

Seagate Technology Public Limited Company (STX – \$53.90)

June 22, 2015

Seagate Technology Public Limited Company (STX) manufactures and sells electronic data storage products. The principal products are hard disk drives or HDDs. Hard disk drives are devices that store digitally encoded data on rapidly rotating disks with magnetic surfaces. In addition to hard disk drives, the Company produces a range of electronic data storage products including solid state hybrid devices and solid state drives. The products are designed for enterprise servers, client compute applications, and client non-compute applications. In addition to data storage products and subsystems, the Company provides data storage services for small to medium-sized businesses. The Company is headquartered in Dublin, Ireland and its US executive headquarters are in Cupertino, CA. Its fiscal year ends on the Friday closest to 06/30.

Thesis Summary

We are concerned about a potential reduction in demand for built-in data storage due to the proliferation of cloud computing. Further, we believe the shift to solid state drives may result in increased competitive pressures on Seagate. Our concerns are heightened given receivable and inventory levels are elevated on an absolute basis and relative to Seagate's closest peer. Finally, cash flow deterioration and executive turnover in Seagate's cloud business heighten our concerns.

Catalysts and Timing

- Weaker-than-expected total addressable market in Q4 15.
- Weaker-than-expected Q1 16 guidance.
- Slowing average capacity per unit and/or terabyte per unit growth.
- Increased proliferation of cloud computing and/or solid state drives.

Company Data

Country/Exchange	US/NASDAQ
Shares Outstanding (mil)	317.4
Float (mil)	314.9
Short Interest (mil)	30.4
% of Float Short	9.6%
Avg. Volume (mil)	3.1
52 Week Range	\$50.44-\$69.40
Dividend Yield	4.0%
Market Cap (bil)	\$16.9
Net Debt (mil)	\$1,321.0
TTM Rev (mil)/Rev Growth	\$14,112/1.9%
TTM EBITDA (mil)	\$3,101.0
TTM Gross Margin %/Change	28.0%/20bps
TTM Op. Margin %/Change	16.0%/290bps

Historical EPS

	Actual	Expected	Surprise
Q3 15	\$1.08	\$1.05	2.9%
Q2 15	\$1.35	\$1.35	0.0%
Q1 15	\$1.34	\$1.24	8.1%

Estimate Drift

	Est.	1M Ago	6M Ago	1Yr Ago
Q4 15 Rev	\$3,261	\$3,280	\$3,507	\$3,428
FY 15 Rev	\$14,059	\$14,088	\$14,603	\$13,939
FY 16 Rev	\$14,045	\$14,101	\$14,784	\$13,941
Q4 15 EPS	\$1.00	\$1.01	\$1.25	\$1.36
FY 15 EPS	\$4.76	\$4.78	\$5.21	\$5.49
FY 16 EPS	\$5.07	\$5.11	\$5.78	\$6.02

Peers Mentioned In This Piece

Toshiba Corporation (6502.T)
Hewlett-Packard Company (HPQ)
Intel Corporation (INTC)
Micron Technology, Inc. (MU)
SanDisk Corporation (SNDK)
Western Digital Corporation (WDC)
Samsung Electronics Co., Ltd. (5930.KS)

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Background and Bull Story

Company Background

Company description: Seagate Technology Public Limited Company (STX) manufactures and sells electronic data storage products. The principal products are hard disk drives or HDDs. Hard disk drives are devices that store digitally encoded data on rapidly rotating disks with magnetic surfaces. In addition to hard disk drives, the Company produces a range of electronic data storage products including solid state hybrid devices and solid state drives. The products are designed for enterprise servers, client compute applications, and client non-compute applications. In addition to data storage products and subsystems, the Company provides data storage services for small to medium-sized businesses. The Company is headquartered in Dublin, Ireland and its US executive headquarters are in Cupertino, CA. Its fiscal year ends on the Friday closest to 06/30.

Markets: In FY 14, the Company shipped 65.4% of its units to client compute customers, 20.6% to client non-compute customers, and 14.1% to enterprise storage customers. Client compute applications are designed for desktop and mobile compute applications. Client non-compute applications are designed for consumer electronic devices and branded disk drives for external storage and network-attached storage (NAS). The enterprise storage market consists of mission critical and nearline applications. Mission critical applications are vital for the operation of large-scale enterprise workloads, requiring high performance and high reliability storage. Nearline applications require high capacity and energy efficient storage such as storage for cloud computing, content delivery, and back up services.

