

Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the company;

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 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.

EMC's management assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2013. In making this assessment, EMC's management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (1992). Based on our assessment, EMC's management determined that, as of December 31, 2013, EMC's internal control over financial reporting is effective and operating at the reasonable assurance level based on those criteria. PricewaterhouseCoopers LLP, an independent registered public accounting firm, has audited the effectiveness of our internal control over financial reporting as stated in their report which appears on page 52 of this Annual Report on Form 10-K.

Report of Independent Registered Public Accounting Firm To the Shareholders and the Board of Directors of EMC Corporation

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of EMC Corporation and its subsidiaries at December 31, 2013 and December 31, 2012 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013 based on criteria established in Internal Control – Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, 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 8. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. 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.

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.

/s/ PricewaterhouseCoopers LLP Boston, Massachusetts February 25, 2014

## EMC CORPORATION

## CONSOLIDATED BALANCE SHEETS

(in millions, except per share amounts)

	December	per 31,			
	2013	2012			
ASSETS					
Current assets:					
Cash and cash equivalents	\$7,891	\$4,714			
Short-term investments	2,773	1,422			
Accounts and notes receivable, less allowance for doubtful accounts of \$62 and \$68	3,861	3,433			
Inventories	1,334	1,201			
Deferred income taxes	912	784			
Other current assets	507	465			
Total current assets	17,278	12,019			
Long-term investments	6,924	5,260			
Property, plant and equipment, net	3,478	3,145			
Intangible assets, net	1,780	2,035			
Goodwill	14,424	13,840			
Other assets, net	1,965	1,663			
Total assets	\$45,849	\$37,962			
LIABILITIES AND SHAREHOLDERS' EQUITY					
Current liabilities:					
Accounts payable	\$1,434	\$1,041			
Accrued expenses	2,783	2,492			
Notes converted and payable	1,665				
Income taxes payable	639	514			
Convertible debt		1,652			
Deferred revenue	5,278	4,575			
Total current liabilities	11,799	10,274			
Income taxes payable	296	293			
Deferred revenue	3,701	2,976			
Deferred income taxes	421	468			
Long-term debt	5,494				
Other liabilities	352	369			
Total liabilities	22,063	14,380			
Convertible debt (See Note E)		58			
Commitments and contingencies (See Note N)					
Shareholders' equity:					
Preferred stock, par value \$0.01; authorized 25 shares; none outstanding					
Common stock, par value \$0.01; authorized 6,000 shares; issued and outstanding 2,020 and	20	21			
2,107 shares	20	21			
Additional paid-in capital	1,406	3,691			
Retained earnings	21,114	18,853			
Accumulated other comprehensive income (loss), net	(239)	(208)			
Total EMC Corporation's shareholders' equity	22,301	22,357			
Non-controlling interests	1,485	1,167			
Total shareholders' equity	23,786	23,524			
Total liabilities and shareholders' equity	\$45,849	\$37,962			

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

## EMC CORPORATION CONSOLIDATED INCOME STATEMENTS

(in millions, except per share amounts)

	For the					
	Year Ended	d Dec	cember 3	1,		
	2013		012		2011	
Revenues:						
Product sales	\$13,690	\$	13,061		\$12,591	
Services	9,532	8,	,653		7,417	
	23,222	2	1,714		20,008	
Costs and expenses:						
Cost of product sales	5,650	5,	,259		5,320	
Cost of services	3,099	2,	,817		2,519	
Research and development	2,761	2,	,560		2,151	
Selling, general and administrative	7,338	7,	,004		6,479	
Restructuring and acquisition-related charges	224	1	10		97	
Operating income	4,150	3,	,964		3,442	
Non-operating income (expense):						
Investment income	128	1	15		129	
Interest expense	(156	) (7	79	)	(170	)
Other income (expense), net	(257	) (1	196	)	(152	)
Total non-operating income (expense)	(285	) (1	160	)	(193	)
Income before provision for income taxes	3,865	3,	,804		3,249	
Income tax provision	772	9	18		640	
Net income	3,093	2,	,886		2,609	
Less: Net income attributable to the non-controlling interest in VMware,	(204	) (1	152	`	(148	`
Inc.	(204	) (1	133	,	(140	)
Net income attributable to EMC Corporation	\$2,889	\$	2,733		\$2,461	
Net income per weighted average share, basic attributable to EMC	\$1.39	•	1.31		\$1.20	
Corporation common shareholders	Φ1.39	φ	1.31		φ1.20	
Net income per weighted average share, diluted attributable to EMC	\$1.33	•	1.23		\$1.10	
Corporation common shareholders	φ1.33	φ	1.23		φ1.10	
Weighted average shares, basic	2,074	2,	,093		2,056	
Weighted average shares, diluted	2,160	2,	,206		2,229	
Cash dividends declared per common share	\$0.30	\$	_		<b>\$</b> —	
The accompanying notes are an integral part of the consolidated financial s	statements.					

# EMC CORPORATION CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (in millions)

	For the Year End	ded ]	December	31,		
	2013		2012		2011	
Net income	\$3,093		\$2,886		\$2,609	
Other comprehensive income (loss), net of taxes (benefits):						
Foreign currency translation adjustments	(44	)	2		(4	)
Changes in market value of investments:						
Changes in unrealized gains (losses), net of taxes (benefits) of \$(13), \$31 and \$(11)	(22	)	53		(21	)
Reclassification adjustment for net losses (gains) realized in net income, net of benefits (taxes) of \$(6), \$(4) and \$(4)	of (11	)	(5	)	(5	)
Net change in market value of investments	(33	)	48		(26	)
Changes in market value of derivatives:		•			`	ĺ
Changes in market value of derivatives, net of taxes (benefits) of \$3, \$(20) an \$(58)	<sup>d</sup> 13		(36	)	(91	)
Reclassification adjustment for net losses (gains) included in net income, net of benefits (taxes) of \$(2), \$15 and \$0	(10	)	28		(3	)
Net change in the market value of derivatives	3		(8	)	(94	)
Recognition of actuarial net gain (loss) from pension and other postretirement plan, net of taxes (benefits) of \$26, \$(5) and \$(11)	43		(14	)	(22	)
Other comprehensive income (loss)	(31	)	28		(146	)
Comprehensive income	3,062		2,914		2,463	
Less: Net income attributable to the non-controlling interest in VMware, Inc.	(204	)	(153	)	(148	)
Less: Other comprehensive income (loss) attributable to the non-controlling interest in VMware, Inc.	_		(2	)	4	
Comprehensive income attributable to EMC Corporation	\$2,858		\$2,759		\$2,319	
The accompanying notes are an integral part of the consolidated financial stat	ements.					
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# EMC CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS (in millions)

	For the Year Ended December 31					
	2013		2012		2011	
Cash flows from operating activities:						
Cash received from customers	\$24,319		\$22,585		\$21,145	
Cash paid to suppliers and employees	(16,708	)	(16,019	)	(15,219	)
Dividends and interest received	169		103		136	
Interest paid	(96	)	(33	)	(70	)
Income taxes paid	(761	)	(374	)	(323	)
Net cash provided by operating activities	6,923		6,262		5,669	
Cash flows from investing activities:						
Additions to property, plant and equipment	(943	)	(819	)	(801	)
Capitalized software development costs	(465	)	(419	)	(442	)
Purchases of short- and long-term available-for-sale securities	(11,250	)	(6,347	)	(7,180	)
Sales of short- and long-term available-for-sale securities	5,292		4,983		5,121	ŕ
Maturities of short- and long-term available-for-sale securities	2,845		1,049		1,130	
Business acquisitions, net of cash acquired	(770	)	(2,136	)	(537	)
Purchases of strategic and other related investments	(131	)	(117	)	(329	)
Sales of strategic and other related investments	35		70		30	
Joint venture funding	(411	)	(228	)	(383	)
Proceeds from divestiture of business	38	,	58		_	,
Purchase of leasehold interest	_		_		(151	)
Net cash used in investing activities	(5,760	)	(3,906	)	(3,542	)
Cash flows from financing activities:	(- )	,	(- )		(- )-	,
Proceeds from the issuance of EMC's common stock	342		560		673	
Proceeds from the issuance of VMware's common stock	197		253		338	
EMC repurchase of EMC's common stock	(3,015	)	(685	)	(2,000	)
EMC purchase of VMware's common stock	(160	)	(290	)	(400	)
VMware repurchase of VMware's common stock	(508	)	(468	)	(526	)
Excess tax benefits from stock-based compensation	116	ĺ	261		362	
Payment of long-term and short-term obligations	(46	)	(1,715	)	(28	)
Proceeds from the issuance of long-term and short-term obligations	5,460	ĺ	5		3	
Interest rate contract settlement	_		(70	)	(141	)
Dividend payment	(415	)	<del></del>	-	<u> </u>	-
Third party contribution to Pivotal	105		_		_	
Net cash provided by (used in) financing activities	2,076		(2,149	)	(1,719	)
Effect of exchange rate changes on cash and cash equivalents	(62	)	15	-	6	
Net increase in cash and cash equivalents	3,177		222		414	
Cash and cash equivalents at beginning of period	4,714		4,492		4,078	
Cash and cash equivalents at end of period	\$7,891		\$4,714		\$4,492	
Reconciliation of net income to net cash provided by operating activities:						
Net income	\$3,093		\$2,886		\$2,609	
Adjustments to reconcile net income to net cash provided by operating						
activities:						
Depreciation and amortization	1,665		1,528		1,422	
Non-cash interest expense on debt	62		46		103	
Non-cash restructuring and other special charges	8		13		(1	)

935	895	823	
(1	) 39	20	
(202	) (118	) (19	)
(116	) (261	) (362	)
	(32	) —	
40	22	3	
(377	) (535	) (392	)
(408	) (459	) (393	)
269	174	(62	)
380	89	35	
(162	) (94	) 5	
222	661	337	
	(1 (202 (116 — 40 (377 (408 269 380 (162	(1 ) 39 (202 ) (118 (116 ) (261 — (32 40 22 (377 ) (535 (408 ) (459 269 174 380 89 (162 ) (94	(1       ) 39       20         (202       ) (118       ) (19         (116       ) (261       ) (362         —       (32       ) —         40       22       3         (377       ) (535       ) (392         (408       ) (459       ) (393         269       174       (62         380       89       35         (162       ) (94       ) 5

# EMC CORPORATION CONSOLIDATED STATEMENTS OF CASH FLOWS (in millions)

	For the Year Ended December 31,					
	2013	2012	2011			
Deferred revenue	1,475	1,367	1,509			
Other liabilities	40	41	32			
Net cash provided by operating activities	\$6,923	\$6,262	\$5,669			
Non-cash investing and financing activity:						
Issuance of common stock and stock options exchanged in business acquisitions	\$1	\$24	\$3			
Investment in joint venture	<b>\$</b> —	\$33	\$			
Dividends declared	\$213	<b>\$</b> —	\$			

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

# EMC CORPORATION CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (in millions)

(III IIIIIIIOIIS)								
	Commo	n Stock	Additional	D. J. I.	Accumulated	Non-controlli	ng <sub>cı</sub>	
	Shares	Par Value	Paid-in Capital	Retained	Other Comprehensiv Loss	Interest in VMware	Equity Equity	rs
Balance, January 1, 2011	2,070	\$21	\$4,284	\$13,659	\$(93)	\$ 763	\$18,634	
Stock issued through stock option and stock purchase plans	52	_	673		_	_	673	
Tax benefit from stock options exercised	_	_	383	_	_	_	383	
Restricted stock grants, cancellations and withholdings, net	10	_	(120 )	_	_	_	(120	)
Repurchase of common stock	(82	) —	(2,000 )				(2,000	)
EMC purchase of VMware stock	_	_	(355)	_	_	(45)	(400	)
Stock options issued in business acquisitions	_	_	3	_	_	_	3	
Stock-based compensation			838	_			838	
Impact from equity transactions of VMware, Inc.	_	_	(417)	_	_	107	(310	)
Actuarial loss on pension plan, net of tax benefit of \$11	_	_	_	_	(22 )	_	(22	)
Change in market value of investments	_	_	_	_	(22 )	(4)	(26	)
Change in market value of derivatives	_	_	_	_	(94)	_	(94	)
Translation adjustment Reclassification of	_	_	_	_	(4)	_	(4	)
convertible debt (to)/from mezzanine (Note E)	_	_	116	_	_	_	116	
Net income	_		_	2,461		148	2,609	
Balance, December 31, 2011 Stock issued through stock	2,050	21	3,405	16,120	(235)	969	20,280	
option and stock purchase plans	42	_	560	_	_	_	560	
Tax benefit from stock options exercised		_	267	_	_	_	267	
Restricted stock grants, cancellations and	11	_	(126 )	_	_	_	(126	)
withholdings, net Repurchase of common stock	(27	) —	(700 )	_		_	(700	)
EMC purchase of VMware stock	_		(258)		_	(42)	(300	)
Stock options issued in business acquisitions	_	_	20	_	_	_	20	

