Channel Stuffing Reinvented: The inside story of Toshiba's Personal Computers Division¹

Introduction

In one of the most egregious instances of wrongdoing in Japanese corporate history, Toshiba Corporation (hereafter, Toshiba, or the Company) was accused in February 2015 by Japan's Securities and Exchange Surveillance Commission (SESC) of overstating operating profit by ¥151.8 billion (\$1.22 billion). Realizing the seriousness of the issue, Toshiba set up an in-house investigation committee (hereafter, the Committee) which issued its 334-page report² (hereafter, the Report) on July 20, 2015. The Committee's investigations led to the uncovering of a wide range of accounting improprieties conducted since at least 2008. This case describes the events that transpired and the accounting practices that were followed in Toshiba's Personal Computers (PC) business from 2008 to 2014. The profit adjustment to Toshiba's PC business was ¥59.2 billion, 39% of the total misstatement. The Report indicated that no adjustments were needed to the sales reported by Toshiba, but profits were overstated in most of the years.

Toshiba Corporation and its PC Business

Founded in 1875, Toshiba Corporation is one of Japan's oldest, largest and most diversified manufacturers of consumer electric and electronic products, and industrial and social infrastructure systems. In FY 2014³, with sales of over ¥6.5 trillion (approximately, \$63 billion), and about 200,000 employees, Toshiba ranked as the tenth largest industrial conglomerate in Japan. Although more than 60 percent of its sales were domestic, Toshiba brought Japan to the forefront of international business through its overseas sales. 16 percent of its sales in 2014 were in North America, 11 percent in Asia, and 10 percent in Europe.

Toshiba's business segments (groups) were comprised of seven companies, one of which (in 2014) was the Personal & Client Solutions Company (PCS Company). The PCS Company was part

¹ This case is developed by Professors Mahendra Gujarathi and Amitabh Dugar of Bentley University for the purpose of class discussion. Please do not quote without permission.

² The English translation of this report can be accessed at: https://www.toshiba.co.jp/about/ir/en/news/20151208 2.pdf

³ All companies in Japan, including Toshiba, are required to follow a uniform fiscal year (FY) that starts on April 1 and ends on March 31 of the following year.

of Toshiba's Digital Products segment and engaged in the manufacture and sale of personal computers. This business was restructured and reorganized several times over the years.⁴

Toshiba's history of manufacturing and selling PCs is long and impressive. In the quarter century after it released the world's first laptop PC in 1985, Toshiba sold over 100 million notebook PCs. The business was not always profitable, however. Poor performance of the segment during FY 2001, FY 2002, and the first half of FY 2003 prompted the PC Division to launch a project in January 2004 to (a) improve business performance by concentrating on differentiated products, (b) migrating from in-house production to ODMs (Original Design Manufacturers), (c) strengthening procurement capabilities, and (d) reducing fixed costs. These initiatives resulted in increased sales and profits, both of which reached record levels in 2007.

During FY 2008, the PC business was hit by major shrinkages in demand; in response, the Company launched an initiative (called the "Action Program to Improve Profitability"), aiming to restore its profitability even if the level of sales did not increase. However, the declining trend of sales and profits could not be arrested during 2009 because the demand for PCs continued to shrink, unit prices of PCs continued to fall, and the yen strengthened. In FY 2010, Toshiba experienced higher sales and continuing decreases in costs and raw material prices. This helped the PC business return to profitability.

In FY 2011, the impact of a strong yen, lower sales of PCs in the United States and Europe, and price erosion led to lower sales and but operating income improved due to implementation of cost reduction measures and lower parts costs. In FY 2012, the PC business recorded significantly lower sales due to a continued demand decline in Japan and sluggish sales in North America. In FY 2013, Toshiba released of the world's first Ultrabook, a thin and light computer, fitted with a high-definition LCD touch panel. This competitive edge helped improve sales but profits suffered due to the competition from tablets and smartphones.

The sales and operating profits of the PC business from 2004 to 2013 are presented in the table below.