FY 14 Client Compute Analysis	% of Units Shipped	FY 14 Client Non-Compute Analysis	% of Units Shipped	FY 14 Markets Analysis	% of Units Shipped
Desktop	53.2%	Consumer electronics	51.5%	Client compute	65.4%
Notebook	46.8%	Branded	48.5%	Client non-compute	20.6%
--	--	--	--	Enterprise storage	14.1%
Client compute	100.0%	Client non-compute	100.0%	Total	100.0%

Customer and geographic concentration: In FY 14, original equipment manufacturers (OEMs) accounted for 68.0% of revenue, distributors accounted for 20.0%, and retail accounted for 12.0%. Specifically, Dell (Hewlett-Packard) accounted for 13.0% (13.0%) of FY 14 revenue.¹ OEM customers typically enter into master purchase agreements that provide for pricing, volume discounts, order lead times, product support obligations, among other terms. Distributors enter into non-exclusive agreements for the resale of products. The retail channel consists of branded storage products sold to retailers. In FY 14, Asia Pacific accounted for 54.0% of revenue, the Americas accounted for 27.0%, and EMEA (Europe, the Middle East, and Asia) accounted for 19.0%.

FY 14 Customer Concentration Analysis	As % of Revenue	FY 14 Geographic Analysis	As % of Revenue
OEMs	68.0%	Asia Pacific	54.0%
Distributors	20.0%	Americas	27.0%
Retail	12.0%	EMEA	19.0%
Total	100.0%	Total	100.0%

Price erosion: In its FY 14 10K, the Company indicated the data storage industry has been characterized by price declines for disk drive products with comparable capacity, performance, and feature sets (like-for-like products). The Company represented price erosion is more pronounced during periods of (1) economic contraction, (2) few new product introductions, and (3) industry supply exceeding demand. The Company indicated disk drive

¹ Dell, Inc. (private) and Hewlett-Packard Company (HPQ).

manufacturers attempt to offset price erosion with an improved mix of disk drive products characterized by higher capacity, better performance, and additional feature sets and/or product cost reductions.

Seasonality: In its FY 14 10K, Seagate disclosed the data storage industry experiences seasonality with higher levels of demand in the second half of the calendar year. The seasonality is driven by increased consumer spending in the back-to-school season and traditional holiday shopping season.

Competition: Seagate primarily competes with Western Digital Corporation (WDC) and to a lesser extent Toshiba Corporation (6502.T) for sales of hard disk drives. Seagate also competes with other companies that provide alternative storage technologies such as solid state drives. Competitors in the solid state drive market include Western Digital, Toshiba, Intel Corporation (INTC), Micron Technology, Inc. (MU), Samsung Electronics Co. Ltd. (5930.KS), and SanDisk Corporation (SNDK), among others.

The Bull Story: Industry Consolidation, Acquisitions, Capacity Increases

Hard disk drive industry consolidation: On 12/19/11, Seagate acquired Samsung Electronics Co., Ltd's hard disk drive business for \$1,140.0 million, \$571.0 million in cash and \$569.0 million in stock. On 03/08/12, Western Digital acquired Viviti Technologies Ltd. (formerly known as HGST) from Hitachi, Ltd. (6501.T) for \$4,700.0 million, \$4,600.0 million in cash and \$102.0 million in stock options, RSUs, and cash-settled stock appreciation rights assumed. The two acquisitions reduced the competition in the hard disk drive market from five competitors to three competitors. In its FY 14 10K, Seagate represented the industry consolidation in FY 12 reduced the impact of industry price erosion.

Following the impact of the flooding in Thailand and further industry consolidation in fiscal year 2012, the HDD industry has maintained improved pricing discipline resulting in benign price erosion in fiscal years 2013 and 2014. (FY 14 10K)

Acquisitions expand supply chain and flash offerings: On 03/31/14, Seagate acquired Xyratex Ltd. a provider of data storage technology for approximately \$376.0 million in cash. In its FY 14 10K, Seagate indicated the Xyratex acquisition strengthened its supply chain, provided access to important capital requirements, and expanded its storage portfolio. On 09/02/14, Seagate acquired LSI's Accelerated Solutions Division and Flash Components Division from Avago Technologies Limited (AVGO) for \$450.0 million in cash. In its 09/02/14 Press Release, Seagate represented the acquisition increased its range and depth of solid state drive (flash) storage capabilities. Further, Seagate indicated the acquisition expanded its ability to meet a broader base of customers' needs and drive new revenue opportunities.

Increased average capacity-per-drive and shift to enterprise storage may benefit margins: In Q3 15, average capacity-per-drive increased 19.8% year-over-year to 1,102.0 gigabytes, while revenue-per-unit shipped increased 7.7% to \$66.47. Accordingly, increased average capacity-per-drive mitigated a portion of the price erosion in like-for-like products. In addition, on its Robert W. Baird Growth Stock Conference Call on 05/06/15, the Company indicated higher capacity drives have higher margins.