Stock-based compensation	_	_	898	_	_	_	898	
Impact from equity transactions of VMware, Inc.	_	_	(436)	_	_	86	(350	)
Actuarial loss on pension plan, net of tax benefit of \$5	_	_	_	_	(14	) —	(14	)
Change in market value of investments	_		_	_	47	1	48	
Change in market value of derivatives	_	_	_	_	(8	) —	(8	)
Translation adjustment	_	_	_		2		2	
Convertible debt conversions and warrant settlement	31		(1)	_		_	(1	)
Reclassification of convertible debt (to)/from mezzanine (Note E)	_	_	62	_	_	_	62	
Net income				2,733		153	2,886	
Balance, December 31, 2012 Stock issued through stock	2,107	21	3,691	18,853	(208	) 1,167	23,524	
option and stock purchase plans	24	_	342	_	_	_	342	
Tax benefit from stock options exercised	_	_	90	_	_	_	90	
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	Common Stock			Additional		Accumulated	Non-controlling		2		
	Shares	Par Value		Paid-in Capital		Retained Earnings	Other Comprehensiv Loss	e Interest in VMware		Shareholde Equity	ers'
Restricted stock grants,											
cancellations and	11	_		(126	)	_	_	_		(126	)
withholdings, net											
Repurchase of common stoc	k(122)	(1	)	(2,999	)	—				(3,000	)
EMC purchase of VMware stock	_	_		(124	)	_	_	(26)		(150	)
Stock options issued in business acquisitions				1		_	_	_		1	
Stock-based compensation				946			_	_		946	
Cash dividends declared	_			_		(628)				(628	)
Impact from equity transactions of VMware, Inc.	<del>.</del> —			(473	)	_	_	140		(333	)
Actuarial gain on pension plan, net of tax of \$26	_			_		_	43			43	
Change in market value of investments				_		_	(33)	_		(33	)
Change in market value of derivatives	_	_		_		_	3			3	
Translation adjustment Reclassification of	_	_		_		_	(44 )	_		(44	)
convertible debt (to)/from mezzanine (Note E)	_	_		58		_	_	_		58	
Net income Balance, December 31, 2013		<del>-</del> \$20		 \$1,406		2,889 \$21,114	- \$(239 )	204 \$ 1,485		3,093 \$23,786	

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

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

## A. Summary of Significant Accounting Policies

#### Company

EMC Corporation ("EMC") and its subsidiaries develop, deliver and support the information technology ("IT") industry's broadest range of information infrastructure and virtual infrastructure technologies, solutions and services. EMC manages the Company as part of a federation of three businesses: EMC Information Infrastructure, VMware Virtual Infrastructure and Pivotal.

EMC's Information Infrastructure business provides a foundation for organizations to store, manage, protect, analyze and secure ever-increasing quantities of information, while at the same time improving business agility, lower cost, and enhancing competitive advantage. These benefits are primarily achieved though virtualization. EMC's Information Infrastructure business comprises three segments – Information Storage, RSA Information Security and Information Intelligence Group.

EMC's VMware Virtual Infrastructure business, which is represented by EMC's majority equity stake in VMware, Inc. ("VMware"), is the leader in virtualization infrastructure solutions utilized by organizations to help them transform the way they build, deliver and consume IT resources. VMware's virtualization infrastructure solutions, which include a suite of products designed to deliver a software-defined data center, run on industry-standard desktop computers and servers and support a wide range of operating system and application environments, as well as networking and storage infrastructures.

EMC's Pivotal business ("Pivotal") was formed in the second quarter of 2013. Pivotal unites strategic technology, people and programs formerly within EMC and VMware, including Greenplum, Cloud Foundry, Spring, Cetas, Pivotal Labs, GemFire and other products. Pivotal is building a new platform comprising next-generation data fabrics, application fabrics and a cloud independent PaaS.

### **Accounting Principles**

The financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

## Principles of Consolidation

These consolidated financial statements include the accounts of EMC, its wholly-owned subsidiaries, and Pivotal and VMware, companies which are majority-owned by EMC. All intercompany transactions have been eliminated. EMC's interest in VMware was approximately 80% at both December 31, 2013 and 2012. VMware's financial results have been consolidated with that of EMC for all periods presented as EMC is VMware's controlling stockholder. The portion of the results of operations of VMware allocable to its other owners is shown as net income attributable to the non-controlling interest in VMware, Inc. on EMC's consolidated income statements. Additionally, the cumulative portion of the results of operations of VMware allocable to its other owners, along with the interest in the net assets of VMware attributable to those other owners, is shown as a component of non-controlling interests on EMC's consolidated balance sheets and as a reduction of net income attributable to EMC shareholders.

EMC's economic interest in Pivotal was approximately 84% at December 31, 2013. Pivotal's financial results have been consolidated with that of EMC for all periods presented. The non-controlling interests' share of equity in Pivotal is reflected as a component of the non-controlling interests in EMC's consolidated balance sheets and as a reduction of net income attributable to EMC shareholders. Because the non-controlling interest in Pivotal is in the form of a preferred equity instrument, there is no net income attributable to non-controlling interest related to Pivotal on EMC's consolidated income statements.

### Use of Accounting Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, the reported amounts of revenues and expenses during the reporting period and the disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

### Revenue Recognition

We derive revenue from sales of information systems, software and services. We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable and collectability is reasonably assured. This policy is applicable to all sales, including sales to resellers and end users. Delivery is achieved when our product has been physically shipped or made available by electronic delivery and the risk of loss has been transferred which, for most of our product sales, occurs upon shipment. The following summarizes the major terms of our contractual relationships with our customers and the manner in which we account for sales transactions.

## Systems sales

Systems sales consist of the sale of storage hardware, required system software and other hardware-related devices. Revenue for systems sales is generally recognized upon shipment.

#### Software sales

Software sales consist of the sale of optional, stand-alone software applications. Our software applications provide customers with resource management, backup and archiving, information security, information management and intelligence, data analytics and server virtualization capabilities. Revenue for software is generally recognized upon shipment or electronic delivery. License revenue from royalty payments is recognized upon either receipt of royalty reports or payments from third parties.

#### Services revenue

Services revenue consists of installation services, professional services, software maintenance, hardware maintenance, software as a service subscriptions and training.

We recognize revenue from fixed-price support or maintenance contracts sold for both hardware and software, including extended warranty contracts, ratably over the contract period and recognize the costs associated with these contracts as incurred. Generally, installation and professional services are not considered essential to the functionality of our products as these services do not alter the product capabilities and may be performed by our customers or other vendors. Installation services revenues are recognized as the services are being performed. Professional services revenues on engagements for which reasonably dependable estimates of progress toward completion are capable of being made are recognized using the proportional performance method, which recognizes revenue based on labor costs incurred in proportion to total expected labor costs to perform the service. Where services are considered essential to the functionality of our products, revenue for the products and services is recorded over the service period. Professional services engagements that are on a time and materials basis are recognized based upon the labor costs incurred. Revenues on all other professional services engagements are recognized upon completion.

#### Multiple element arrangements

When more than one element, such as hardware, software and services are contained in a single arrangement, we first allocate revenue based upon the relative selling price into two categories: (1) non-software components, such as hardware and any hardware-related items, such as required system software that functions with the hardware to deliver the essential functionality of the hardware and related post-contract customer support, software as a service subscriptions and other services and (2) software components, such as optional software applications and related items, such as post-contract customer support and other services. We then allocate revenue within the non-software category to each element based upon their relative selling price using estimated selling prices ("ESP") if vendor-specific objective evidence ("VSOE") or third-party evidence of selling price ("TPE") does not exist. We allocate revenue within

the software category to the undelivered elements based upon their fair value using VSOE with the residual revenue allocated to the delivered elements. If we cannot objectively determine the VSOE of the fair value of any undelivered software element, we defer revenue until all elements are delivered and services have been performed, or until fair value can objectively be determined for any remaining undelivered elements.

We allocate the amount of revenue recognition for delivered elements to the amount that is not subject to forfeiture or refund or contingent on the future delivery of products or services.

Customers under software maintenance agreements are entitled to receive updates and upgrades on a when-and-if-available basis, and various types of technical support based on the level of support purchased. In the event specific features, functionality, entitlements, or the release version of an upgrade or new product have been announced but not delivered, and customers will receive that upgrade or new product as part of a current software maintenance contract, a specified upgrade is deemed created and

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

product revenues are deferred on purchases made after the announcement date until delivery of the upgrade or new product. The amount and elements to be deferred are dependent on whether we have established VSOE of fair value for the upgrade or new product.

#### Indirect channel sales

We market and sell our products through our direct sales force and indirect channels such as independent distributors and value-added resellers. For substantially all of our indirect sales, we recognize revenues on products sold to resellers and distributors on a sell through basis. These product sales are evidenced by a master distribution agreement, together with evidence of an end-user arrangement, on a transaction-by-transaction basis.

We offer rebates to certain channel partners. We generally recognize the amount of the rebates as a reduction of revenues when the underlying revenue is recognized. We also offer marketing development funds to certain channel partners. We generally record the amount of the marketing development funds, based on the maximum potential liability, as a marketing expense as the funds are earned by the channel partners.

#### Shipping terms

Our sales contracts generally provide for the customer to accept risk of loss when the product leaves our facilities. When shipping terms or local laws do not allow for passage of risk of loss at shipping point, we defer recognizing revenue until risk of loss transfers to the customer.

#### Leases

Revenue from sales-type leases is recognized at the net present value of future lease payments. Revenue from operating leases is recognized over the lease period.

#### Other

We accrue for the estimated costs of systems' warranty at the time of sale. We reduce revenue for estimated sales returns at the time of sale. Systems' warranty costs are estimated based upon our historical experience and specific identification of systems' requirements. Sales returns are estimated based upon our historical experience and specific identification of probable returns.

#### Deferred Revenue

Our deferred revenue consists primarily of deferred hardware and software maintenance and unearned license fees, which are recognized ratably over the contract term as either product or services revenue depending on the nature of the item, and deferred professional services, including education and training, which are recognized in services revenue as the services are provided.

#### Shipping and Handling Costs

Shipping and handling costs are classified in cost of product sales.

#### Foreign Currency Translation

The local currency is the functional currency of the majority of our subsidiaries. Assets and liabilities are translated into U.S. dollars at exchange rates in effect at the balance sheet date. Income and expense items are translated at daily rates.

Gains and losses from foreign currency transactions are included in other income (expense), net, and consist of net losses of \$2 million in 2013, \$16 million in 2012 and \$13 million in 2011. Foreign currency translation adjustments are included in other comprehensive income (loss).

#### Derivatives

We use derivatives to hedge foreign currency exposures related to foreign currency denominated assets and liabilities and forecasted revenue and expense transactions.

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

We hedge our exposure in foreign currency denominated monetary assets and liabilities with foreign currency forward and option contracts. Since these derivatives hedge existing exposures that are denominated in foreign currencies, the contracts do not qualify for hedge accounting. Accordingly, these outstanding non-designated derivatives are recognized on the consolidated balance sheet at fair value and the changes in fair value from these contracts are recorded in other income (expense), net, in the consolidated income statements. These derivative contracts mature in less than one year.

We also use foreign currency forward and option contracts to hedge our exposure on a portion of our forecasted revenue and expense transactions. These derivatives are designated as cash flow hedges. We did not have any derivatives designated as fair value hedges as of December 31, 2013. All outstanding cash flow hedges are recognized on the consolidated balance sheets at fair value with changes in their fair value recorded in accumulated other comprehensive income (loss) until the underlying forecasted transactions occur. To achieve hedge accounting, certain criteria must be met, which includes (i) ensuring at the inception of the hedge that formal documentation exists for both the hedging relationship and the entity's risk management objective and strategy for undertaking the hedge, and (ii) at the inception of the hedge and on an ongoing basis, the hedging relationship is expected to be highly effective in achieving offsetting changes in fair value attributed to the hedged risk during the period that the hedge is designated. Further, an assessment of effectiveness is required at a minimum on a quarterly basis. Absent meeting these criteria, changes in fair value are recognized currently in other expense, net, in the consolidated income statements. Once the underlying forecasted transaction occurs, the gain or loss from the derivative designated as a hedge of the transaction is reclassified from accumulated other comprehensive income (loss) to the consolidated income statements, in the related revenue or expense caption, as appropriate. In the event the underlying forecasted transaction does not occur, the amount recorded in accumulated other comprehensive income (loss) will be reclassified to other income (expense), net, in the consolidated income statements in the then-current period. Any ineffective portion of the derivatives designated as cash flow hedges is recognized in current earnings. The ineffective portion of the derivatives includes gains or losses associated with differences between actual and forecasted amounts. Our cash flow hedges generally mature within six months or less. The notional amount of cash flow hedges outstanding as of December 31, 2013, 2012 and 2011 were \$384 million, \$201 million and \$194 million, respectively.

