

EMC CORP  
Form 10-K  
February 25, 2014

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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 1934

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 \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 1-9853

EMC CORPORATION

(Exact name of registrant as specified in its charter)

Massachusetts

04-2680009

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification Number)

176 South Street

01748

Hopkinton, Massachusetts

(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 ☐ 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 ☒

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

Indicate by check mark whether the registrant has submitted electronically 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 (§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 ☐ 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.

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Large accelerated filer ☒ Accelerated filer ☐  
Non-accelerated filer ☐ (Do 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 ☒

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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EMC CORPORATION

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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™ 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](http://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](http://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](http://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](http://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;
- VMware'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;  
and

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:

- the 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.

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## ITEM 2. PROPERTIES

As of December 31, 2013, we owned or leased the facilities described below:

| Location   | Approximate Sq. Ft.*                  | Principal Use(s)   | Principal Segment(s)                                |
|--|---------------------------------------|--|---|
| Hopkinton, MA  | owned: 1,681,000                      | executive and administrative offices, R&D, customer service, sales and marketing               | Information Storage, Information Intelligence Group |
| Franklin, MA   | owned: 922,000<br>leased: 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: 1,410,000<br>leased: 103,000   | executive and administrative offices, R&D, sales, marketing and data center                    | VMware Virtual Infrastructure                       |
| Other North American Locations                           | owned: 1,361,000<br>leased: 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: 588,000<br>leased: 180,000     | manufacturing, customer service, R&D, administrative offices, sales and marketing              | **  |
| Europe, Middle East and Africa (excluding Cork, Ireland) | owned: 35,000<br>leased: 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.

\*\* All segments of our business generally utilize these facilities.

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.



## EXECUTIVE OFFICERS OF THE REGISTRANT

Our executive officers are as follows:

| 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 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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## 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       |
| Second Quarter | 29.98   | 22.77   | N/A       |
| Third Quarter  | 28.18   | 22.79   | N/A       |
| Fourth Quarter | 27.89   | 23.24   | 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)

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

(2)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 <sup>(1)</sup>     | 2012 <sup>(2)</sup> | 2011 <sup>(4)</sup> | 2010 <sup>(5)</sup> | 2009 <sup>(6)</sup> |
| 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 Corporation                                     | 2,889                   | 2,733               | 2,461               | 1,900               | 1,088               |
| Net income attributable to EMC Corporation per weighted average share, basic   | \$1.39                  | \$1.31              | \$1.20              | \$0.92              | \$0.54              |
| Net income attributable to EMC Corporation per weighted average share, diluted | \$1.33                  | \$1.23              | \$1.10              | \$0.88              | \$0.53              |
| 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                  | \$—                 | \$—                 | \$—                 | \$—                 |
| 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              |

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

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

(3) 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).

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

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

(6) 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):

|                                | 2013     | 2012     | 2011     | Percentage Change |              |
|--------------------------------|----------|----------|----------|-------------------|--------------|
|                                |          |          |          | 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           |

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|                |          |          |          |   |     |   |
|----------------|----------|----------|----------|---|-----|---|
| 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,

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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):

|                                  | 2013     | 2012     | 2011     | Percentage Change |              |   |
|----------------------------------|----------|----------|----------|-------------------|--------------|---|
|                                  |          |          |          | 2013 vs 2012      | 2012 vs 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):

|   | 2013    | 2012    | 2011    | Percentage Change |              |   |
|---|---------|---------|---------|-------------------|--------------|---|
|   |         |         |         | 2013 vs 2012      | 2012 vs 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 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 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         | % |

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

(2) Amount includes corporate reconciling items of \$603 million, \$626 million and \$581 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,