The higher capacities, the higher components that go into it. And so that's where it gets to the more heads per disk or the more disks that go into each of the systems. And obviously those carry a higher trajectory of margin. (SVP Finance Mr. David H. Morton, Robert W. Baird Growth Stock Conference Call, 05/06/15)

Capacity Analysis	Q3 15	Q2 15	Q1 15	Q4 14	Q3 14
Average capacity-per-drive (in gigabytes)	1,102.0	1,077.0	1,007.0	938.0	920.0
<i>Year-over-year change</i>	<i>19.8%</i>	<i>16.8%</i>	<i>14.7%</i>	<i>10.1%</i>	<i>8.5%</i>
Revenue-per-unit shipped	\$66.47	\$64.96	\$63.61	\$62.88	\$61.70
<i>Year-over-year change</i>	<i>7.7%</i>	<i>4.2%</i>	<i>1.6%</i>	<i>(1.1%)</i>	<i>(2.5%)</i>

Enterprise category growth outpaces closest peer: In Q3 15, Seagate (Western Digital) twelve-month enterprise storage units shipped increased 8.2% (declined 0.5%) year-over-year to 34.4 million (30.4 million) units. Accordingly, Seagate and Western Digital combined enterprise storage units increased 3.9% to 64.8 million units, and Seagate enterprise storage units as a percentage of total Seagate and Western Digital units increased 210 basis points to 53.1%. Accordingly, Seagate enterprise storage units shipped outpaced Western Digital enterprise storage units shipped.

Enterprise Units Analysis (units in millions)	12M Ended Q3 15	12M Ended Q2 15	12M Ended Q1 15	12M Ended Q4 14	12M Ended Q3 14
Seagate enterprise units	34.4	33.0	31.7	31.0	31.8
<i>Year-over-year change</i>	<i>8.2%</i>	<i>4.4%</i>	<i>1.9%</i>	<i>5.8%</i>	<i>7.4%</i>
Western Digital enterprise units	30.4	30.0	29.8	29.8	30.6
<i>Year-over-year change</i>	<i>(0.5%)</i>	<i>(2.1%)</i>	<i>0.9%</i>	<i>7.4%</i>	<i>10.2%</i>
Total enterprise units	64.8	63.0	61.5	60.8	62.4
<i>Year-over-year change</i>	<i>3.9%</i>	<i>1.2%</i>	<i>1.4%</i>	<i>6.6%</i>	<i>8.8%</i>

Valuation: On 04/22/15, Seagate reported Q3 15 revenue (non-GAAP earnings) of \$3,330.0 million (\$1.08), 2.6% below (2.9% above) the consensus estimate of \$3,418.5 million (\$1.05). As of the date of this publication Seagate traded at 11.1x next twelve-month earnings, 5.6% below Western Digital.

Valuation Analysis	P/E NTM
Seagate	11.1
Western Digital	11.8
<i>% above (below) peer</i>	<i>(5.6%)</i>

Voyant's Earnings Risk Assessment

We are concerned about a potential reduction in demand for built-in data storage due to the proliferation of cloud computing. Further, we believe the shift to solid state drives may result in increased competitive pressures on Seagate. Our concerns are heightened given receivable and inventory levels are elevated on an absolute basis and relative to Seagate's closest peer. Finally, cash flow deterioration and executive turnover in Seagate's cloud business heighten our concerns.

Cloud Computing May Negatively Impact Demand For Built-In Storage, In Our View

Background on built-in storage products: In FY 14, the Company shipped 65.4% (20.6%) of units for client compute (client non-compute) applications. Therefore, the Company shipped 86.0% of units for client compute and non-compute products. Client compute products are storage products for desktop and notebook computers. Client non-compute products are storage products for consumer electronic devices (e.g. DVRs and surveillance systems) and branded disk drives for external and network-attached storage.

Units Shipped Analysis	FY 14	FY 13	FY 12
Client compute	65.4%	67.0%	69.7%
Client non-compute	20.6%	19.9%	17.4%
Client total	86.0%	86.9%	87.0%
Enterprise storage	14.1%	13.1%	12.9%
Total	100.0%	100.0%	100.0%

Background on cloud storage: Cloud computing delivers shared resources, software, and information to users on-demand on multiple devices. Most cloud computing consists of services delivered through large datacenters with enterprise-class servers. Data is hosted, accessed, and processed through a third-party provider over a broadband internet connection. Consumers use cloud based services such as Dropbox, Box, and Google documents to store documents; Facebook and Instagram to store images; and Apple's iCloud and Amazon Prime to watch television/movies on demand. Business are using cloud computing services such as Salesforce and Workday.

Storage Medium Analysis	Approximate Size	Traditional	Computer Age	Cloud/Social Age
Document	0.1MB	Print	HDD	Google Docs/Dropbox/Box
Image	3.0MB	Print	HDD	Facebook/Instagram/Snapchat
Video	1,000.0MB	Film/VHS	HDD	Apple TV/Amazon Prime/HBO Go

Proliferation of cloud computing may reduce demand for built-in device storage, in our view: In its FY 14 10K, the Company represented as cloud storage becomes more prevalent client compute applications require less built-in storage. Consumers can download content from the cloud without using built-in storage on their device. Therefore, instead of content being stored on multiple personal hard drives it can be stored on fewer cloud servers but still accessed by the same number of consumers. For example, a single one gigabyte movie that was formerly stored on 100,000 computer hard drives (i.e. 100,000 GB of storage) can now be stored on a single cloud server (i.e. one GB of storage). **Accordingly, we believe the proliferation of cloud storage may reduce demand for built-in storage in desktop and notebook computers and external hard drives, and reduce the amount of unutilized storage capacity.**