We do not engage in currency speculation. For purposes of presentation within the consolidated statement of cash flows, derivative gains and losses are presented within net cash provided by operating activities.

In 2010, EMC entered into interest rate swap contracts with an aggregate notional amount of approximately \$900 million. These swaps were designated as cash flow hedges of the semi-annual interest payments of the forecasted issuance of debt in 2011 when our \$1.725 billion 1.75% convertible senior notes due 2011 (the "2011 Notes") were scheduled to become due. As such, the unrealized loss on these hedges was recognized in other comprehensive loss. In November 2011, we settled the swaps and replaced them with new interest rate swap contracts for the forecasted issuance of debt in 2012. In April 2012, we settled the swaps and replaced them with new interest rate swap contracts for the forecasted issuance of debt in 2012. Each of these new swaps was deemed as an effective hedge as the notional amounts and other terms matched the underlying hedged item. Losses on the interest rate swap contracts at the time of settlement of \$141 million in November 2011 and \$23 million in April 2012 were deferred as they were expected to be realized over the life of the new debt issued under the related interest rate swap contracts and recognized as a component of interest expense in the consolidated income statements.

In June 2012, management changed its forecast date for the issuance of debt from December 31, 2012 to the first quarter of 2014. Consequently, hedge accounting effectively ceased as the terms of the swaps no longer matched the terms of the underlying hedged item resulting in changes in the fair value of the swaps being recorded in the consolidated income statement. The swaps were subsequently re-designated as cash flow hedges and achieved hedge

accounting. The change in the forecasted timeframe for the issuance of debt resulted in certain previously anticipated hedge interest payments no longer being expected to occur within the window covered by the hedge designation. As a result, \$40 million of accumulated realized losses in other comprehensive income related to these previously-anticipated interest payments was reclassified from other comprehensive income and recognized as a component of other income (expense), net in the 2012 consolidated income statements.

In July 2012, we settled the interest rate swap contracts and did not replace them. Losses on the interest rate swap contracts at the time of settlement of \$46 million were deferred as they were expected to be realized over the life of the new debt issued under the related interest rate swap contracts and recognized as a component of interest expense in the consolidated income statements.

At December 31, 2013, we had \$176 million of accumulated realized losses related to the settled swaps in accumulated other comprehensive income which will be realized during the life of our ten year senior notes issued in June 2013. These losses will be reclassified from other comprehensive income and recognized on a straight-line basis in the consolidated income statements as interest expense beginning in the third quarter of 2014.

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Our derivatives and their related activities are not material to our consolidated balance sheets or consolidated income statements.

#### Cash and Cash Equivalents

Cash and cash equivalents include highly liquid investments with a maturity of ninety days or less at the time of purchase. Cash equivalents consist primarily of money market securities, U.S. treasury bills, U.S. agency discount notes and commercial paper. Cash equivalents are stated at fair value. See Note F.

#### Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts for the estimated probable losses on uncollectible accounts and notes receivable. The allowance is based upon the creditworthiness of our customers, our historical experience, the age of the receivable and current market and economic conditions. Uncollectible amounts are charged against the allowance account. The allowance for doubtful accounts is maintained against both our current and non-current accounts and notes receivable balances. The balances in the allowance accounts at December 31, 2013 and 2012 were as follows (table in millions):

	December 31	ļ.,
	2013	2012
Current	\$62	\$68
Non-current (included in other assets, net)	3	4
	\$65	\$72

#### Investments

Unrealized gains and temporary loss positions on investments classified as available-for-sale are included within accumulated other comprehensive income (loss), net of any related tax effect. Upon realization, those amounts are reclassified from accumulated other comprehensive income (loss) to investment income. Realized gains and losses and other-than-temporary impairments are reflected in the consolidated income statement in investment income. For investments accounted for utilizing the fair value option, changes to fair value are recognized in the consolidated income statement in non-operating other income (expense), net.

#### Inventories

Inventories are stated at the lower of cost (first-in, first-out) or market, not in excess of net realizable value.

#### Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Buildings under development are included in building construction in progress. Depreciation commences upon placing the asset in service and is recognized on a straight-line basis over the estimated useful lives of the assets, as follows:

Furniture and fixtures	5-10 years
Equipment and software	2-10 years
Improvements	5-31 years
Buildings	15-51 years

Upon retirement or disposition, the asset cost and related accumulated depreciation are removed with any gain or loss recognized in the consolidated income statements. Repair and maintenance costs, including planned maintenance, are expensed as incurred.

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

#### Research and Development and Capitalized Software Development Costs

Research and development ("R&D") costs are expensed as incurred. R&D costs include salaries and benefits, stock-based compensation, consultants, facilities related costs, material costs, depreciation and travel. Material software development costs incurred subsequent to establishing technological feasibility through the general release of the software products are capitalized. Technological feasibility is demonstrated by the completion of a detailed program design or working model, if no program design is completed. GAAP requires that annual amortization expense of the capitalized software development costs be the greater of the amounts computed using the ratio of gross revenue to a products' total current and anticipated revenues, or the straight-line method over the products' remaining estimated economic life. Capitalized costs are amortized over periods ranging from eighteen months to two years which represents the products' estimated economic life.

Following the release of vSphere 5 and the comprehensive suite of cloud infrastructure technologies in the third quarter of 2011, VMware determined that its go-to-market strategy had changed from single solutions to product suite solutions. As a result of this change in strategy, and the related increased importance of interoperability between VMware's products, the length of time between achieving technological feasibility and general release to customers significantly decreased. For future releases, VMware expects its products to be available for general release soon after technological feasibility has been established. Given that the majority of VMware's product offerings are expected to be suites or to have key components that interoperate with VMware's other product offerings, the costs incurred subsequent to achievement of technological feasibility were not material in 2013 and 2012, and are expected to be immaterial in future periods. As of December 31, 2013, all of VMware's previously capitalized software development costs had been fully amortized.

Unamortized software development costs were \$762 million and \$703 million at December 31, 2013 and 2012, respectively, and are included in other assets, net. Amortization expense was \$427 million, \$398 million and \$380 million in 2013, 2012 and 2011, respectively. Amounts capitalized were \$487 million, \$432 million and \$480 million in 2013, 2012 and 2011, respectively. The amounts capitalized include stock-based compensation which is not reflected in the consolidated statements of cash flows as it is a non-cash item.

#### Long-lived Assets

Purchased intangible assets, other than goodwill, are amortized over their estimated useful lives which range from one to nineteen years. Intangible assets include goodwill, developed technology, trademarks and tradenames, customer relationships and customer lists, software licenses, patents, leasehold interest, in-process research and development ("IPR&D") and other intangible assets, which include backlog, non-competition agreements and non-solicitation agreements. The intangible assets are amortized based on the pattern in which the economic benefits of the intangible assets are estimated to be realized. Goodwill is not amortized and is carried at its historical cost.

We periodically review our long-lived assets for impairment. We initiate reviews for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test, other than goodwill, is based on a comparison of the undiscounted cash flows to the recorded value of the asset. If an impairment is indicated, the asset is written down to its estimated fair value.

We test goodwill for impairment in the fourth quarter of each year or more frequently if events or changes in circumstances indicate that the asset might be impaired. The test is based on a comparison of the reporting unit's book value to its estimated fair market value. We perform both qualitative and quantitative tests of our goodwill.

#### **Investments in Joint Ventures**

We make investments in joint ventures. For each joint venture investment we consider the facts and circumstances in order to determine whether it qualifies for cost, equity or fair value method accounting or whether it should be consolidated.

In 2009, Cisco and EMC formed VCE Company LLC ("VCE"), with investments from VMware and Intel. VCE, through Vblock infrastructure platforms, delivers an integrated IT offering that combines network, computing, storage, management, security and virtualization technologies for converged infrastructures and cloud based computing models.

We consider VCE a variable interest entity. Authoritative guidance related to variable interest entities states that the primary beneficiary of a variable interest entity must have both of the following characteristics: (a) the power to direct the activities of a variable interest entity that most significantly will impact the entity's economic performance; and (b) the obligation to absorb

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

losses that could be potentially significant to the variable interest entity or the right to receive benefits from the entity that could potentially be significant to the variable interest entity. Since the power to direct the activities of VCE which most significantly impact its economic performance are determined by its board of directors, which is comprised of equal representation of EMC and Cisco, and all significant decisions require the approval of the minority shareholders, we have determined we are not the primary beneficiary, and as such we account for the investment under the equity method with our portion of the gains and losses recognized in other expense, net in the consolidated income statements.

#### Advertising

Advertising costs are expensed as incurred. Advertising expense was \$23 million, \$30 million and \$44 million in 2013, 2012 and 2011, respectively.

#### Legal Costs

Legal costs incurred in connection with loss contingencies are recognized when the costs are probable of occurrence and can be reasonably estimated.

#### **Income Taxes**

Deferred tax liabilities and assets are recognized for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax liabilities and assets are determined based on the difference between the tax basis of assets and liabilities and their reported amounts using enacted tax rates in effect for the year in which the differences are expected to reverse. Tax credits are generally recognized as reductions of income tax provisions in the year in which the credits arise. The measurement of deferred tax assets is reduced by a valuation allowance if, based upon available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

Accounting for uncertainty in income taxes recognized in the financial statements is in accordance with accounting authoritative guidance, which prescribes a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination. If the tax position is deemed "more-likely-than-not" to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50 percent likelihood of being realized upon ultimate settlement.

We do not provide for a U.S. income tax liability on undistributed earnings of our foreign subsidiaries. The earnings of non-U.S. subsidiaries, which reflect full provision for non-U.S. income taxes, are currently indefinitely reinvested in non-U.S. operations or are expected to be remitted substantially free of additional tax.

#### Sales Taxes

Sales and other taxes collected from customers and subsequently remitted to government authorities are recorded as cash or accounts receivable with a corresponding offset recorded to sales taxes payable. These balances are removed from the consolidated balance sheet as cash is collected from the customers and remitted to the tax authority.

### Earnings Per Share

Basic net income per share is computed using the weighted-average number of shares of our common stock outstanding during the period. Diluted net income per share is computed using the weighted-average number of common and dilutive common equivalent shares outstanding during the period. Common equivalent shares consist of stock options, unvested restricted stock and restricted stock units, the shares issuable under our 2011 Notes and our 2013 Notes and the associated warrants. See Note E for further information regarding the 2011 Notes and 2013 Notes and the associated warrants and Note O for further information regarding the calculation of diluted net income per weighted-average share. Additionally, for purposes of calculating diluted net income per common share, net income is adjusted for the difference between VMware's reported diluted and basic earnings per share, if any, multiplied by the number of shares of VMware held by EMC.

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

#### **Retirement Benefits**

Pension cost for our domestic defined benefit pension plan is funded to the extent that the current pension cost is deductible for U.S. Federal tax purposes and to comply with the Employee Retirement Income Security Act and the General Agreement on Tariff and Trade Bureau additional minimum funding requirements. Net pension cost for our international defined benefit pension plans are generally funded as accrued.

#### Concentrations of Risks

Financial instruments that potentially subject us to concentration of credit risk consist principally of bank deposits, money market investments, short- and long-term investments, accounts and notes receivable, and foreign currency exchange contracts. Deposits held with banks in the United States may exceed the amount of FDIC insurance provided on such deposits. Deposits held with banks outside the United States generally do not benefit from FDIC insurance. The majority of our day-to-day banking operations globally are maintained with Citibank. We believe that Citibank's position as a primary clearing bank, coupled with the substantial monitoring of their daily liquidity, both by their internal processes and by the Federal Reserve and the FDIC, mitigate some of our risk.

Our money market investments are placed with money market funds that are 2a-7 qualified. Rule 2a-7, adopted by the United States Securities and Exchange Commission (the "SEC") under the Investment Company Act of 1940, establishes strict standards for quality, diversity and maturity, the objective of which is to maintain a constant net asset value of a dollar. We limit our investments in money market funds to those that are primarily associated with large, money center financial institutions and limit our exposure to Prime funds. Our short- and long-term investments are invested primarily in investment grade securities, and we limit the amount of our investment in any single issuer.