Up to December 2003: Digital Media Network Company (DM Company)

From April 2004: PC & Network Company (PC Company)

From April 2010: Digital Products & Network Company (DN Company)
From April 2011: Digital Products & Service Company (DS Company)
From April 2014: Personal & Client Solutions Company (PCS Company)

⁴ Toshiba's PC business was conducted through the following in-house companies:

Toshiba Sales & Profits - PC Business (in billions ¥)										
Financial Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Sales	767.9	852.7	971.8	1,040.4	955.3	888.1	916.0	822.9	705.1	733.9
Operating profit	8.2	3.4	6.9	41.2	14.5	(9.9)	7.3	11.4	8.2	(19.9)

(Source: The Report, p. 228)

Corporate Governance and Performance Evaluation at Toshiba

Each of Toshiba's major business segments (groups) was headed by a Group CEO (GCEO). In 1999, Toshiba introduced an in-house performance evaluation system, under which each group operated independently. Within each segment, every company had a profit and loss responsibility and its president (called Company President or CP) had the authority over most business execution matters. Toshiba evaluated the performance of its business segments based on segment operating income (loss). The segment's operating income (loss) was derived by deducting the segment's cost of sales and selling, general and administrative expenses from net sales.

The CPs reported to the GCEOs, who in turn reported to the President and CEO of Toshiba Corporation. The reports submitted by CPs to their GCEOs were deemed to be reports provided directly to the President and CEO of Toshiba Corporation (Report, page 27). The Group CEOs were required to report any material violation of laws and regulations to Toshiba's Audit Committee. Toshiba also had a Corporate Audit Division, which served as its internal audit department. This department's general manager reported directly to Toshiba's President and CEO. The general manager also reported to the Board of Directors on the internal audit results.

Toshiba's performance evaluation system was designed to energize the organization, promote autonomous responsible management, and improve Toshiba's corporate value through continuous operational innovations. Every month, each division/company submitted its performance results and forecasts for the upcoming one-month and six-month periods to the Corporate Finance & Accounting Division, which was headed by Toshiba's CFO (Chief Financial Officer). The CFO compiled and reported this information to Toshiba's CEO. The Corporate Accounting & Finance Division also submitted proposals to the CEO designed to improve performance (called "Challenges") and the CEO determined the content of each Challenge (Report, page 36). Company Presidents reported on their respective companies' performance results relative to forecasts at CEO Monthly Meetings, and at these meeting the CEO issued "Challenges" to them as necessary.

The practice of issuing "Challenges" to the President of the PC Company (and other Toshiba companies) began with CEO Atsutoshi Nishida in FY 2008. The practice was continued by Nishida's successors in that role, Norio Sasaki (2009-2013) & Hisao Tanaka⁵ (2013-2014). As described in a later section, each of these CEOs appealed to employees' loyalty, and shamed, bullied and threatened the CPs to ensure that their orders were carried out.

Use of ODMs and Masking Price in the PC Division

To reduce the procurement, production, and fixed costs, Toshiba outsourced a large part of the business of designing, developing, and producing PCs to ODMs (Original Design Manufacturers) in Taiwan. Key PC parts including the CPU, HDD, memory, ODD, and LCD were purchased by Toshiba or its wholly owned Subsidiary, TTIP (Taiwan Toshiba International Procurement Corporation). The parts were then supplied to ODMs at the Masking Price, which was higher than the procurement cost of the parts (the "Parts Transactions"). The use of masking prices prevented ODMs from knowing Toshiba's procurement cost and eliminated the possibility of the ODMs leaking Toshiba's purchase prices to its competitors. This was important because many of those competitors also used the same ODMs to outsource their PC production.⁶

Using the parts supplied by Toshiba (or TTIP), the ODMs assembled the PCs and shipped them back to Toshiba (or to TTIP), who in turn sold them to Toshiba's independent distributors in various regions. When the ODMs sold PCs to Toshiba or TTIP (the "Completed Products Transactions"), they would invoice Toshiba (or TTIP) at the masking price that they had been charged, plus a processing/assembling charge (their profit). Together, the Parts Transactions and Completed Products Transactions were referred to within Toshiba as "Buy-Sell Transactions" and their combined effect on the company's profit was called "Buy-Sell Profit".

The difference between the price at which Toshiba (or TTIP) procured the parts from the vendors and the price at which they were supplied to the ODMs was called the "Masking Difference". For instance, if Toshiba's procurement price was 50 and the parts were supplied to ODMs at 300, the masking difference would be 250, and the masking ratio (computed by dividing the masking difference by the procurement price) would be 5.0 (250/50). Toshiba's masking ratio was 2.0 in fiscal 2008 but it rose significantly each year, as can be seen in the table below:

⁵ Tanaka progressed upwards through the ranks at Toshiba within its PC business, leading the start of the Buy-Sell transactions described later in this case and rising to the position of General Manager, Procurement Division at the PC & Network Company in 2004.