As the storage of digital content in the cloud becomes more prominent, some **client compute applications require less built-in storage**, and therefore alternative storage solutions are becoming more prevalent within the client compute market. (FY 14 10K) [emphasis added]

Shift in television viewing patterns may reduce demand for consumer electronic storage, in our view: In Q3 15, twelve-month client-non compute units shipped declined 6.0% year-over-year to 43.6 million units. Specifically, consumer electronics (branded) units declined 9.8% (1.8%) to 22.0 million (21.6 million) units. We believe consumer electronic shipments relate primarily to DVR devices. In Q4 14, Netflix (NFLX) US internet television subscribers increased 17.0% year-over-year to 39.1 million, the fifth consecutive double-digit increase. Further, certain television operators continue to highlight a shift from traditional viewership to on-demand viewership.² In our view, the shift toward more streaming and on-demand television viewership may result in reduced demand for DVR units and/or DVR storage capacity.

Client Non-Compute Analysis (units in millions)	12M Ended Q3 15	12M Ended Q2 15	12M Ended Q1 15	12M Ended Q4 14	12M Ended Q3 14
Consumer electronics units	22.0	22.6	23.2	23.4	24.4
<i>Year-over-year change</i>	<i>(9.8%)</i>	<i>(8.9%)</i>	<i>(2.1%)</i>	<i>0.4%</i>	<i>(0.8%)</i>
Branded units	21.6	22.4	22.6	22.0	22.0
<i>Year-over-year change</i>	<i>(1.8%)</i>	<i>2.8%</i>	<i>4.6%</i>	<i>1.4%</i>	<i>6.3%</i>
Client non-compute units	43.6	45.0	45.8	45.4	46.4
<i>Year-over-year change</i>	<i>(6.0%)</i>	<i>(3.4%)</i>	<i>1.1%</i>	<i>0.9%</i>	<i>2.4%</i>

Shift To Solid State Storage May Pressure Growth, In Our View

Background on hard disk drives (HDDs) and solid state drives (SSDs): Hard disk drives (HDDs) are devices that store digitally encoded data on rapidly rotating disks with magnetic surfaces. Solid state drives (SSDs) store data on interconnected flash memory chips. SSDs are more expensive than HDDs on a per gigabyte basis. On its Robert W. Baird Growth Stock Conference Call on 05/06/15, the Company indicated SSD (flash) memory costs approximately \$0.30 to \$0.40 per gigabyte compared to \$0.05 per gigabyte for HDDs. HDDs typically have more capacity and availability than SSDs, while SSDs are quieter, lighter, faster, more power efficient, and more durable.

HDDs vs. SSD Price Analysis	Price Per Gigabyte
Hard disk drives	\$0.05
Solid state drives	\$0.30 to \$0.40

Solid state drives market expands: On its Sanford C. Bernstein Strategic Decisions Conference Call on 05/27/15, Micron Technology represented the data storage dynamic was shifting to solid state. On its Sanford C. Bernstein Strategic Decisions Conference Call on 05/28/15, SanDisk guided for the enterprise SSD total addressable market to grow from \$4.0 billion in CY 14 to approximately \$9.0 billion in CY 18. Further, SanDisk represented enterprise SSDs were replacing certain hard disk drives and were a “major area of focus” for SanDisk.

The strongest growth for the industry TAM is in enterprise SSDs, about a \$4 billion enterprise SSD TAM in 2014, growing to about a \$9 billion TAM for the industry in 2018 timeframe. And this is where flash solutions really are enabling tremendous benefit of cost of acquisition as well as cost of ownership leading already to 15K hard-disk drive getting replaced by solid-state drive and then also 10K HDDs starting to get replaced by solid-state drive. So this is an exciting opportunity for the flash industry, and

² See our 03/30/15 HSN, Inc. (HSNI) *Comprehensive Analysis* for discussion on shift in television viewership.

this is a major area of focus for SanDisk in terms of driving our growth opportunities in the future. (SNDK CEO Mr. Sanjay Mehrotra, Sanford C. Bernstein Strategic Decisions Conference Call, 05/28/15)

We have the following observations:

- 1. Seagate is a laggard in SSD market share, in our view:** As mentioned, the solid state drive market has more competitors than the hard disk drive market. On its Stifel, Nicolaus Technology Conference Call on 02/09/15, Seagate guided to generate approximately \$100.0 million in revenue per quarter from its SSD (flash) business and indicated its competition was “ahead” in the SSD market. We believe Seagate had a 6.2% share of the SSD market.³ **Accordingly, we believe the SSD market may be more competitive than the HDD market and Seagate may be behind the competition in the SSD market. In our view, as price for SSDs decline and demand shifts from HDDs to SSDs, Seagate may face more revenue pressure than its peers.**