We provide credit to customers in the normal course of business. Credit is extended to new customers based on checks of credit references, credit scores and industry reputation. Credit is extended to existing customers based on prior payment history and demonstrated financial stability. The credit risk associated with accounts and notes receivables is generally limited due to the large number of customers and their broad dispersion over many different industries and geographic areas. We establish an allowance for the estimated uncollectible portion of our accounts and notes receivable. We customarily sell the notes receivable we derive from our leasing activity. Generally, we do not retain any recourse on the sale of these notes. Our sales are generally dispersed among a large number of customers, minimizing the reliance on any particular customer or group of customers.

The counterparties to our foreign currency exchange contracts consist of a number of major financial institutions. In addition to limiting the amount of contracts we enter into with any one party, we monitor the credit quality of the counterparties on an ongoing basis.

We purchase or license many sophisticated components and products from one or a limited number of qualified suppliers. If any of our suppliers were to cancel or materially change contracts or commitments with us or fail to meet the quality or delivery requirements needed to satisfy customer orders for our products, we could lose customer orders. We attempt to minimize this risk by finding alternative suppliers or maintaining adequate inventory levels to meet our forecasted needs.

#### Accounting for Stock-Based Compensation

We have selected the Black-Scholes option-pricing model to determine the fair value of our stock option awards. For stock options, restricted stock and restricted stock units, we recognize compensation cost on a straight-line basis over

the awards' vesting periods for those awards which contain only a service vesting feature. For awards with a performance condition vesting feature, when achievement of the performance condition is deemed probable, we recognize compensation cost on a graded-vesting basis over the awards' expected vesting periods.

#### Reclassifications

Certain prior year amounts have been reclassified to conform with the current year's presentation. During the second quarter of 2013, EMC and VMware combined certain operations to form Pivotal, with a cash investment from General Electric Company ("GE"). Pivotal is considered a separate reportable segment. We recast the segment disclosures for the prior financial reporting periods to separately present the operations of the Pivotal segment. None of the segment reclassifications impact EMC's previously reported consolidated financial statements. See Note S for further discussion of the segment reclassifications.

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

#### **Recent Accounting Pronouncements**

In July 2013, the Financial Accounting Standards Board ("FASB") issued new accounting guidance on the presentation of unrecognized tax benefits. This new guidance requires an entity to present an unrecognized tax benefit, or a portion of an unrecognized tax benefit, as a reduction to a deferred tax asset when a net operating loss carryforward, a similar tax loss or a tax credit carryforward exists, with limited exceptions. This new guidance is effective for the periods beginning after December 15, 2013, and should be applied prospectively with retroactive application permitted. We do not expect it to have a material impact on our consolidated financial position, results of operations or cash flows.

In March 2013, the FASB issued guidance that requires a parent company to release any related cumulative translation adjustment into net income only if the sale or transfer results in the complete or substantially complete liquidation of the foreign entity in which the subsidiary or group of assets had resided. This new guidance is effective beginning after December 15, 2013. We do not anticipate that the adoption of this new guidance will have a material impact on our consolidated financial position, results of operations or cash flows.

### B. Non-controlling Interest in VMware, Inc.

The non-controlling interests' share of equity in VMware is reflected as a component of the non-controlling interests in the accompanying consolidated balance sheets and was \$1,380 million and \$1,167 million as of December 31, 2013 and 2012, respectively. At December 31, 2013, EMC held approximately 97% of the combined voting power of VMware's outstanding common stock and approximately 80% of the economic interest in VMware.

The effect of changes in our ownership interest in VMware on our equity was as follows (table in millions):

	For the Year E		nded	
	December 31	1,	December 3	1,
	2013		2012	
Net income attributable to EMC Corporation	\$2,889		\$2,733	
Transfers (to) from the non-controlling interest in VMware, Inc.:				
Increase in EMC Corporation's additional paid-in-capital for VMware's equity issuance	s92		128	
Decrease in EMC Corporation's additional paid-in-capital for VMware's other equity activity	(565	)	(564	)
Net transfers (to) from non-controlling interest	(473	)	(436	)
Change from net income attributable to EMC Corporation and transfers from the non-controlling interest in VMware, Inc.	\$2,416		\$2,297	

The non-controlling interests' share of equity in Pivotal is reflected as a component of the non-controlling interests in the accompanying consolidated balance sheets as \$105 million and \$0 million at December 31, 2013 and 2012, respectively. At December 31, 2013, EMC consolidated held approximately 84% of the economic interest in Pivotal. GE's interest in Pivotal is in the form of a preferred equity instrument. Consequently, there is no net income attributable to non-controlling interest related to Pivotal on the consolidated income statements. Additionally, due to the terms of the preferred instrument, GE's non-controlling interest on the consolidated balance sheets is generally not impacted by Pivotal's equity related activity. The preferred equity instrument is convertible into common shares at GE's election at any time.

### C. Acquisitions

#### 2013 Acquisitions

During the year ended December 31, 2013, EMC acquired five companies. Complementing the Information Storage segment, we acquired substantially all of the assets of Adaptivity, Inc., a provider of software solutions that automate

and accelerate enterprise IT migration to the cloud and all of the outstanding capital stock of ScaleIO, a provider of server-side storage software. A member of our board of directors is an investor in a limited partnership which held an equity interest in ScaleIO. The director did not participate in any votes of the board of directors or any committee thereof approving the acquisition, and the terms of the acquisition were negotiated at arms' length.

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Complementing the Information Intelligence Group segment, we also acquired all of the outstanding capital stock of Sitrof Technologies, a document management consultancy provider. Complementing the RSA Information Security segment, we acquired all of the outstanding common stock of Aveksa, Inc., a provider of cloud-based identity and access management solutions and PassBan Corporation, a developer of mobile and cloud-based multi-factor authentication technology.

Additionally, during the year ended December 31, 2013, VMware acquired all of the outstanding common stock of two companies including Virsto Software, a provider of software that optimizes storage performance and utilization in virtual environments and Desktone, Inc., a provider of desktop-as-a-service for delivering Windows desktops and applications as a cloud service.

Complementing the Pivotal segment, Pivotal acquired all of the outstanding common stock of Xtreme Labs, a provider of mobile strategy and product development during the year ended December 31, 2013.

The aggregate consideration for these eight acquisitions was \$771 million, which consisted of \$770 million of cash consideration, net of cash acquired and \$1 million for the fair value of our stock options granted in exchange for the acquirees' stock options. The consideration paid was allocated to the fair value of the assets acquired and liabilities assumed based on estimated fair values as of the respective acquisition dates. The aggregate allocation to goodwill, intangibles and net liabilities was approximately \$596 million, \$182 million and \$8 million, respectively. Most of our intangible assets are being amortized based upon the pattern in which the economic benefits of the intangible assets are estimated to be utilized and the remainder are amortized on a straight-line basis. The results of these acquisitions have been included in the consolidated financial statements from the date of purchase. Pro forma results of operations have not been presented as the results of the acquired companies were not material, individually or in aggregate, to our consolidated results of operations for the years ended December 31, 2013 or 2012.

The fair value of our stock options for all of the aforementioned acquisitions in 2013 was estimated using the following weighted-average assumptions:

Expected term (in years)	1.8	
Expected volatility	26.4	%
Risk-free interest rate	0.3	%
Dividend yield	1.5	%

The following represents the aggregate allocation of the purchase price for all of the aforementioned acquisitions to intangible assets (table in millions):

Developed technology (weighted-average useful life of 5 years)	\$138
Customer relationships (weighted-average useful life of 4 years)	34
IPR&D	10
Total intangible assets	\$182

#### 2012 Acquisitions

#### Acquisition of Nicira

On August 24, 2012, VMware acquired all of the outstanding capital stock of Nicira, a developer of software-defined networking solutions. This acquisition expanded VMware's product portfolio to provide a suite of software-defined networking capabilities.

The aggregate consideration paid for Nicira was \$1,100 million, net of cash acquired, including cash of \$1,083 million and the fair value of assumed equity attributed to pre-combination services of \$17 million. Additionally, VMware assumed all of Nicira's unvested stock options and restricted stock outstanding at the completion of the acquisition. The assumed unvested stock options converted into 1 million stock options to purchase VMware Class A common stock. The assumed restricted stock converted into 1 million shares of restricted VMware Class A common stock.

The weighted-average acquisition-date fair value of the stock options was determined using the Black-Scholes option pricing model with the following weighted-average assumptions: (i) market price of \$92.21 per share, which was the closing price of VMware's Class A common stock on the acquisition date; (ii) expected term of 2.7 years; (iii) risk-free interest rate of 0.3%; (iv)

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

annualized expected volatility of 35.7%; and (v) no dividend yield. The fair value of the restricted stock was based on the acquisition-date closing price of \$92.21 per share for VMware's Class A common stock.

The purchase price has been allocated to the assets acquired and the liabilities assumed based on estimated fair values as of the acquisition date. The following table summarizes the allocation of the Nicira purchase price, adjusted in the fourth quarter of 2012 for a reassessment of unrecognized tax benefit (table in millions): Intangible assets:

Purchased technology (weighted-average useful life of 7 years)	\$266	
Trademarks and tradenames (weighted-average useful life of 10 years)	20	
In-process research and development	49	
Total intangible assets	335	
Goodwill	893	
Deferred tax liabilities, net	(77	)
Income tax payable	(50	)
Other assumed liabilities, net of acquired assets	(1	)
Total purchase price	\$1,100	
In-process Research and Development		

In-process Research and Development

In connection with the Nicira acquisition, we acquired one IPR&D project which was completed by the end of 2012 and is being amortized over its estimated useful life of 8 years.

Other 2012 Acquisitions

During the year ended December 31, 2012, EMC acquired eleven companies. We acquired all of the outstanding capital stock of Pivotal Labs, a provider of services and technology to build Big Data applications; Likewise Software, a provider of technology for managing cross-platform access to data files and software for managing unstructured data; XtremIO, a provider of Flash enterprise storage systems; Watch4Net, a provider of enterprise and carrier-class performance management software; Tiburon Technologies, a provider of support and modernization services for legacy database management systems; and iWave Software, a provider of storage and cloud automation software solutions. These acquisitions complemented and expanded our Information Storage segment. We also acquired all of the outstanding capital stock of Syncplicity, a provider of cloud-based synch and share file management and Trinity Technologies, a provider of enterprise content management consulting and development services which complemented and expanded our Information Intelligence Group segment. We acquired Silicium Security, a provider of enterprise malware detection solutions, More VRP Resources, a provider of database performance and monitoring software and Silver Tail Systems, a provider of web fraud detection and security software which complemented and expanded our RSA Information Security segment.

Additionally, during the year ended December 31, 2012, VMware acquired five companies, in addition to the acquisition of Nicira, which were not material either individually or in the aggregate. In connection with our acquisitions, we had adjustments to the fair value of previously held interests in XtremIO which resulted in a gain of \$32 million which was recognized in other income (expense), net in the second quarter of 2012.

The aggregate consideration for these sixteen acquisitions, excluding Nicira, was \$1,060 million which consisted of \$1,053 million of cash consideration, net of cash acquired and \$7 million for the fair value of our stock options granted in exchange for the acquirees' stock options. The consideration paid was allocated to the fair value of the assets acquired and liabilities assumed based on estimated fair values as of the respective acquisition dates.

The aggregate allocation to goodwill, intangibles and net liabilities, excluding Nicira, was approximately \$819 million, \$311 million and \$70 million, respectively. The intangible assets are being amortized based upon the pattern in which the economic benefits of the intangible assets are being utilized. The results of these acquisitions have been included in the consolidated financial statements from the date of purchase.

#### **EMC CORPORATION**

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The fair value of our stock options for all of the aforementioned acquisitions, excluding Nicira, in 2012 was estimated assuming no expected dividends and the following weighted-average assumptions:

Expected term (in years)	1.9	
Expected volatility	31.6	%
Risk-free interest rate	0.3	%

The following represents the aggregate allocation of the purchase price for all of the aforementioned acquisitions, excluding Nicira, to intangible assets (table in millions):

Developed technology (weighted-average useful life of 4.8 years)	\$255
Customer relationships (weighted-average useful life of 6.1 years)	54
Trademarks and tradenames (weighted-average useful life of 3.4 years)	2
Total intangible assets	\$311

The total weighted-average amortization period for the intangible assets is 5.0 years. The intangible assets are being amortized based upon the pattern in which the economic benefits of the intangible assets are being utilized. 2011 Acquisitions

During the year ended December 31, 2011, we acquired all of the capital stock of NetWitness Corporation, a privately-held provider of network security analysis solutions. This acquisition complemented and expanded our RSA Information Security segment. Additionally, during the year ended December 31, 2011, VMware acquired six companies. The aggregate consideration for these seven acquisitions was \$540 million which consisted of \$537 million of cash consideration, net of cash acquired and \$3 million for the fair value of our stock options granted in exchange for the acquirees' stock options. The consideration paid was allocated to the fair value of the assets acquired and liabilities assumed based on estimated fair values as of the respective acquisition dates. The allocation to goodwill, intangibles and net assets was approximately \$376 million, \$157 million and \$7 million, respectively. The results of these acquisitions have been included in the consolidated financial statements from the respective dates of purchase.