⁶ Toshiba's use of Masking Prices was not uncommon; its competitors used the same technique as well.

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Masking ratio	2.0 times	2.2 times	3.6 times	4.2 times	5.2 times	5.2 times

(Source: The Report, page 233)

Masking prices for the parts supplied to ODMs were stipulated by Toshiba without any negotiation. ODMs did not object to the high masking prices because Toshiba agreed to purchase all the assembled PCs, and any unused parts at the masking prices charged to the ODMs, and also pay them the stipulated processing/assembling charge. If PC production exceeded the quantity that Toshiba could sell, the excess inventories were considered to be Toshiba's responsibility. This shielded the ODMs from inventory risk because Toshiba guaranteed that it would purchase any unused parts plus the entire quantity of PCs it asked the ODMs to assemble.⁷

Toshiba's accounting for the 'Parts' and 'Completed Products' Transactions

Although Toshiba followed accounting principles generally accepted in Japan, certain adjustments and reclassifications were made in its consolidated financial statements to conform to the accounting principles generally accepted in the U.S.⁸ Income recognition in the PC business had an additional quirk, the masking profit. When recording the 'Parts' transaction, Toshiba included the masking difference in the accounts receivable due from the ODMs, and increased profits by an equivalent amount by reducing the cost of goods manufactured.⁹ As an example, the supply of parts that cost Toshiba 50 and was invoiced to ODMs at a masking price of 300, would be reflected in Toshiba's consolidated financial statements (ignoring transactions among subsidiaries) via the following summary journal entry:

Accounts Receivable - ODM		
Cost of Goods Manufactured		250
Accounts payable - Parts Vendor		50

⁷ On several occasions, Toshiba had to buy back parts that had become obsolete because they had been sitting with the ODMs for too long. It had to incur additional costs to dispose them off.

⁸ This practice is acceptable to Japanese regulators. Indeed, Japanese companies can choose from one of the four sets of accounting standards to file their consolidated financial statements: Japanese GAAP, IFRS, U.S. GAAP, and Japan's Modified International Standards. (Accounting Standards Board of Japan, accessed at: https://www.asb.or.jp/en/jp-gaap/about.html)

⁹ In other words, Toshiba recorded effects on profits directly through cost of goods manufactured; it did not record the parts supplied to ODMs as sales. In most fiscal periods, the cost of goods sold was the same as the cost of goods manufactured.

When Toshiba subsequently purchased the assembled PCs from the ODMs (i.e. at the time of 'completed products' transaction), the masking profit recorded in the 'parts' transaction was removed. As an example, if the ODMs charged 20 for assembling the PCs, and TTIP added its own processing charge of 10, the summary journal entry in the consolidated financial statements to record the receipt of assembled PCs would be as follows:

Cost of goods manufactured	330	
Accounts payable - ODM		320
Charge income of TTIP		10

The combined effect of the 'parts' and 'completed products' transactions in Toshiba's consolidated financial statements after the payments were made to the ODMs and the parts vendors (ignoring transactions among subsidiaries) would be as follows:

Cost of goods manufactured	80	
Cash (paid to ODMs)		20
Cash (paid to Parts Vendor)		50
Charge income of TTIP		10

An overview of the accounting effects of the 'Parts' and 'Completed Products' Transactions is presented in Figure 1.

Toshiba also manufactured PCs through another subsidiary, TIH (Toshiba Information Equipment Hangzhou Co. Ltd.). Normally, the parts supplied to TIH either directly or via yet another Toshiba subsidiary, TTI (Toshiba Trading Incorporated) were not at the masking price, because both TTI & TIH were Toshiba's wholly-owned subsidiaries and no masking of original purchase prices was necessary. However, during each of the last three quarters of FY 2012, Toshiba did use masking prices, which were four to eight times its cost of procurement, to supply parts to its own subsidiaries. As before, the resulting masking difference was recorded as reduction in the cost of goods manufactured. TIH retained these inventories at the quarter-end, and transferred them in the subsequent quarter to TTIP for supplying to ODMs with no additional masking.