Going into this quarter, we're going to be getting close to \$100 million a quarter in flash-based business. We haven't announced – we don't disclose that in our earnings release, et cetera, but we're tracking. And **I know our competition is ahead of us**, but I think we have some really interesting stuff. (President Global Markets & Customers Mr. Albert A. Pimentel, Stifel, Nicolaus Technology Conference Call, 02/09/15) [emphasis added]

SSD Revenue Analysis (\$ in millions)	Annualized SSD Revenue	% of Market Share
Seagate	\$400.0	6.2%
Western Digital	\$896.0	13.8%
SanDisk	\$1,922.0	29.6%
Micron	\$3,271.6	50.4%
Total SSD market (Voyant estimate)	\$6,489.6	100.0%

- 2. Laptops are shifting exclusively to SSD, in our view:** In Q3 15, twelve-month client compute units shipped declined 1.7% year-over-year to 140.9 million units. Specifically, desktop (notebook) units shipped declined 12.1% (increased 10.4%). The Company did not discuss the unit shipment decline on its Q3 15 Conference Call or in its Q3 15 10Q.

As mentioned, we believe consumers’ demand for built-in personal storage capacity may decline as cloud storage becomes more prevalent. Given storage capacity may be less important in the purchase decision making process, we believe notebook customers may focus more on speed, durability, weight, and/or battery life. In our view, consumer preferences may be shifting to SSDs in notebooks. All major notebook OEMS (including Apple, Dell, Acer, and Toshiba) offer SSD notebooks. **Apple no longer sells laptops with HDD.**⁴ **Given that Seagate (1) is competitively weaker in SSDs relative to peers and (2) has offset desktop weakness with increased notebook units, we believe increased demand for SSDs may pressure Seagate revenue growth and market share.**

³ We estimated Seagate and Western Digital annualized SSD revenue based on quarterly SSD revenue disclosures. Further, our peer group is a limited subset of SSD competitors based on companies that disclose SSD revenue. As such, we believe Seagate has a maximum of 6.2% in the SSD market.

⁴ We believe Apple was the first major OEM to cease including floppy disks (CD-ROM drives) in desktops (laptops). In our view, Apple is an innovator in computer hardware configuration.

Client Units Analysis (units in millions)	12M Ended Q3 15	12M Ended Q2 15	12M Ended Q1 15	12M Ended Q4 14	12M Ended Q3 14
Desktop units	67.4	72.9	76.1	76.5	76.7
<i>Year-over-year change</i>	<i>(12.1%)</i>	<i>(4.7%)</i>	<i>(3.9%)</i>	<i>(5.0%)</i>	<i>(10.6%)</i>
Notebook units	73.5	73.1	70.3	67.3	66.6
<i>Year-over-year change</i>	<i>10.4%</i>	<i>8.8%</i>	<i>4.0%</i>	<i>(4.8%)</i>	<i>(13.5%)</i>
Client compute units	140.9	146.0	146.4	143.8	143.3
<i>Year-over-year change</i>	<i>(1.7%)</i>	<i>1.6%</i>	<i>(0.3%)</i>	<i>(4.9%)</i>	<i>(12.0%)</i>

Desktop Demand Weakness May Pressure Growth, In Our View

Background on PC exposure: In FY 14, client compute applications accounted for 65.4% of units shipped. Specifically, Seagate desktop (notebook) units accounted for 34.8% (30.6%), while Western Digital desktop (notebook) units accounted for 26.9% (36.2%). Client compute products are designed primarily for desktop and mobile computing. On its Bank of America Merrill Lynch Global Technology Conference Call on 06/02/15, the Company represented its PCs accounted for less than 50.0% of its revenue.

Relative Desktop Shipment Analysis (desktop units as % of units shipped)	FY 14	FY 13	FY 12
Seagate	34.8%	35.7%	38.1%
Western Digital	26.9%	28.6%	34.7%

Weak PC demand impacts client compute unit shipments, in our view: In Q3 15, twelve-month Seagate (Western Digital) client compute shipments declined 1.7% (6.7%) year-over-year to 140.9 million (147.7 million) units. Accordingly, Seagate and Western Digital combined client compute unit shipments declined 4.3% to 288.6 million units. On its Q3 15 Conference Call, Seagate represented it faced challenges from macroeconomic pressures in Europe and PC demand in the quarter.