The following represents the aggregate allocation of the purchase price for all the aforementioned acquisitions to intangible assets (table in millions):

6	
Developed technology (weighted-average useful life of 3.2 years)	\$98
Customer relationships (weighted-average useful life of 4.0 years)	58
Trademarks and tradenames (weighted-average useful life of 2.6 years)	1
Total intangible assets	\$157

The total weighted-average amortization period for the intangible assets is 3.5 years. The intangible assets are being amortized based upon the pattern in which the economic benefits of the intangible assets are being utilized.

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

#### D. Intangibles and Goodwill

#### **Intangible Assets**

Intangible assets, excluding goodwill, as of December 31, 2013 and 2012 consist of (tables in millions):

	December 31, 2013					
	Gross Carrying	Accumulated		Net Book Value		
	Amount	Amortization		Net Book value		
Purchased technology	\$2,356	\$(1,429	)	\$927		
Patents	225	(102	)	123		
Software licenses	101	(90	)	11		
Trademarks and tradenames	171	(118	)	53		
Customer relationships and customer lists	1,386	(855	)	531		
Leasehold interest	145	(11	)	134		
Other	28	(27	)	1		
Total intangible assets, excluding goodwill	\$4,412	\$(2,632	)	\$1,780		
Total mangiole assets, excluding goodwin	December 31, 2012					
	December 31, 2012	2				
	December 31, 2012 Gross Carrying	2 Accumulated		Not Book Volue		
	·			Net Book Value		
Purchased technology	Gross Carrying	Accumulated	)	Net Book Value \$1,026		
Purchased technology Patents	Gross Carrying Amount	Accumulated Amortization	)			
	Gross Carrying Amount \$2,233	Accumulated Amortization \$(1,207	) )	\$1,026		
Patents	Gross Carrying Amount \$2,233 225	Accumulated Amortization \$(1,207) (87)	) ) )	\$1,026 138		
Patents Software licenses	Gross Carrying Amount \$2,233 225 96	Accumulated Amortization \$(1,207) (87) (88)	) ) ) )	\$1,026 138 8		
Patents Software licenses Trademarks and tradenames	Gross Carrying Amount \$2,233 225 96 173	Accumulated Amortization \$(1,207) (87) (88) (102)	) ) ) )	\$1,026 138 8 71		
Patents Software licenses Trademarks and tradenames Customer relationships and customer lists	Gross Carrying Amount \$2,233 225 96 173 1,378	Accumulated Amortization \$(1,207) (87) (88) (102) (724)	) ) ) ) )	\$1,026 138 8 71 654		

In the year ended December 31, 2011, we, along with three other technology companies, acquired specific patents from Novell, Inc. for \$450 million, of which we paid \$113 million. We assigned our portion of the patent portfolio an average life of 10 years, based on the average contractual term remaining on the patents we acquired. The cash outflow was included in purchases of strategic and other related investments in the investing activities section of the consolidated statements of cash flows.

In the year ended December 31, 2011, VMware purchased all of the right, title and interest in a ground lease covering the property and improvements located adjacent to VMware's Palo Alto, California campus for \$225 million. The gross amount classified to property, plant and equipment, net was \$74 million. The remaining \$151 million of the \$225 million purchase price was for the fair value of the ground lease and the right to develop additional square footage on the parcel. The long-term portion of \$147 million was recorded to intangible assets, net with the remainder recorded to other current assets on the consolidated balance sheet. Concurrent with the closing of the transaction, VMware entered into an amended and restated ground lease for the related property. The buildings and site improvements will be depreciated from the date they are placed into service through the term of the amended and restated ground lease, and intangible assets will be amortized through 2046.

Amortization expense on intangibles was \$389 million, \$365 million and \$342 million in 2013, 2012 and 2011, respectively. As of December 31, 2013, amortization expense on intangible assets for the next five years is expected to be as follows (table in millions):

2014 \$360

2015	316
2016	260
2017	210
2018	179
Total	\$1,325
72	

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

#### Goodwill

Changes in the carrying amount of goodwill, net, on a consolidated basis and by segment, for the years ended December 31, 2013 and 2012 consist of the following (tables in millions):

	Year Ended	December 31	, 2013				
	Information Storage	Information Intelligence Group	RSA Information Security	Pivotal	VMware Virtual Infrastructu	Total re	
Balance, beginning of the year	\$7,442	\$1,484	\$2,022	<b>\$</b> —	\$2,892	\$13,840	
Goodwill resulting from acquisitions	145	1	181	37	233	597	
Finalization of purchase price allocations and other, net	11	2	_	_	(26	) (13	)
Goodwill transferred in formation of Pivotal	(112)	_	_	140	(28	) —	
Balance, end of the year	\$7,486	\$1,487	\$2,203	\$177	\$3,071	\$14,424	
	Year Ended	December 31	1, 2012				
	Information Storage	Information Intelligence Group	RSA Information Security	Pivotal	VMware Virtual Infrastructure	Total	
Balance, beginning of the year		Intelligence	Information	Pivotal \$—	Virtual		
Balance, beginning of the year Goodwill resulting from acquisitions	Storage	Intelligence Group	Information Security		Virtual Infrastructure		
Goodwill resulting from acquisitions Finalization of purchase price allocations and other, net	Storage \$7,034	Intelligence Group \$ 1,469	Information Security \$ 1,849		Virtual Infrastructure \$ 1,803 1,092	\$12,155	)
Goodwill resulting from acquisitions Finalization of purchase price	\$7,034 438	Intelligence Group \$ 1,469	Information Security \$ 1,849 179		Virtual Infrastructure \$ 1,803 1,092	\$12,155 1,724	)

During the second quarter of 2013, EMC and VMware formed Pivotal, with an investment from GE. As Pivotal is considered a separate reportable segment, the transfer of goodwill from the Information Storage and VMware Virtual Infrastructure segments to the newly formed Pivotal segment is shown above for 2013. The amount of transferred goodwill was determined using the relative fair value method. See Note S for further discussion of the segment disclosures.

#### Valuation of Goodwill and Intangibles

We perform an assessment of the recoverability of goodwill, at least annually, in the fourth quarter of each year. Our assessment is performed at the reporting unit level which, for certain of our operating segments, is one step below our reporting segment level. We employ both qualitative and quantitative tests of our goodwill. For some of our reporting units, we performed a qualitative assessment on goodwill to determine whether a quantitative assessment was necessary and determined there were no indicators of potential impairment. For other reporting units we evaluated goodwill using a quantitative model. For all of our goodwill assessments we determined that there was sufficient market value above the carrying value of those reporting units so that we would not expect any near term changes in the operating results that would trigger an impairment.

The determination of relevant comparable industry companies impacts our assessment of fair value. Should the operating performance of our reporting units change in comparison to these companies or should the valuation of these companies change, this could impact our assessment of the fair value of the reporting units. Our discounted cash flow analyses factor in assumptions on revenue and expense growth rates. These estimates are based upon our historical experience and projections of future activity, factoring in customer demand, changes in technology and a cost structure necessary to achieve the related revenues. Additionally, these discounted cash flow analyses factor in expected amounts of working capital and weighted average cost of capital. Changes in judgments on any of these

factors could materially impact the value of the reporting unit. There was no impairment in 2013, 2012 or 2011. Other intangible assets are evaluated based upon the expected period the asset will be utilized, forecasted cash flows, changes in technology and customer demand. Changes in judgments on any of these factors could materially impact the value of the assets.

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

#### E. Debt

#### Long-Term Debt

In June 2013, we issued \$5.5 billion aggregate principal amount of senior notes (collectively, the "Notes") which pay a fixed rate of interest semi-annually in arrears. The first interest payment occurred on December 2, 2013. The proceeds from the Notes have been used to satisfy the cash payment obligation of the converted 2013 Notes as well as for general corporate purposes including stock repurchases, dividend payments, working capital needs and other business opportunities. The Notes of each series are senior, unsecured obligations of EMC and are not convertible or exchangeable. Unless previously purchased and canceled, we will repay the Notes of each series at 100% of the principal amount, together with accrued and unpaid interest thereon, at maturity. However, EMC has the right to redeem any or all of the Notes at specified redemption prices. As of December 31, 2013, we were in compliance with all debt covenants, which are customary in nature.

Our long-term debt as of December 31, 2013 was as follows (dollars in millions):

Senior Notes	Issued at Discour	Carrying	
Selloi Notes	to Par		Value
\$2.5 billion 1.875% Notes due 2018	99.943	%	\$2,499
\$2.0 billion 2.650% Notes due 2020	99.760	%	1,996
\$1.0 billion 3.375% Notes due 2023	99.925	%	999
			\$5,494

The unamortized discount on the Notes consists of \$6 million, which will be fully amortized by June 1, 2023. The effective interest rate on the Notes was 2.54% for the year ended December 31, 2013.

#### Convertible Debt

In November 2006, we issued our \$1.725 billion 1.75% convertible senior notes due 2011 (the "2011 Notes") and our \$1.725 billion 1.75% convertible senior notes due 2013 (the "2013 Notes") for total gross proceeds of \$3.5 billion. The 2013 Notes are senior unsecured obligations and rank equally with all other existing and future senior unsecured debt.

The 2011 Notes matured and a majority of the noteholders exercised their right to convert the outstanding 2011 Notes at the end of 2011. Pursuant to the settlement terms, the majority of the converted 2011 Notes were not settled until January 9, 2012. At that time, we paid the noteholders \$1.7 billion in cash for the outstanding principal and 30 million shares for the \$661 million in excess of the conversion value over the principal amount, as prescribed by the terms of the 2011 Notes.

As of December 31, 2013, the 2013 Notes had matured and a majority of the noteholders exercised their rights to convert the outstanding 2013 Notes. These converted notes were classified as notes converted and payable on the consolidated balance sheet at December 31, 2013. Due to the settlement terms, the majority of the converted 2013 Notes were not settled until January 7, 2014. At that time, we paid the noteholders \$1.7 billion in cash for the outstanding principal and 35 million shares for the \$858 million excess of the conversion value over the principal amount, as prescribed in the terms of the 2013 Notes.

With respect to the conversion value in excess of the principal amount of the 2013 Notes converted, we have elected to settle the excess with shares of our common stock based on a daily conversion value, determined in accordance

with the indenture, calculated on a proportionate basis for each day of the relevant 20-day observation period. The actual conversion rate for the 2013 Notes was 62.6978 shares of our common stock per one thousand dollars of principal amount of 2013 Notes, which represents a 26.5% conversion premium from the date the 2013 Notes were issued and is equivalent to a conversion price of approximately \$15.95 per share of our common stock.

The 2013 Notes paid interest in cash at a rate of 1.75% semi-annually in arrears on December 1 and June 1 of each year. The effective interest rate on the 2011 Notes and 2013 Notes was 5.6% for both the year ended December 31, 2013 and 2012.

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table represents the key components of our interest expense on convertible debt (table in millions):

	For the Twelve Months Ended				
	2013	2012	2011		
Contractual interest expense on the coupon	\$27	\$30	\$58		
Amortization of the discount component recognized as interest	58	61	116		
expense		~-			
Total interest expense on the convertible debt	\$85	\$91	\$174		

In connection with the issuance of the 2011 Notes and 2013 Notes, we entered into separate convertible note hedge transactions with respect to our common stock (the "Purchased Options"). The Purchased Options allow us to receive shares of our common stock and/or cash related to the excess conversion value that we would pay to the holders of the 2011 Notes and 2013 Notes upon conversion. The Purchased Options will cover, subject to customary anti-dilution adjustments, approximately 215 million shares of our common stock. We paid an aggregate amount of \$669 million of the proceeds from the sale of the 2011 Notes and 2013 Notes for the Purchased Options that was recorded as additional paid-in-capital in shareholders' equity. In the fourth quarter of 2011, we exercised 107 million of the Purchased Options in conjunction with the planned settlements of the 2011 Notes, and we received 30 million shares of net settlement on January 9, 2012, representing the excess conversion value of the options. In 2013, we exercised the remaining 107 million of the Purchased Options in conjunction with the planned settlements of the 2013 Notes, and we received 35 million shares of net settlement on January 7, 2014, representing the excess conversion value of the options.