Practice of Channel-Stuffing

One method used by Toshiba to achieve the CEO's "Challenges" was to enhance profits through the channel stuffing of ODM parts. In this method, Toshiba (or TTIP) sold volumes of parts to ODMs in excess of the volume needed for normal production (and sales) and required the ODMs to hold the excess as inventory. The masking difference embedded in these Parts Transactions caused profit to surge by an equivalent amount. However, the cost of good manufactured subsequently increased (and profit declined) by the amount of the Masking Difference when completed products were purchased from the ODMs in the following month or beyond. ¹⁰

The process of channel stuffing of ODM parts was executed as follows. First, the company presidents (CPs) determined monetary amounts of such transactions. Second, the production and procurement departments of the (subsidiary) companies and Toshiba's corporate procurement department would, in conjunction with TTIP, negotiate with ODMs on the type and volume of parts to be sold, and finally have the ODMs purchase the parts to complete the channel stuffing process. Within Toshiba this practice was euphemistically referred to as the "early recording of cost reductions (CR)" (The Report, page 243).

The term "early recording of CR" had more to do with overstatement of profits through the channel stuffing of ODM parts rather than lower prices secured from the suppliers of parts. For instance, at the October 2008 CEO monthly meeting, the President of PC Company reported that the operating profit was being overstated by ¥17.3 billion through the early recording of CR and that if this is excluded, the attainable profit would be only ¥6.4 billion. He also stated that "early supply of parts was possible because of the Anniversary of the Founding of the People's Republic of China in September, but obtaining agreement will be difficult in December because that's the end of the accounting period for the ODMs."

The total amount of Masking Difference at any point in time would depend on (a) the volume of parts inventories supplied by Toshiba but not yet used by the ODMs, and (b) the volume of PC inventory assembled by the ODMs but not shipped back to TTIP. The report mentions the following amounts of masking differences over the years for the inventory of unused parts and the unshipped PCs¹¹:

Amounts in ¥ billion

Masking Difference	FY	FY	FY	FY	FY	FY	Q1-3, FY
iviasking difference	2008	2009	2010	2011	2012	2013	2014
Parts inventories	16.4	41.2	28.9	46.1	71.5	72.1	39.2
Completed inventories	3.4	7.2	8.8	8.3	9.8	12.1	19.9

¹⁰ Normally, the parts that are sold through channel stuffing to ODMs at the end of each quarter are processed and purchased by Toshiba as completed products in the following month or the month after that, and the masking difference is recognized as a deduction from profits. For this reason, the masking difference (sometimes called "debt") would revert back to zero if there was no new channel stuffing of ODM parts during the period (The Report, page 243).

¹¹ The report also mentions that the masking differences in FY 2007 and before were insignificant.

Total	19.8	48.4	37.7	54.4	81.3	84.2	59.1
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(Source: p. 237 and p. 238 of the Investigation Report)

Dynamic of setting and complying with "Challenges"

The operating conditions of the PC business deteriorated during FY 2008. At a meeting in January 2009, the president of the PC Company reported a forecasted loss for the second half of FY 2008. CEO Atsutoshi Nishida¹² was disappointed. He said: "Do all that you can as if your life depends on it. You do not have to make the improvement of ¥10.0 billion, if that is alright with you. However, this does mean that you will be sold off. If you want to protect your business, an improvement by ¥10.0 billion is the minimum. Do your best." By the time of the February CEO Monthly Meeting, the profit forecast for the second half of FY 2008 had further deteriorated. In the meeting, Atsutoshi Nishida set forth a Challenge of ¥16.0 billion improvement in profits. In response to the Challenge, the PC Company conducted Channel Stuffing of ODM Parts, and as a result, the Balance of Recorded Buy-Sell Profit at the end of the fourth quarter of FY 2008 was estimated to be ¥16.4 billion.

The "Challenges" issued by the CEOs were very difficult to meet not only because they were aggressive, but also because they were frequently issued near the end of a fiscal quarter, which made it virtually impossible for business unit to achieve them. As a result, the business units used deceptive accounting practices to meet the Challenges. For example, at the December 2008 CEO meeting the President of the PC Company reported that the operating profit forecast for Q3, FY 2008 remained at negative ¥18.4 billion. Nishida responded that "I am ashamed of these figures so I can't release them (the Report pg. 244). As a result, channel stuffing was conducted to record an operating profit of ¥20.7 billion in December 2008, resulting in a reported net profit of ¥0.5 for the quarter.