Client Units Shipped Analysis (units shipped in millions)	12M Ended Q3 15	12M Ended Q2 15	12M Ended Q1 15	12M Ended Q4 14	12M Ended Q3 14
Seagate client compute units	140.9	146.0	146.4	143.8	143.3
<i>Year-over-year change</i>	<i>(1.7%)</i>	<i>1.6%</i>	<i>(0.3%)</i>	<i>(4.9%)</i>	<i>(12.0%)</i>
Western Digital client compute units	147.7	153.8	156.7	157.2	158.3
<i>Year-over-year change</i>	<i>(6.7%)</i>	<i>(3.8%)</i>	<i>(1.6%)</i>	<i>(2.8%)</i>	<i>(9.9%)</i>
Total client compute units	288.6	299.8	303.1	301.0	301.6
<i>Year-over-year change</i>	<i>(4.3%)</i>	<i>(1.2%)</i>	<i>(1.0%)</i>	<i>(3.8%)</i>	<i>(10.9%)</i>

We have the following observations:

- 1. PC demand weakness may persist, in our view:** On its Q1 15 Conference Call on 04/14/15, Intel Corporation represented PC demand was weaker-than-expected. Intel indicated PC inventory levels were lower across the supply chain and reduced its FY 15 PC unit growth guidance for from flat to a mid single-digit decline.⁵ In addition, on its Q3 15 Conference Call, Western Digital guided for global macroeconomic headwinds to negatively impact PC sales in the short term. **Accordingly, we believe PC demand weakness may persist and continue to pressure client compute unit growth.**

⁵ Intel's Q1 15 period corresponds to Seagate's Q3 15 period.

The change in revenue outlook was a result of weaker than expected demand for business desktop PCs, lower than expected inventory levels across the PC supply chain...We believe there was an inventory burn across the worldwide PC supply chain in the first quarter and we expect a further reduction in inventory supply chain levels in the second quarter in anticipation of Windows 10 launch this summer...We expect revenue to be approximately flat to 2014, down from the prior guidance of mid single-digit percentage growth. We're now projecting a mid single-digit decline in the overall PC market. (INTC CFO Mr. Stacy J. Smith, INTC Q1 15 Conference Call, 04/14/15)

- 2. Desktop unit shipment deterioration may disproportionately impact Seagate, in our view:** In Q3 15, Seagate (Western Digital) twelve-month desktop units shipped declined 12.1% (8.3%) year-over-year to 67.4 million (61.4 million) units. Combined Seagate and Western Digital desktop units shipped declined 10.3% to 128.8 million units. Accordingly, Seagate's percentage of total Seagate and Western Digital desktop units shipped declined 110 basis points to 52.3%. Given Seagate's higher desktop exposure relative to Western Digital and potential unit market share loss, we believe the accelerating deterioration in desktop unit shipments may disproportionately impact Seagate.

Desktop Shipment Analysis (desktop units in millions)	12M Ended Q3 15	12M Ended Q2 15	12M Ended Q1 15	12M Ended Q4 14	12M Ended Q3 14
Seagate	67.4	72.9	76.1	76.5	76.7
<i>Year-over-year change</i>	<i>(12.1%)</i>	<i>(4.7%)</i>	<i>(3.9%)</i>	<i>(5.0%)</i>	<i>(10.6%)</i>
Western Digital	61.4	64.5	66.0	66.9	67.0
<i>Year-over-year change</i>	<i>(8.3%)</i>	<i>(6.1%)</i>	<i>(5.2%)</i>	<i>(3.1%)</i>	<i>(9.7%)</i>
Total	128.8	137.4	142.1	143.4	143.7
<i>Year-over-year change</i>	<i>(10.3%)</i>	<i>(5.4%)</i>	<i>(4.5%)</i>	<i>(4.1%)</i>	<i>(10.2%)</i>

- 3. Revenue-per-terabyte shipped deterioration may exacerbate desktop demand weakness, in our view:** In Q3 15, twelve-month terabytes shipped increased 14.1% year-over-year to 225.7 million, while revenue increased 1.9% to \$14,112.0 million. Accordingly, revenue-per-terabyte shipped declined 10.7% to \$62.53. In our view, the deterioration in revenue-per-terabyte shipped may exacerbate desktop demand pressure.

Terabytes Shipped Analysis (in millions)	12M Ended Q3 15	12M Ended Q2 15	12M Ended Q1 15	12M Ended Q4 14	12M Ended Q3 14
Terabytes (TB) shipped	225.7	221.3	212.2	201.2	197.8
Revenue	\$14,112.0	\$14,188.0	\$14,020.0	\$13,724.0	\$13,848.0
Revenue-per-TB shipped	\$62.53	\$64.11	\$66.07	\$68.21	\$70.01
<i>Year-over-year</i>	<i>(10.7%)</i>	<i>(10.9%)</i>	<i>(11.1%)</i>	<i>(12.7%)</i>	<i>(16.7%)</i>

Elevated Receivables Suggest Weak End Market Demand, In Our View

Receivable levels build: In Q3 15, receivables increased 8.3% year-over-year to \$1,769.0 million, while revenue declined 2.2% to \$3,330.0 million. Accordingly, receivables-to-revenue increased 10.8% to 0.531, the highest level in three years. The Company did not discuss the receivable levels on its Q3 15 Conference Call or in its Q3 15 10Q.