We also entered into separate transactions in which we sold warrants to acquire, subject to customary anti-dilution adjustments, approximately 215 million shares of our common stock at an exercise price of approximately \$19.55 per share of our common stock. We received aggregate proceeds of \$391 million from the sale of the associated warrants. Upon exercise, the value of the warrants is required to be settled in shares. Half of the associated warrants were exercised between February 15, 2012 and March 14, 2012 and the remaining half of the associated warrants have expiration dates between February 18, 2014 and March 17, 2014. During the first quarter of 2012, the exercised warrants were settled with 32 million shares of our common stock. Beginning February 18, 2014, a percentage of the remaining 108 million warrants become exercisable each day over the course of the settlement period through March 17, 2014. These warrants will be settled with shares of our common stock.

The Purchased Options and associated warrants have generally had the effect of increasing the conversion price of the 2013 Notes to approximately \$19.31 per share of our common stock, representing an approximate 53% conversion premium based on the closing price of \$12.61 per share of our common stock on November 13, 2006, which was the issuance date of the 2013 Notes.

#### **Interest Rate Swap Contracts**

In 2010, EMC entered into interest rate swap contracts with an aggregate notional amount of approximately \$900 million. These swaps were designated as cash flow hedges of the semi-annual interest payments of the forecasted issuance of debt in 2011 when our 2011 Notes were scheduled to become due. As such, the unrealized loss on these hedges was recognized in other comprehensive loss. In November 2011, we settled the swaps and replaced them with new interest rate swap contracts for the forecasted issuance of debt in 2012. In April 2012, we settled the swaps and replaced them with new interest rate swap contracts for the forecasted issuance of debt in 2012. Each of these new swaps was deemed as an effective hedge as the notional amounts and other terms matched the underlying hedged item. Losses on the interest rate swap contracts at the time of settlement of \$141 million in November 2011 and \$23 million in April 2012 were deferred as they were expected to be realized over the life of the new debt issued under the related interest rate swap contracts and recognized as a component of interest expense in the consolidated income statements.

In June 2012, management changed its forecast date for the issuance of debt from December 31, 2012 to the first quarter of 2014. Consequently, hedge accounting effectively ceased as the terms of the swaps no longer matched the terms of the underlying hedged item resulting in changes in the fair value of the swaps being recorded in the consolidated income statement. The swaps were subsequently re-designated as cash flow hedges and achieved hedge accounting. The change in the forecasted timeframe for the issuance of debt resulted in certain previously-anticipated hedge interest payments no longer being expected to occur within the window covered by the hedge designation. As a result, \$40 million of accumulated realized losses in other comprehensive income related to these previously-anticipated interest payments were reclassified from other comprehensive income and recognized in the 2012 consolidated income statements.

In July 2012, we settled the interest rate swap contracts and did not replace them. Losses on the interest rate swap contracts at the time of settlement of \$46 million were deferred as they were expected to be realized over the life of the new debt issued under the related interest rate swap contracts and recognized as a component of interest expense in the consolidated income statements.

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

At December 31, 2013, we had \$176 million of accumulated realized losses related to the settled swaps in accumulated other comprehensive income which will be realized during the life of our ten year Notes. These losses will be reclassified from other comprehensive income and recognized on a straight-line basis in the consolidated income statements as interest expense beginning in the third quarter of 2014.

F. Fair Value of Financial Assets and Liabilities

Our fixed income and equity investments are classified as available for sale and recorded at their fair market values. We determine fair value using the following hierarchy:

Level 1 – Quoted prices in active markets for identical assets or liabilities.

Level 2 – Inputs other than Level 1 that are observable, either directly or indirectly, 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 corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Most of our fixed income securities are classified as Level 2, with the exception of some of our U.S. government and agency obligations which are classified as Level 1, and all of our auction rate securities, which are classified as Level 3. In addition, our investments in publicly traded equity securities are classified as Level 1 and our strategic investments held at cost are classified as Level 3. At December 31, 2013 and 2012, the vast majority of our Level 2 securities were priced by pricing vendors. These pricing vendors utilize the most recent observable market information in pricing these securities or, if specific prices are not available for these securities, use other observable inputs like market transactions involving identical or comparable securities. In the event observable inputs are not available, we assess other factors to determine the security's market value, including broker quotes or model valuations. Each month, we perform independent price verifications of all of our fixed income holdings. In the event a price fails a pre-established tolerance check, it is researched so that we can assess the cause of the variance to determine what we believe is the appropriate fair market value.

In general, investments with remaining effective maturities of 12 months or less from the balance sheet date are classified as short-term investments. Investments with remaining effective maturities of more than 12 months from the balance sheet date are classified as long-term investments. Our publicly traded equity securities are classified as long-term investments and our strategic investments held at cost are classified as other assets. As a result of the lack of liquidity for auction rate securities, we have classified these as long-term investments as of December 31, 2013 and 2012. At December 31, 2013 and 2012, all of our short- and long-term investments, excluding auction rate securities, were recognized at fair value, which was determined based upon observable inputs from our pricing vendors for identical or similar assets. At December 31, 2013 and 2012, auction rate securities were valued using a discounted cash flow model.

The following tables summarize the composition of our short- and long-term investments at December 31, 2013 and 2012 (tables in millions):

,	December 31, 2013						
Amortized Unrealized Unrealized Agg	regate						
Cost Gains (Losses) Fair	Value						
U.S. government and agency obligations \$3,726 \$4 \$(3 ) \$3,	727						
U.S. corporate debt securities 2,260 8 (2 ) 2,260	66						
High yield corporate debt securities 515 19 (3 ) 531							
Asset-backed securities — — — — —							
Municipal obligations 860 3 — 863							
Auction rate securities 63 — (3 ) 60							
Foreign debt securities 2,152 6 (3 ) 2,152	55						

Total fixed income securities	9,576	40	(14	)	9,602
Publicly traded equity securities	72	24	(1	)	95
Total	\$9,648	\$64	\$(15	)	\$9,697

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

We held approximately \$2,155 million in foreign debt securities at December 31, 2013. These securities have an average credit rating of A+, and approximately 4% of these securities are deemed sovereign debt with an average credit rating of AAA. None of the securities deemed sovereign debt are from Greece, Italy, Ireland, Portugal, Spain or Cyprus.

December 31, 2012							
Amortized	Unrealized	Unrealized		Aggregate			
Cost	Gains	(Losses)		Fair Value			
\$2,191	\$10	\$(1	)	\$2,200			
1,480	10	_		1,490			
486	34	(1	)	519			
2	_	_		2			
1,032	3	_		1,035			
74	_	(4	)	70			
1,270	9	_		1,279			
6,535	66	(6	)	6,595			
47	41	(1	)	87			
\$6,582	\$107	\$(7	)	\$6,682			
	Amortized Cost \$2,191 1,480 486 2 1,032 74 1,270 6,535 47	Amortized Unrealized Cost Gains \$2,191 \$10 1,480 10 486 34 2 — 1,032 3 74 — 1,270 9 6,535 66 47 41	Amortized       Unrealized       Unrealized         Cost       Gains       (Losses)         \$2,191       \$10       \$(1         1,480       10       —         486       34       (1         2       —       —         1,032       3       —         74       —       (4         1,270       9       —         6,535       66       (6         47       41       (1	Amortized       Unrealized       Unrealized         Cost       Gains       (Losses)         \$2,191       \$10       \$(1       )         1,480       10       —       —         486       34       (1       )         2       —       —       —         1,032       3       —       —         74       —       (4       )         1,270       9       —       —         6,535       66       (6       )         47       41       (1       )			

The following tables represent our fair value hierarchy for our financial assets and liabilities measured at fair value as of December 31, 2013 and 2012 (in millions):

Cash       Level 1       Level 2       Level 3       Total         Cash equivalents       \$1,725       \$—       \$—       \$1,725         Cash equivalents       5,674       492       —       6,166         U.S. government and agency obligations       1,797       1,930       —       3,727         U.S. corporate debt securities       —       2,266       —       2,266         High yield corporate debt securities       —       531       —       531	December 31, 2013							
Cash equivalents5,674492—6,166U.S. government and agency obligations1,7971,930—3,727U.S. corporate debt securities—2,266—2,266High yield corporate debt securities—531—531								
U.S. government and agency obligations 1,797 1,930 — 3,727 U.S. corporate debt securities — 2,266 — 2,266 High yield corporate debt securities — 531 — 531								
U.S. corporate debt securities — 2,266 — 2,266 High yield corporate debt securities — 531 — 531								
High yield corporate debt securities — 531 — 531								
No. 11.1111. 11. 11. 11. 11. 11. 11. 11.								
Municipal obligations — 863 — 863								
Auction rate securities — — 60 60								
Foreign debt securities — 2,155 — 2,155								
Publicly traded equity securities 95 — 95								
Total cash and investments \$9,291 \$8,237 \$60 \$17,588								
Other items:								
Strategic investments held at cost \$— \$— \$379 \$379								
Investment in joint venture — — 35 35								
Long-term debt carried at discounted issuance cost (5,419 ) — (5,419	)							
Foreign exchange derivative assets — 31 — 31								
Foreign exchange derivative liabilities — (20 ) — (20	)							
Commodity derivative assets — 4 — 4								

## EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

December 31, 2012						
Level 1	Level 2	Level 3	Total			
\$1,454	<b>\$</b> —	<b>\$</b> —	\$1,454			
2,898	362		3,260			
1,327	873		2,200			
_	1,490		1,490			
	519		519			
	2		2			
_	1,035	_	1,035			
	_	70	70			
	1,279		1,279			
87	_		87			
\$5,766	\$5,560	\$70	\$11,396			
\$—	<b>\$</b> —	\$364	\$364			
_	_	33	33			
	(2.666	1	(2.666	`		
	(2,000	) —	(2,000	,		
	30		30			
	(35	) —	(35	)		
	(1	) —	(1	)		
	Level 1 \$1,454 2,898 1,327 — — — — — — 87	Level 1 \$1,454 \$	Level 1       Level 2       Level 3         \$1,454       \$—       \$—         2,898       362       —         1,327       873       —         —       1,490       —         —       519       —         —       2       —         —       70       —         —       70       —         —       70       —         \$5,766       \$5,560       \$70         \$—       \$364         —       33         —       (2,666       )         —       30       —	Level 1       Level 2       Level 3       Total         \$1,454       \$—       \$—       \$1,454         2,898       362       —       3,260         1,327       873       —       2,200         —       1,490       —       1,490         —       519       —       519         —       2       —       2         —       1,035       —       1,035         —       70       70       70         —       1,279       —       1,279         87       —       87       \$11,396         \$—       \$364       \$364         —       33       33         —       (2,666       )       —       (2,666         —       30       —       30		

Our auction rate securities are predominantly rated investment grade and are primarily collateralized by student loans. The underlying loans of all but one of our auction rate securities, with a market value of \$7 million, has partial guarantees by the U.S. government as part of the Federal Family Education Loan Program ("FFELP") through the U.S. Department of Education. FFELP guarantees at least 95% of the loans which collateralize the auction rate securities. We believe the quality of the collateral underlying most of our auction rate securities will enable us to recover our principal balance.

To determine the estimated fair value of our investment in auction rate securities, we used a discounted cash flow model using a five year time horizon. As of December 31, 2013, the coupon rates used ranged from 0% to 4% and the discount rate was 1%, which rate represents the rate at which similar FFELP backed securities with a five year time horizon outside of the auction rate securities market were trading at as of that date. The assumptions used in preparing the discounted cash flow model include an incremental discount rate for the lack of liquidity in the market ("liquidity discount margin") for an estimated period of time. The discount rate we selected was based on AA-rated banks as the majority of our portfolio is invested in student loans where EMC acts as a financier to these lenders. The liquidity discount margin represents an estimate of the additional return an investor would require for the lack of liquidity of these securities over an estimated five-year holding period. The rate used for the discount margin was 1% at both December 31, 2013 and 2012.