Some deadlines to achieve "Challenge" targets were blatantly unrealistic. Faced with a ¥24.8 billion forecasted quarterly loss at the September 27, 2012 meeting Sasaki (CEO) demanded an improvement of ¥12.0 billion over the remaining three days of the quarter (Report pg. 252). In response, the President of the Digital Services & Products Company and his team proposed to improve reported profits by a total of ¥10.4 billion (Report pg. 252), partly through Buy-Sell transactions; this proposal was approved by Sasaki within the next day. However, given the

¹² Atsutoshi Nishida joined Toshiba in 1975. After working in Toshiba's subsidiaries in Europe and America, he became the general manager of the PC division in 1995. In 2004, he became the President of Toshiba's PC and Network Company. He served as the President and CEO of Toshiba from 2005 to 2009 and then as the Chairman of its Board from 2009 to 2011.

short amount of time remaining till the end of the quarter to negotiate with the ODMs, Toshiba instead sold inventory to its own subsidiary TTI at the Masking Price, which then transferred it to TTIP via an intermediate entity (TIH) as previously described (Report pg. 253)).¹³

The "Challenges" were often delivered with explicit or implied threats. For example, at the January 2011 meeting CEO Sasaki stated: "if you try to repay the Debt¹⁴ in a manner that will cause you to fall short of budget for the second half, you put yourself in a safe place but our company at risk. If you just repay the Debt and achieve your budget by using the profit from the third quarter to excessively repay the Debt like last time, I will lower the bonus assessment by two levels" (Report pg. 248).

CEO responses

The report does not draw definitive conclusions about whether Toshiba's successive CEOs Nishida, Sasaki, and Tanaka were directly responsible for the accounting improprieties that took place under their respective tenures during the period under investigation (FY 2008 – FY 2014). However, each claimed that he did not know (or understand) that channel stuffing was being used to inflate profits, and denied encouraging or condoning that practice. Following are some indicative quotes by the three CEOs:

Nishida: "I was not aware that the large amounts of profit arising at the end of each quarter were the result of Buy-Sell Transactions. If it had been explained to me in the reports at the CEO Monthly Meetings that the profit targets were met by early recording of CR, I think I would have been aware that (i.e. interpreted it to mean) that early recording of CR meant early recording of cost reductions such as negotiations to reduce prices with vendors (parts suppliers)."

Sasaki: Soon after I assumed the position of President it was explained to me that Buy-Sell Transactions were not illegal, but I never gave instructions myself to overstate profits using Buy-Sell Transactions, and as it is unsound business, I kept on saying that the volume should be reduced.

Tanaka: "I understood that selling parts to ODMs resulted in profit, but it was never raised as an issue by the auditor and I thought the accounting treatment was being

¹³ In these types of parts transactions, TTIP did not make any adjustment to the price at which the parts were sold to the ODMs since it received the parts at a price that already included the Masking Difference.

¹⁴ In this context "Debt" referred to the overstatement of profit achieved through channel stuffing of ODM parts (Report pg. 243).

implemented in accordance with the rules. I was aware that the volumes sold to the ODMs were increasing, but I thought that there were a number of reasons for that, such as that they had been implementing an expansion strategy before I became President, and I was not aware that they were having ODMs buy greater volumes than required in order to overstate profits."

Responses from the PC Division

Executives of the PC business made several attempts to curtail channel stuffing but were not successful. For instance, at the October 2009 CEO Monthly meeting, the President of the PC business (Fukakushi) suggested recording a "settlement" of negative ¥14.7 billion of the early recording of CR. In response, Norio Sasaki (CEO) said "You always conduct things like Buy-Sell Transactions at the end of the period without learning from the past." In response, Fukakushi said, "That is why we are going to repay a part of the early recorded amount this quarter and also during the fourth quarter, so that we can normalize the situation as much as possible." Norio Sasaki replied, "Normalization may not be the best thing to do when the company is going through such a difficult phase. What you are talking about is a bit strange, and it may not be in the best interests of the PC Business or Toshiba."