Receivables Analysis (\$ in millions)	Q3 15	Q2 15	Q1 15	Q4 14	Q3 14
Receivables	\$1,769.0	\$1,829.0	\$1,909.0	\$1,729.0	\$1,633.0
Revenue	\$3,330.0	\$3,696.0	\$3,785.0	\$3,301.0	\$3,406.0
Receivables-to-revenue	0.531	0.495	0.504	0.524	0.479
<i>Year-over-year change</i>	<i>10.8%</i>	<i>8.1%</i>	<i>8.8%</i>	<i>7.4%</i>	<i>8.2%</i>

We have the following observations:

- 1. Elevated receivable levels relative to closest peer suggest company specific issues, in our view:** In Q3 15, Seagate days sales outstanding (DSOs) increased 13.3% year-over-year to 49.2 days, Western Digital DSOs declined 0.8% to 45.8 days. Accordingly, we believe the elevated Seagate receivable levels may be a company specific issue. In our view, Seagate receivable levels may indicate end market demand weakness due to its relatively higher exposure to desktop computers and/or limited exposure to the SSD market.

Peer DSO Analysis	Q3 15	Q2 15	Q1 15	Q4 14	Q3 14
Seagate days sales outstanding (DSO)	49.2 days	46.0 days	47.1 days	46.3 days	43.4 days
<i>Year-over-year change</i>	<i>13.3%</i>	<i>10.4%</i>	<i>9.8%</i>	<i>7.9%</i>	<i>4.7%</i>
Western Digital (DSO)	45.8 days	44.4 days	48.5 days	47.2 days	46.2 days
<i>Year-over-year change</i>	<i>(0.8%)</i>	<i>3.4%</i>	<i>13.2%</i>	<i>10.8%</i>	<i>11.4%</i>

- 2. End market demand weakness may have driven receivables build, in our view:** In FY 14, Hewlett-Packard accounted for approximately 13.0% of Seagate revenue. In its Q2 15 10Q, Hewlett-Packard indicated its days payables outstanding (DPO) increased year-over-year due to the extension of payment terms with product suppliers and improvement in purchasing linearity. On its Q2 15 Conference Call on 05/21/15, Hewlett-Packard indicated it had slower sell-out at the end of its Q2 15 period, putting some pressure on Q3 15 revenue.⁶ Given Hewlett-Packard's representation that certain product suppliers extended payment terms and guidance for weak sell-through, we believe end market demand weakness may pressure Seagate revenue.

Compared to the corresponding period in fiscal 2014, the increase in DPO was primarily the result of an extension of payment terms with our product suppliers and improvement in purchasing linearity. (Hewlett-Packard Q2 15 10Q)

- 3. Retail revenue decline suggests end market demand weakness, in our view:** In Q3 15, retail revenue declined 16.2% year-over-year to \$399.6 million. In its FY 14 10K, the Company disclosed revenue for certain retail customers is recognized on a sell-through basis. Accordingly, we believe the retail revenue decline suggests potential end market demand weakness. In our view, end market demand weakness may have resulted in elevated channel inventory levels at distributors. As such, we believe distributor revenue may be pressured.

Retail Revenue Analysis (\$ in millions)	Q3 15	Q2 15	Q1 15	Q4 14	Q3 14
Retail revenue	\$399.6	\$480.5	\$454.2	\$363.1	\$476.8
<i>Year-over-year change</i>	<i>(16.2%)</i>	<i>4.8%</i>	<i>18.3%</i>	<i>6.0%</i>	<i>4.0%</i>

⁶ Hewlett-Packard's Q2 15 period corresponds to Seagate's Q3 15 period.

Elevated Inventory May Levels Portend Margin Pressure, In Our View

Inventory levels surge: In Q3 15, inventory increased 28.0% year-over-year to \$1,083.0 million, while revenue declined 2.2% to \$3,330.0 million. Accordingly, inventory-to-revenue surged 30.9% to 0.325, the highest level in at least four years. On its Q3 15 Conference Call, the Company indicated inventory and channel inventory was “within manageable levels.”

Inventory Analysis (\$ in millions)	Q3 15	Q2 15	Q1 15	Q4 14	Q3 14
Inventory	\$1,083.0	\$1,129.0	\$1,071.0	\$985.0	\$846.0
Revenue	\$3,330.0	\$3,696.0	\$3,785.0	\$3,301.0	\$3,406.0
Inventory-to-revenue	0.325	0.305	0.283	0.298	0.248
<i>Year-over-year change</i>	<i>30.9%</i>	<i>13.7%</i>	<i>13.3%</i>	<i>19.7%</i>	<i>5.1%</i>

We have the following observations:

- Inventory build more pronounced than closest peer:** In Q3 15, Seagate days sales in inventory (DSI) increased 27.0% year-over-year to 42.4 days, while Western Digital DSI increased 5.7% to 47.1 days. Despite Seagate’s lower absolute DSIs, we are concerned with the significantly higher increase in DSIs relative to Western Digital. Accordingly, we believe the inventory build may be indicative of company-specific issues.