The following table provides a summary of changes in fair value of our Level 3 auction rate securities for the years ended December 31, 2013 and 2012 (table in millions):

	2013	2012	
Balance, beginning of the period	\$70	\$75	
Sales	(8	) —	
Calls at par value	(1	) (7	)
Other-than-temporary impairment loss	(1	) (3	)
Decrease in previously recognized unrealized losses included in other comprehensive income	_	5	
Balance, end of the period	\$60	\$70	

Significant changes in the unobservable inputs discussed above could result in a significantly lower or higher fair value measurement. Generally, an increase in the discount rate, liquidity discount margin or coupon rate results in a decrease in our fair value measurement and a decrease in the discount rate, liquidity discount margin or coupon rate results in an increase in our fair value measurement.

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

In the fourth quarter of 2012, EMC and Lenovo formed a joint venture, LenovoEMC Limited, to provide NAS systems to small- and medium-sized businesses and distributed enterprise sites. EMC has a 49% ownership percentage of the joint venture. We account for our LenovoEMC joint venture using the fair value method of accounting. To determine the estimated fair value of our investment, we use a discounted cash flow model using a three year time horizon. As of December 31, 2012, the discount rate used was 6%, which represents the incremental borrowing rate for a market participant. The assumptions used in preparing the discounted cash flow model include an analysis of estimated Lenovo NAS revenue against a prescribed target as well as consideration of the purchase price put and call features included in the joint venture agreement. The put and call features create a floor and a cap on the fair value of the investment. As such, there is a limit to the impact on the fair value that would result from significant changes in the unobservable inputs.

The following table provides a summary of changes in fair value of our LenovoEMC joint venture for the years ended December 31, 2013 and 2012 (table in millions):

,		
	2013	2012
Balance, beginning of the period	\$33	\$
Realized gain included in other income (expense), net	2	33
Balance, end of period	\$35	\$33

The carrying value of the strategic investments held at cost were accounted for under the cost method. As part of our impairment review, we perform a fair value calculation of our strategic investments held at cost on a quarterly basis using the most currently available information. To determine the estimated fair value of private strategic investments held at cost we use a combination of several valuation techniques including discounted cash flow models, acquisition comparables and trading comparables. In addition, we evaluate the impact of pre- and post-money valuations of recent financing events and the impact of those on our fully diluted ownership percentages, and we consider any available information regarding the issuer's historical and forecasted performance as well as market comparables and conditions. The fair value of these investments is considered in our review for impairment if any events and changes in circumstances occur that might have a significant adverse effect on their value.

#### **Investment Losses**

Unrealized losses on investments at December 31, 2013 and 2012 by investment category and length of time the investment has been in a continuous unrealized loss position are as follows (table in millions):

December 31, 2013	Less Than	12 Months		12 Months	or Greater	Total		
	Fair Value	Gross Unrealized Losses	d	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealiz Losses	ed
U.S. government and agency obligation	ns\$1,161	\$(3	)	\$20	<b>\$</b> —	\$1,181	\$(3	)
U.S. corporate debt securities	532	(2	)	17		549	(2	)
High yield corporate debt securities	120	(3	)			120	(3	)
Municipal obligations	51					51	_	
Auction rate securities				60	(3	60	(3	)
Foreign debt securities	695	(3	)	6		701	(3	)
Publicly traded equity securities				25	(1)	25	(1	)
Total	\$2,559	\$(11	)	\$128	\$(4	\$2,687	\$(15	)

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

December 31, 2012	Less Than 12 Months		12 Months	or Greater	Total			
	Fair Value	Gross Unrealize Losses	ed	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealize Losses	ed
U.S. government and agency obligation	s\$188	\$(1	)	\$12	\$—	\$200	\$(1	)
U.S. corporate debt securities	266	_				266	_	
High yield corporate debt securities	21	_		1	(1	) 22	(1	)
Municipal obligations	258	_		12		270	_	
Auction rate securities		_		70	(4	70	(4	)
Foreign debt securities	178	_		2		180	_	
Publicly traded equity securities	1	(1	)			1	(1	)
Total	\$912	\$(2	)	\$97	\$(5)	\$1,009	\$(7	)

For all of our securities for which the amortized cost basis was greater than the fair value at December 31, 2013 and 2012, we have concluded that currently we neither plan to sell the security nor is it more likely than not that we would be required to sell the security before its anticipated recovery. In making the determination as to whether the unrealized loss is other-than-temporary, we considered the length of time and extent the investment has been in an unrealized loss position, the financial condition and near-term prospects of the issuers, the issuers' credit rating, third party guarantees and the time to maturity.

In 2012, in connection with our acquisition of XtremIO, a realized gain of \$32 million was recorded in other income (expense), net on the consolidated income statements for EMC's gain on the XtremIO strategic investment. In 2011, a realized gain of \$56 million was recorded in other income (expense), net on the consolidated income statements for the sale of VMware's investment in Terremark Worldwide, Inc.

#### **Contractual Maturities**

The contractual maturities of fixed income securities held at December 31, 2013 are as follows (table in millions):

	December 31, 2	013
	Amortized	Aggregate
	Cost Basis	Fair Value
Due within one year	\$2,695	\$2,697
Due after 1 year through 5 years	5,855	5,871
Due after 5 years through 10 years	519	531
Due after 10 years	507	503
Total	\$9.576	\$9.602

Short-term investments on the consolidated balance sheet include \$76 million in variable rate notes which have contractual maturities in 2014, and are not classified within investments due within one year above.

#### G. Inventories

Inventories consist of (table in millions):

	December 31,	December 31,
	2013	2012
Work-in-process	\$696	\$606
Finished goods	638	595
	\$1,334	\$1,201

#### H. Accounts and Notes Receivable and Allowance for Credit Losses

Accounts and notes receivable are recorded at cost. The portion of our notes receivable due in one year or less are included in accounts and notes receivable and the long-term portion is included in other assets, net on the consolidated balance sheets. Lease receivables arise from sales-type leases of products. We typically sell, without recourse, the contractual right to the lease payment stream and assets under lease to third parties. For certain customers, we retain the lease.

#### **EMC CORPORATION**

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The contractual amounts due under the leases we retained as of December 31, 2013 were as follows (table in millions):

Year	Contractual Amounts	S	
1 Cal	Due Under Leases		
Due within one year	\$103		
Due within two years	80		
Due within three years	68		
Thereafter	1		
Total	252		
Less amounts representing interest	(5	)	
Present value	247		
Current portion (included in accounts and notes receivable)	101		
Long-term portion (included in other assets, net)	\$146		

Subsequent to December 31, 2013, we sold \$34 million of these notes to third parties without recourse.

We maintain an allowance for credit losses on our accounts and notes receivable. The allowance is based on the credit worthiness of our customers, including an assessment of the customer's financial position, operating performance and their ability to meet their contractual obligation. We assess the credit scores for our customers each quarter. In addition, we consider our historical experience, the age of the receivable and current market and economic conditions. Uncollectible amounts are charged against the allowance account.

In the event we determine that a lease may not be paid, we include in our allowance an amount for the outstanding balance related to the lease receivable. As of December 31, 2013, amounts from lease receivables past due for more than 90 days were not significant.

The following table presents the activity of our allowance for credit losses related to lease receivables for the years ended December 31, 2013 and 2012 (table in millions):

	December 31,	December 31,
	2013	2012
Balance, beginning of the period	\$17	\$24
Recoveries	(12	) (15)
Provisions	4	8
Balance, end of the period	\$9	\$17

Gross lease receivables totaled \$252 million and \$329 million in 2013 and 2012, respectively, before the allowance. The components of these balances were individually evaluated for impairment and included in our allowance determination as necessary.

### I. Property, Plant and Equipment

Property, plant and equipment consist of (table in millions):

	December 31,	December 3	1,
	2013	2012	
Furniture and fixtures	\$229	\$197	
Equipment and software	5,973	5,345	
Buildings and improvements	2,089	1,873	
Land	132	121	
Building construction in progress	215	197	
	8,638	7,733	
Accumulated depreciation	(5,160	) (4,588	)
	\$3,478	\$3,145	

Depreciation expense was \$867 million, \$780 million and \$728 million in 2013, 2012 and 2011, respectively. Building construction in progress at December 31, 2013 includes \$74 million for facilities not yet placed in service that we are holding for future use.

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

#### J. Joint Ventures

We make investments in joint ventures. For each joint venture investment we consider the facts and circumstances in order to determine whether it qualifies for cost accounting, equity accounting, fair value method accounting or whether it should be consolidated.

In 2009, Cisco and EMC formed VCE Company LLC ("VCE"), with investments from VMware and Intel. VCE, through Vblock infrastructure platforms, delivers an integrated IT offering that combines network, computing, storage, management, security and virtualization technologies for converged infrastructures and cloud based computing models. As of December 31, 2013, we have contributed \$1,132 million in funding and \$16 million in stock-based compensation to VCE since inception and own approximately 58% of VCE's outstanding equity.

We consider VCE a variable interest entity. Authoritative guidance related to variable interest entities states that the primary beneficiary of a variable interest entity must have both of the following characteristics: (a) the power to direct the activities of a variable interest entity that most significantly will impact the entity's economic performance; and (b) the obligation to absorb losses that could be potentially significant to the variable interest entity or the right to receive benefits from the entity that could potentially be significant to the variable interest entity. Since the power to direct the activities of VCE which most significantly impact its economic performance are determined by its board of directors, which is comprised of equal representation of EMC and Cisco, and all significant decisions require the approval of the minority shareholders, we have determined we are not the primary beneficiary, and as such we account for the investment under the equity method.

Our portion of VCE's gains and losses is recognized in other income (expense), net, in the consolidated income statements. Our consolidated share of VCE's losses, based upon our portion of the overall funding, was approximately 63% for the years ended December 31, 2013, 2012 and 2011. As of December 31, 2013, we have recorded net accumulated losses from VCE of \$796 million since inception, of which \$298 million, \$245 million and \$209 million were recorded in 2013, 2012 and 2011, respectively.

We recognized \$439 million, \$286 million and \$134 million in revenue from sales of product and services to VCE during the years ended December 31, 2013, 2012 and 2011, respectively. We perform certain administrative services, pursuant to an administrative services agreement, on behalf of VCE and we pay certain operating expenses on behalf of VCE. Accordingly, we have a receivable from VCE related to the administrative services agreement of \$52 million and \$44 million as of December 31, 2013 and 2012, respectively, which is included in other current assets in the consolidated balance sheets.

December 31

### K. Accrued Expenses

Accrued expenses consist of (table in millions):

	December 31,	December 31,
	2013	2012
Salaries and benefits	\$1,078	\$1,018
Product warranties	289	278
Dividends payable (see Note O)	205	_
Partner rebates	214	187
Restructuring, current (See Note Q)	84	76
Derivatives	23	40
Other	890	893
	\$2,783	\$2,492

**Product Warranties** 

December 31

Systems sales include a standard product warranty. At the time of the sale, we accrue for systems' warranty costs. The initial systems' warranty accrual is based upon our historical experience, expected future costs and specific identification of systems' requirements. Upon sale or expiration of the initial warranty, we may sell additional maintenance contracts to our customers. Revenue from these additional maintenance contracts is included in deferred revenue and recognized ratably over the service period. The following represents the activity in our warranty accrual for the years ended December 31, 2013, 2012 and 2011 (table in millions):

## EMC CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Our provision (benefit) for income taxes consists of (table in millions):

	Year Ended December 31,			
	2013	2012	2011	
Balance, beginning of the period	\$278	\$255	\$236	
Provision	198	182	175	
Amounts charged to the accrual	(187	) (159	) (156	)
Balance, end of the period	\$289	\$278	\$255	

The provision includes amounts accrued for systems at the time of shipment, adjustments for changes in estimated costs for warranties on systems shipped in the period and changes in estimated costs for warranties on systems shipped in prior periods. It is not practicable to determine the amounts applicable to each of the components.

#### L. Income Taxes

2013 2011 2012 Federal: Current \$698 \$792 \$488 Deferred (163 ) (80 ) 14 535 712 502 State: Current 84 74 70

Deferred	(23	) (12	) (45
	61	62	25
Foreign:			
Current	192	169	101
Deferred	(16	) (25	) 12
	176	144	113
Total provision for income taxes	\$772	\$918	\$640

In 2013, 2012 and 2011, we were able to utilize net operating loss carryforwards and tax credit carryforwards to reduce the current portion of our tax provision by \$54 million, \$59 million and \$20 million, respectively.