In FY 2011, the DS Company's production and procurement department, Finance & Accounting Division, Corporate Finance & Accounting Division and CFO jointly prepared a plan aimed at reducing the volume of channel stuffing in a planned matter because they felt such transactions were unsound. However, in face of the deterioration in sales and profitability of the PC business, it was utterly impossible to use operating profits to compensate for the losses that would result from the settlement of Channel Stuffing of ODM parts, and channel stuffing of ODM parts actually increased that year (The Report, page 250).

As the volume and frequency of the channel stuffing transactions increased, collusion among Toshiba's employees to prevent the transactions from being discovered increased. Some Toshiba employees continued to push back against this practice but were unable to bring about meaningful changes. Soon after his appointment as CEO, Tanaka held a confidential meeting with DS Company Senior Vice President Makoto Kubo in September 2013 during which Kubo was asked "to increase the Buy-Sell Debt a bit and do whatever it takes to ensure that losses for the DS Company are no more than ¥9.9 billion. Kubo replied, "While I obey any decisions made by Hisao Tanaka 100% and do my best, I am opposed to increasing Buy-Sell Transactions (Report pg. 255)."

The Buy-Sell Debt grew both in magnitude and in importance as a tool for manipulating reported profits. After Nishida resigned as CEO to become the Chairman of Toshiba's Board of Directors, Tanaka, who was responsible for parts procurement at that time, told him that it would be possible to achieve the (current) "Challenge" if repayment of the "Debt" could be deferred. Nishida responded, "It can't be helped this period but next period you must repay at least some of the Debt. It is okay to be a little reckless this period so make sure you contribute to Toshiba's operating profit."

While conceding that the Finance & Accounting Division of the PC business unit wanted to resolve the overstatement of profits but was unable to do so due to pressure from the President of the unit and Toshiba's CEOs, the Report blames them for (a) providing insufficient explanations contrary to the facts and (b) acting in ways designed to conceal the inappropriate accounting treatment so that no issues would be raised by Toshiba's external auditors (Report pg. 262). For example, the statements made by persons in charge of accounting and finance at the DS Company regarding how to respond to the quarterly audit by the accounting (external) auditor included the following:

"We can definitely not let them perceive that funds to cover the manufacturing profit and loss are involved in transactions with TTIP and TTI, and it is necessary to keep saying that TTIP sells parts materials to the ODMs, as the term 'company-supplied' requires picking up profit and loss. It is best to be careful and avoid touching on the issue as much as possible, and if you think it is even slightly risky you should consult your superiors."

"We will be asked about the reason why the monthly profits improve at the end of each period at every audit with respect to the monthly movement in cost of sales and operating profit. We are responding by simply saying that it is a bundled CD¹⁵ at the end of the period, but with respect to the fluctuations in the amount, the values for FY 2012 are extremely abnormal. The operating profit for the single month of December FY 2012 is ¥80.6 billion, which is the highest profit on record and is an amount that significantly exceeds the sales amount of ¥63.7 billion."

Similarly, the audit report issued on DS Company in February 2013 by Toshiba's Corporate Audit Division mentioned that "Under the accounting policies, the resale profit from Buy-Sell should not be realized until it becomes sales revenue after shifting to products. However, Buy-Sell parts held by ODMs as inventory are ordinarily equivalent to three days' worth of production.

¹⁵ Within Toshiba, the term CD was used to imply "cost down", or cost reduction.

Therefore, it was explained to the auditor that the impact on unrealized profit and loss from this situation would be very limited and the approval for the accounting treatment was obtained." (Report pg. 264)

Corporate Audit Division and Audit Committee

Toshiba's internal audit department also raised the issue of channel-stuffing on three separate occasions (in FY2009, FY2011 and FY2013), going so far as to state that "even if it is Buy & Sell, the business purpose [of such transactions by the PC Company] is not the sale of major parts," and "It is necessary to verify the situation regarding Buy & Sell Parts held at the ODMs. And it is also necessary to establish a system [at the PC Company] where appropriate internal controls work to ensure that arbitrary operations are not implemented." However, despite this the channel stuffing of ODM parts using Buy-Sell Transactions continued to take place (Report pg. 263).

The internal audit department also expressed concern about the levels of inventory and masking prices in its audit report, stating: "The appropriate number of inventory days for inventory subject to Buy-Sell Transactions is five days but the balance at the end of December 2010 was around the same as the procurement amount for that entire month and equivalent to one months' inventory. Increases and decreases in the masking amount balance...have a large impact on the profits for the period and therefore it is necessary to keep a record of approvals regarding changes to the Masking Price. Further, it is desirable to decrease the Masking Price."