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 Months 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

|  | GAAP    | Stock-based compensation | Intangible asset amortization | Restructuring and acquisition-related charges | Amortization of VMware's capitalized software from prior periods | Special tax items | Non-GAAP |
|--|---------|--------------------------|-------------------------------|---|--|-------------------|----------|
| Gross margin                                   | \$4,224 | \$ 32                    | \$ 59                         | \$ —  | \$ 1   | \$ —              | \$4,317  |
| Operating income                               | 1,461   | 239                      | 98                            | 29  | 1  | —                 | 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

|  | GAAP    | Stock-based compensation | Intangible asset amortization | Restructuring and acquisition-related charges | Amortization of VMware's capitalized software from prior periods | Special tax items | R&D tax credit | Non-GAAP |
|--|---------|--------------------------|-------------------------------|---|--|-------------------|----------------|----------|
| Gross margin                                   | \$3,890 | \$ 31                    | \$ 57                         | \$ —  | \$ 13  | \$ —              | \$ —           | \$ 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 to EMC                 | 870     | 159                      | 64                            | 23  | 7  | 11                | 60             | 1,194    |
| Diluted earnings per share attributable to EMC | \$0.39  | \$ 0.07                  | \$ 0.03                       | \$ 0.01                                       | \$ —   | \$ 0.01           | \$ 0.03        | \$ 0.54  |

For the Twelve Months Ended December 31, 2013

|  | GAAP | Stock-based compensation | Intangible asset amortization | Restructuring and acquisition-related charges | Amortization of VMware's capitalized software from prior periods | Net gain on disposition of certain lines of business and other | Special tax items | R&D tax credit | Non-GAAP |
|--|------|--------------------------|-------------------------------|---|--|--|-------------------|----------------|----------|
|--|------|--------------------------|-------------------------------|---|--|--|-------------------|----------------|----------|

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|  |          |         |         |         |         |          |          |          |           |
|--|----------|---------|---------|---------|---------|----------|----------|----------|-----------|
| Gross margin                                   | \$14,473 | \$ 124  | \$ 232  | \$ —    | \$ 34   | \$ —     | \$—      | \$—      | \$ 14,864 |
| Operating income                               | 4,150    | 935     | 389     | 224     | 34      | —        | —        | —        | 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   |

For the Twelve Months Ended December 31, 2012

|  | GAAP      | Stock-based compensation | Intangible asset amortization | Restructuring and acquisition-related charges | Amortization of VMware's capitalized software from prior periods | RSA special charge (release) | Loss on interest rate swaps | Gain on strategic investments | Special tax items | R&D tax credit | Non-GAAP  |
|--|-----------|--------------------------|-------------------------------|---|--|------------------------------|-----------------------------|-------------------------------|-------------------|----------------|-----------|
| Gross margin                                   | \$ 13,638 | \$ 126                   | \$ 199                        | \$ —  | \$ 62  | \$ (24 )                     | \$ —                        | \$ —                          | \$ —              | \$ —           | \$ 14,001 |
| Operating income                               | 3,964     | 920                      | 365                           | 111   | 62   | (24 )                        | —                           | —                             | —                 | —              | 5,397     |
| Income tax provision                           | 918       | 230                      | 112                           | 22  | 20   | (6 )                         | 15                          | —                             | (12 )             | (66 )          | 1,234     |
| Net income attributable to EMC                 | 2,733     | 623                      | 238                           | 87  | 33   | (18 )                        | 24                          | (32 )                         | 11                | 60             | 3,759     |
| Diluted 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 Months Ended |                   | For the Year Ended |                   |
|--|----------------------------|-------------------|--------------------|-------------------|
|  | December 31, 2013          | December 31, 2012 | December 31, 2013  | December 31, 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):

|  | Amortized<br>Cost | Unrealized<br>Gains | Unrealized<br>(Losses) | Aggregate<br>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 obligations | 352                    | 211              | 1          | —           | 1                 |
| Purchase orders   | 2,548                  | —                | —          | —           | —                 |
| Uncertain tax positions and related interest  | 308                    | —                | —          | —           | —                 |
| Total   | \$12,348               |                  |            |             |                   |