The effective income tax rate is based upon income for the year, composition of the income in different countries, effect of tax law changes and adjustments, if any, for potential tax consequences, benefits and/or resolutions of tax audits or other tax contingencies. A reconciliation of our income tax provision to the statutory federal tax rate is as follows:

	2013		2012		2011	
Statutory federal tax rate	35.0	%	35.0	%	35.0	%
State taxes, net of federal taxes	1.6	%	1.3	%	0.7	%
Resolution of uncertain tax positions	(0.9	)%	(0.5	)%	(1.7	)%
Tax rate differential for international jurisdictions and other international related tax items	(15.2	)%	(13.6	)%	(14.4	)%
U.S. tax credits	(3.8	)%	(0.2	)%	(2.8	)%
International reorganization of acquired companies	0.6	%	0.3	%		%
Permanent items	2.3	%	1.5	%	2.5	%
Other	0.4	%	0.3	%	0.4	%
	20.0	%	24.1	%	19.7	%

Substantially all the tax rate differential for international jurisdictions was driven by earnings of our Irish subsidiaries.

On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law. Some of the provisions were retroactive to January 1, 2012 including an extension of the U.S. federal tax credit for increasing research activities through December 31,

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

2013. Because the extension was enacted after December 31, 2012, our 2012 effective income tax rate did not reflect our 2012 federal tax credit for increasing research activities even though it was reported on our 2012 federal income tax returns. Our 2013 income tax provision included the federal tax credit for increasing research activities for 2012 as well as for 2013, which reduced our 2013 effective income tax rate by 3.5%.

The components of the current and non-current deferred tax assets and liabilities are as follows (table in millions):

	December 31, 2013		December 31, 2012	
	Deferred	Deferred	Deferred	Deferred
	Tax	Tax	Tax	Tax
	Asset	Liability	Asset	Liability
Current:				
Accounts and notes receivable	\$96	<b>\$</b> —	\$68	\$—
Inventory	73	_	64	_
Accrued expenses	311	_	281	_
Deferred revenue	365	_	281	_
Equity	83	_	98	_
Credit carryforwards	4	_	5	_
Net operating losses	28	_	29	_
Total current	960	_	826	_
Property, plant and equipment, net	_	(291	) —	(286)
Intangible and other assets, net	_	(680	) —	(663)
Equity	139	_	144	_
Deferred revenue	253	_	177	_
Other non-current liabilities	_	(13	) —	(43)
Credit carryforward	280	_	242	_
Net operating losses	78	_	98	_
Other comprehensive loss	109	_	120	_
Total non-current	859	(984	781	(992)
Gross deferred tax assets and liabilities	1,819	(984	1,607	(992)
Valuation allowance	(211)		(183)	
Total deferred tax assets and liabilities	\$1,608	\$(984	\$1,424	\$(992)

At December 31, 2013 and 2012, net non-current state and foreign deferred tax assets of \$133 million and \$116 million, respectively, were included in other non-current assets on the consolidated balance sheets. We made minor revisions of certain amounts related to the classification of 2012 deferred tax balances related to deferred revenues and state tax carryforwards and related valuation allowance to conform to the 2013 presentation.

We have gross federal, state and foreign net operating loss carryforwards of \$219 million, \$277 million and \$45 million, respectively, at December 31, 2013. Portions of these carryforwards are subject to annual limitations, including Section 382 of the Internal Revenue Code of 1986 ("Code"), as amended, for U.S. tax purposes and similar provisions under other countries' tax laws. Certain of these net operating loss carryforwards will begin to expire in 2014 if not utilized, while others have an unlimited carryforward period.

We have federal and state credit carryforwards of \$2 million and \$283 million, respectively, at December 31, 2013. Portions of these carryforwards are subject to annual limitations, including Section 382 of the Code, as amended, for U.S. tax purposes and similar provisions under other countries' tax laws. Certain of these credit carryforwards will begin to expire in 2016 if not utilized, while others have an unlimited carryforward period. The valuation allowance at

December 31, 2013 mainly relates to state tax credit carryforwards.

Deferred income taxes have not been provided on basis differences related to investments in foreign subsidiaries. These basis differences were approximately \$10.2 billion and \$8.1 billion at December 31, 2013 and 2012, respectively, and consisted primarily of undistributed earnings permanently invested in these entities. The change in the basis difference in 2013 was mainly attributable to income earned in the current year. At December 31, 2013, our total cash, cash equivalents, and short-term and long-term

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

investments were \$17.6 billion. This balance includes approximately \$6.2 billion held by VMware, of which \$4.1 billion is held outside of the U.S., and \$4.3 billion held by EMC in entities outside of the U.S. If these overseas funds are needed for our operations in the U.S., we would be required to accrue and pay U.S. taxes to repatriate these funds. However, our intent is to permanently reinvest these funds outside of the U.S. and our current plans do not demonstrate a need to repatriate them to fund our U.S. operations. Determination of the amount of unrecognized deferred income tax liability related to these earnings is not practicable. Income before income taxes from foreign operations for 2013, 2012 and 2011 was \$2.3 billion, \$1.9 billion and \$1.8 billion, respectively. Income before income taxes from domestic operations for 2013, 2012 and 2011 was \$1.6 billion, \$1.9 billion and \$1.5 billion, respectively.

The following is a rollforward of our gross consolidated liability for unrecognized income tax benefits for the three years ended December 31 (table in millions):

	2013	2012	2011	
Unrecognized tax benefits, beginning of year	\$270	\$197	\$230	
Tax positions related to current year:				
Additions	37	25	42	
Reductions	_	(1	) (2	)
Tax positions related to prior years:				
Additions	10	64	14	
Reductions	(33	) (4	) (71	)
Settlements	(5	) —	(3	)
Lapses in statutes of limitations	(13	) (11	) (13	)
Unrecognized tax benefits, end of year	\$266	\$270	\$197	

As of December 31, 2013, 2012 and 2011, \$261 million, \$255 million and \$187 million, respectively, of the unrecognized tax benefits, if recognized, would have been recorded as a reduction to income tax expense. The remainder would be an adjustment to shareholders' equity.

We are routinely under audit by the Internal Revenue Service (the "IRS"). We have concluded all U.S. federal income tax matters for years through 2008. The IRS commenced a federal income tax audit for the tax years 2009 and 2010 in the third quarter of 2012. The current federal income tax audit is in the early stage for information gathering and it is not expected to be completed until 2015. We also have income tax audits in process in numerous state, local and international jurisdictions. In our international jurisdictions that comprise a significant portion of our operations, the years that may be examined vary, with the earliest year being 2004. Based on the timing and outcome of examinations of EMC, the result of the expiration of statutes of limitations for specific jurisdictions or the timing and result of ruling requests from taxing authorities, it is reasonably possible that the related unrecognized tax benefits could change from those recorded in our statement of financial position. We anticipate that several of these audits may be finalized within the next twelve months. While we expect the amount of unrecognized tax benefits to change in the next twelve months, we do not expect the change to have a significant impact on our results of operations or financial position. The \$71 million reduction during 2011 for tax positions related to prior years is principally due to the resolution of certain transfer pricing matters, inclusive of the completion of audits in certain foreign jurisdictions and the completion of the 2007 and 2008 U.S. federal income tax audits.

We recognize interest expense and penalties related to income tax matters in income tax expense. For 2013, 2012 and 2011, \$9 million, \$4 million and \$1 million, respectively, in interest expense was recognized. In addition to the unrecognized tax benefits noted above, the gross balance of the accrued interest and penalties were \$42 million, \$35 million and \$32 million as of December 31, 2013, 2012 and 2011, respectively.

M. Retirement Plan Benefits 401(k) Plan

EMC's Information Infrastructure business has established a deferred compensation program for certain employees that is qualified under Section 401(k) of the Code. EMC will match pre-tax employee contributions up to 6% of eligible compensation during each pay period (subject to a \$750 maximum match each quarter). Matching contributions are subject to a 3 year vesting period. Our contributions amounted to \$68 million, \$88 million and \$73 million in 2013, 2012 and 2011, respectively.

# EMC CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Employees may elect to invest their contributions in a variety of funds, including an EMC stock fund. The deferred compensation program limits an employee's maximum investment allocation in the EMC stock fund to 30% of their total contribution. Our matching contribution mirrors the investment allocation of the employee's contribution. Defined Benefit Pension Plan

We have a noncontributory defined benefit pension plan which was assumed as part of the Data General acquisition, which covers substantially all former Data General employees located in the U.S. In addition, certain of our foreign subsidiaries also have a defined benefit pension plan.

Benefits under these plans are generally based on either career average or final average salaries and creditable years of service as defined in the plans. The annual cost for these plans is determined using the projected unit credit actuarial cost method that includes actuarial assumptions and estimates which are subject to change. The measurement date for the plans is December 31.

The Data General U.S. pension plan's (the "Pension Plan") investment policy provides that no security, except issues of the U.S. Government, shall comprise more than 5% of total plan assets, measured at market. At December 31, 2013, the Pension Plan held \$0.4 million of our common stock.

The Pension Plan is summarized in the following tables. The other pension plans are not presented because they do not have a material impact on our consolidated financial position or results of operations.

The components of the change in benefit obligation of the Pension Plan is as follows (table in millions):

	December 31,	December 31	ι,
	2013	2012	
Benefit obligation, at beginning of year	\$539	\$483	
Interest cost	20	21	
Benefits paid	(18	) (17	)
Actuarial (gain) loss	(46	) 52	
Benefit obligation, at end of year	\$495	\$539	

The reconciliation of the beginning and ending balances of the fair value of the assets of the Pension Plan is as follows (table in millions):

December 31,	December 31,	
2013	2012	
\$431	\$397	
35	51	
1	_	
(18)	(17	)
\$449	\$431	
	2013 \$431 35 1 (18 )	2013 2012 \$431 \$397 35 51 1 — (18 ) (17

We did not make any significant contributions to the Pension Plan in 2013 or 2012 and we do not expect to make a contribution to the Pension Plan in 2014. The under-funded status of the Pension Plan at December 31, 2013 and 2012 was \$46 million and \$109 million, respectively. This amount is classified as a component of other long-term liabilities on the consolidated balance sheets.

In 2013, \$15 million of the accumulated actuarial loss and prior services cost associated with the Pension Plan were reclassified from accumulated comprehensive loss to a component of net periodic benefit cost. Additionally, the Pension Plan had net gains of \$53 million included in accumulated other comprehensive income (loss), which was primarily the result of an increase in the discount rate at the end of 2013. We expect that \$10 million of the total balance included in accumulated other comprehensive income (loss) at December 31, 2013 will be recognized as a component of net periodic benefit costs in 2014. We do not expect to receive any refunds from the Pension Plan in 2014.

#### **EMC CORPORATION**

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The components of net periodic expense of the Pension Plan are as follows (table in millions):

	2013	2012	2011	
Interest cost	\$20	\$21	\$23	
Expected return on plan assets	(28	) (26	) (25	)
Recognized actuarial loss	15	13	11	
Net periodic expense	\$7	\$8	\$9	

The weighted-average assumptions used in the Pension Plan to determine benefit obligations at December 31 are as follows:

	December 31,		December 31,		December 31,	
	2013		2012		2011	
Discount rate	4.7	%	3.7	%	4.6	%
Rate of compensation increase	N/A		N/A		N/A	

The weighted-average assumptions used in the Pension Plan to determine periodic benefit cost for the years ended December 31 are as follows:

	December 31,		December 31,		December 31,	
	2013		2012		2011	
Discount rate	3.7	%	4.6	%	5.4	%
Expected long-term rate of return on plan assets	6.75	%	6.75	%	6.75	%
Rate of compensation increase	N/A		N/A		N/A	
The benefit payments are expected to be paid in the follow.	ing years (table ir	mi	llions):			
2014					\$23	
2015					25	
2016					26	
2017					28	
2018					29	
2019-2022					163	

Fair Value of Plan Assets

Following is a description of the valuation methodologies used for assets measured at fair value at December 31, 2013:

Common Collective Trusts – valued at the net asset value calculated by the fund manager based on the underlying investments. These are all classified within Level 2 of the valuation hierarchy. These include: EB Daily Valued Small Cap Stock Index Fund, EB Daily Valued Large Cap Growth Stock Index Fund, EB Daily Valued Large Cap Value Stock Index Fund, EB Daily Valued Stock Index Fund, EB Daily Valued International Stock Index Fund, EB Daily Valued Emerging Markets Index Fund, EB Long Term Government Bond Index Fund, EB Long Term Credit Bond Index and Collective Trust High Yield Fund.

Corporate Debt Securities – valued daily at the closing price reported in active U.S. financial markets and are classified within Level 2 of the valuation hierarchy.

## EMC CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table sets forth, by level within the fair value hierarchy, the Pension Plan's assets at fair value as of December 31, 2013 and 2012 (table in millions):

	December 31, 2013					
	Level 1	Level 2	Level 3	Total		
Common collective trusts	\$—	\$330	\$—	\$330		
U.S. Treasury securities	2	_	_	2		