Although the results of the Corporate Audit Division were regularly reported to the Audit Committee, it did not discuss the issue of Channel Stuffing or take any action to stop the practice. An Audit Committee member (Seiya Shimaoka) made three attempts in 2014 and 2015 to draw the attention of the Audit Committee Chairman (Kubo) to this issue but was rebuffed each time. Specifically, he asked for a thorough examination of the restructuring of the PC Business which would have shed light on the losses resulting from the reduction of channel stuffing, and could have revealed the inappropriate accounting that had occurred. However, Kubo did not agree to Shimaoka's request and did not meet with him to discuss this issue. Instead, he dismissed Shimaoka's suggestion with the argument that "rocking the boat" at that point would leave insufficient time for closing of accounts and worsen matters.

External Auditors

Toshiba's auditors – Ernst and Young ShinNihon - did not report any concerns regarding the effects of Channel Stuffing of ODM Parts in any of their audit reports. They failed to question the

fact that costs of manufactured goods were reduced on the final day of the quarter, giving rise to a large gross profit margin. From 2012 onwards, such amounts were higher than that for production but they accepted Toshiba's explanation that the gross profit rate improved due to the of cost reduction (CR) negotiations held every quarter.

Clearing the Stuffed Channels

Overstatement of profits through Channel Stuffing continued during FY 2013, although the balance of Buy-Sell profit recorded did not grow appreciably. Starting from May 12, 2014, these matters were discussed at the emergency meetings in which Tanaka (CEO) participated. At the Third Emergency Meeting held on May 20, 2014, Tanaka suggested eliminating the remaining balance of masking profits. At the eighth meeting held on July 18, 2014, it was decided to record a loss of ¥50.2 billion in FY 2014. Of that, ¥30.0 billion was due to the loss resulting from the reduction of overstated profits from Channel Stuffing of ODM Parts. Although this plan was discussed in Toshiba's Corporate Management Meeting on September 16, 014 and Toshiba's Board of Directors meeting on September 18, 2014, no details were revealed. Instead the Board was told that of the ¥50.2 billion amount, operating expenses of ¥45.0 billion would be the costs for "sales and inventory measures, production adjustments, impairment, etc." It was said that Channel Stuffing of ODM Parts was stopped in June 2015, and as of the end of the third quarter of FY 2014, "the overstatement of profits using Buy-Sell Transactions has resolved naturally."

Requirements

Requirement 1

- a. Does the use of masking prices violate GAAP? Why? Is it appropriate for Toshiba to increase profit (by the amount of the masking difference) at the time of supplying parts to ODMs? Why? When and how should Toshiba record the masking differences in its consolidated financial statements? Explain.
- b. For the PCs that are manufactured by its subsidiary TIH, is it appropriate for Toshiba to record the masking difference as a reduction in the cost of goods manufactured? Why?

Requirement 2

a. Refer to the table of masking differences in the 'Practice of Channel Stuffing' section of the case. For each fiscal year from 2008 to 2014, compute the income misstatement and specify whether the reported income is overstated or understated. For simplicity, assume that there were no masking differences at the beginning of FY 2008. Present your answer in the following table:

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Income misstatement							
Overstated or understated?							

b. The table of masking differences indicates that the total masking difference declined noticeably in FY 2010. Why do you think Toshiba's management was willing to reduce the masking difference in FY 2010? The masking difference was again reduced sharply in FY 2014. What could have caused that to happen?

Requirement 3

Assume that TTIP, a fully-owned subsidiary of Toshiba, purchased key PC parts and supplied them to Pegatron, an Original Design Manufacturer (ODM) in Taiwan, for assembling PCs. The price paid by TTIP was ¥24,000 per PC. However, to keep Pegatron from knowing TTIP's true cost, the parts were supplied at the masking price of ¥84,000 per PC. In other words, the

masking ratio used was 2.5 [(¥84,000-¥24,000)/ ¥24,000]. Address the following requirements, ignoring Pegatron's processing charge.