Peer DSI Analysis	Q3 15	Q2 15	Q1 15	Q4 14	Q3 14
Seagate days sales in inventory (DSI)	42.4 days	37.5 days	36.8 days	35.1 days	33.4 days
<i>Year-over-year change</i>	<i>27.0%</i>	<i>15.1%</i>	<i>18.0%</i>	<i>13.6%</i>	<i>15.7%</i>
Western Digital (DSI)	47.1 days	41.8 days	43.8 days	43.4 days	44.5 days
<i>Year-over-year change</i>	<i>5.7%</i>	<i>2.0%</i>	<i>7.1%</i>	<i>7.2%</i>	<i>10.1%</i>

- TAM may be weaker-than-expected, in our view:** On its Q3 15 Conference Call, Seagate guided for Q4 15 TAM of 125.0 million units and indicated its TAM guidance was “somewhat cautious.” On its Q3 15 Conference Call, Western Digital guided for Q4 15 TAM to be 120.0 million units. Western Digital attributed the TAM guidance to continued headwinds from global macroeconomic and PC demand weakness. **We believe the surge in Seagate inventory relative to its primary may be partially related to more aggressive assumptions about the near-term total addressable market.**

Total Addressable Market Guidance Analysis (in million units)	Q4 15 (guidance)
Seagate	125.0
Western Digital	120.0
<i>% Seagate above (below) Western Digital</i>	<i>4.2%</i>

- Elevated industry inventory levels may portend price erosion, in our view:** In its FY 14 10K, Seagate represented the hard disk drive industry has been characterized by price declines for like-for-like products. Specifically, Seagate indicated price declines are more pronounced during periods of industry supply exceeding demand. Given Seagate’s disclosure that over supply in the industry may lead to price erosion, we believe the elevated inventory levels at both Seagate and Western Digital combined with the TAM decline (discussed heretofore) may result in margin pressure.

Cash Flow Deterioration Heightens Our Earnings Sustainability Concerns

In Q3 15, twelve-month cash flow from operations increased 26.5% year-over-year to \$2,996.0 million, while net income increased 20.5% to \$1,925.0 million. Accordingly, cash flow from operations-to-net income increased 5.0% to 1.556. Accounts payable provided \$233.0 million of cash in the period, while accounts receivable (inventory) consumed \$64.0 million (\$89.0 million). Excluding the impact of the accounts payable on cash flow, twelve-month cash flow from operations-to-net income declined 15.6% year-over-year to 1.435. In our view, the Company may have slowed payments to vendors due to weaker-than-expected demand. Given the deterioration in cash flow levels and consumption of cash by certain working capital accounts, our concerns about earnings sustainability are heightened.

Cash Flow Analysis (\$ in millions)	12M Ended Q3 15	12M Ended Q2 15	12M Ended Q1 15	12M Ended Q4 14	12M Ended Q3 14
Cash flow from operations (CFO)	\$2,996.0	\$3,065.0	\$2,478.0	\$2,558.0	\$2,369.0
AP source (use) of cash	\$233.0	\$65.0	(\$54.0)	(\$190.0)	(\$350.0)
CFO ex. AP	\$2,763.0	\$3,000.0	\$2,532.0	\$2,748.0	\$2,719.0
Net income (NI)	\$1,925.0	\$2,029.0	\$1,524.0	\$1,570.0	\$1,598.0
CFO ex. AP-to-NI	1.435	1.479	1.661	1.750	1.702
<i>Year-over-year change</i>	<i>(15.6%)</i>	<i>(11.2%)</i>	<i>3.0%</i>	<i>(10.3%)</i>	<i>(7.4%)</i>

Observations On Executive Turnover

In its 02/24/14 Press Release, the Company announced the appointment of Mr. Jamie Lerner as President, Cloud Systems and Solutions. In its 05/01/15 Press Release, the Company announced Mr. Lerner's tenure as president of the Cloud Systems and Solutions group ended effective 04/30/15 in connection with the planned combination of the Cloud Systems and Solutions group and the Electronic Solutions group. The Company represented Mr. Lerner would continue to work as an employee and/or consultant over "the next few months" as part of the transition process. Given the shift to cloud computing (discussed heretofore), we are concerned about the executive turnover in the Cloud Systems and Solutions group.

Risks to Our Thesis and Conclusion

Risks to our thesis: The following developments could present challenges to our thesis:

- PC demand increases with the release of Windows 10.
- Recent acquisitions improve Seagate's cloud and flash businesses.
- Stronger-than-expected total addressable market.
- Seagate makes more acquisitions and/or the industry becomes more consolidated.

Conclusion: We are concerned about a potential reduction in demand for built-in data storage due to the proliferation of cloud computing. Further, we believe the shift to solid state drives may result in increased competitive pressures on Seagate. Our concerns are heightened given receivable and inventory levels are elevated on an absolute basis and relative to Seagate's closest peer. Finally, cash flow deterioration and executive turnover in Seagate's cloud business heighten our concerns.

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