(a) In January 2008, TTIP purchased parts for 100 PCs and supplied them to Pegatron and no assembled PCs were shipped back by Pegatron. In February 2008, TTIP did not purchase or supply additional PC parts to ODMs. However, during that month, Pegatron assembled the parts that it had received in January 2008, and shipped 100 PCs to TTIP. In March 2008, TTIP purchased parts for 100 PCs and supplied them to Pegatron. It assembled 95 PCs and shipped them back to TTIP. The remaining inventory of parts for 5 PCs remained in Pegatron's warehouse but is guaranteed to be purchased by TTIP.

Required: Compute the profit misstatement for each month, and indicate whether it would be overstated (O/S), or understated (U/S). Present your answer in the following table:

Period	Profit misstatement	Over- or Under-statement?
January 2008		
February 2008		
March 2008		
Total for the Quarter		

- (b) The average number of parts purchased and supplied in FY 2007 and prior was for approximately 100 PC units per month. However, during the years FY 2008 to FY 2013 (respectively), TTIP decided to purchase and supply to Pegatron the parts for 102, 104, 106, 108, 110, 112 PC units per month (i.e. the number of units for which parts were supplied per month increased by 2 PC units every year). The number of PC assembled each month by Pegatron, shipped to Toshiba and sold to independent customers each month remained at 95 throughout the six years. The PCs were sold for ¥30,000 each. Compute the profit misstatement for each of the six years, FY 2008 to FY 2013. Assume that there were no masking differences at the beginning of the investigation period (i.e., FY 2007 and before). Present the answer to this requirement and the next requirement [part (c)] in the table following requirement 3(c).
- (c) Continue with (b) above. In addition to supplying more parts to Pegatron, TTIP also increased the masking ratio to 3.0, 3.5, 4.0, 4.5, 5.0, and 5.5, respectively in FY 2008, FY

2009, FY 2010, FY 2011, FY 2012, and FY 2013. Compute the profit misstatement for each of the six years, FY 2008 to FY 2013.

	Answer to Requirement 3(b)	Answer to Requirement 3(c)
FY 2008		
FY 2009		
FY 2010		
FY 2011		
FY 2012		
FY 2013		

(d) The case mentions that the "operating profit for the single month of December FY 2012 is ¥80.6 billion, which is the highest profit on record and is an amount that significantly exceeds the sales amount of ¥63.7 billion." How is it possible for the profit to be higher than the sales? Explain.

Requirement 4

In interviews conducted by the Investigation Committee, each President and CEO of Toshiba (i.e., Nishida, Sasaki, and Tanaka) denied that he was aware of the fact that profits were overstated by Channel Stuffing of ODM parts. Would you agree to the explanations given by each? Why?

Requirement 5

The presidents of the PC business claimed that the overstating of profit by Channel Stuffing of ODM parts was dictated by the top management and hence they were not responsible. Do you agree with this view? If you were the president of the PC business facing similar circumstances, what other possible courses of action would you have considered?

Requirement 6

Investopedia.com defines channel-stuffing as "a deceptive business practice used by a company to inflate its sales and earnings figures by deliberately sending retailers along its distribution channel more products than they are able to sell to the public." Read the following article on channel-stuffing. Explain the difference between the technique and effectiveness of typical channel-stuffing, and channel-stuffing as practiced by Toshiba during the period of investigation.

"The SEC wants to know if Diageo used the oldest — and worst — trick in the book to fudge its numbers" in *Business Insider* (July 24, 2015). It can be accessed at:

 $\frac{\text{http://www.businessinsider.com/sec-investigates-diageo-how-channel-stuffing-works-}}{2015-7}$

Requirement 7

Did Toshiba's external auditors (Ernst & Young ShinNihon) fulfill their responsibilities? Explain.

Within the Group External Procurement Manufacturing Sales Parts Transactions (subject of investigation) Completed Products Transactions Vendor ODM Toshiba TTIP Toshiba Distributor TTIP TTIP TTIP ODM Toshiba inventory 80 inventory inventory inventory 50 320 300 Charge 10 Masking Difference Processing Processing 250 costs 20 costs 20 Masking Charge 10 Masking rocurement Procurement Difference Difference price 50 Processing price 50 250 250 costs 20 Procurement Procurement Procureme price 50 price 50 Toshiba nt price 50 Manufacturing Manufacturing (250)cost

Figure 1
Overview of 'Parts' and 'Completed Products' Transactions

(Source: The Report, p. 232