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## Nidec: A Gigantic Stock Promotion

<b>Company:</b> Nidec Corp.	<b>Report Date:</b> December 13, 2016
<b>Ticker:</b> 6594 JP	<b>Stock Price (JPY):</b> JPY 9888
<b>Industry:</b> Manufacturing	<b>Market Cap (JPY):</b> JPY 2,948 billion
	<b>Float:</b> 84.4%
	<b>Avg Volume (30 days):</b> 1.1 million shares

Muddy Waters Capital LLC (“Muddy Waters”) is short Nidec, and we value its shares at JPY 4,764. We view Nidec as a gigantic stock promotion. The company’s management, led by Mr. Shigenobu Nagamori, repeatedly give uber-bullish predictions about Nidec’s business, and then massively misses them. Nidec missed a three-year forward sales projection by 29%. The company missed its 2015 sales target of JPY 2,000 billion by 41%, and now tells investors that number is its 2020 target. Nidec missed a two-year projected overall operating profit target by 27%. Nidec’s track record with short, medium, and long-term projections in its Automotive product group seems even worse.

On top of the arbitrariness of Nidec’s projections, we calculate the company showed effectively no organic growth over the past four years, despite having projected its organic growth CAGR during this time would be 11.4%.<sup>1</sup> Instead, we calculate that Nidec’s actual organic growth (ex-currency effects and M&A) CAGR from FY 2011 through FY 2015 was only 0.05%.<sup>2</sup> The quality of Nidec’s earnings growth seems poor. We estimate that effective tax rate reductions have boosted Nidec’s reported EPS by 11.4% since FY 2013. Given Nidec’s meager top line organic growth, it is probably fair to say that the vast majority of the remainder of Nidec’s reported EPS growth has been due to currency effects and M&A.

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<sup>1</sup> H1 2012 Presentation, Slide 13 Data points extracted from Nidec graphic using Plot Digitizer, available from <http://plotdigitizer.sourceforge.net/>

<sup>2</sup> See *Nidec’s Organic Growth Barely Exists* for an explanation of our organic growth estimates.

Analysts and investors appear to have gone blind from staring at The Man Hotter Than the Sun. (This is a reference to Mr. Nagamori's self-published comic book about himself, shown to the right.) Sell-side analysts heap praise on the company, and write about their expectations for future organic growth as though Nidec were a completely different company. At the same time, they remain oblivious to the incessantly missed predictions. As a result, Nidec's sky high valuation implies a valuation for its non-HDD businesses close to that of Facebook, Inc., which is one of the strongest consumer brands in the world, generates 35%+ organic growth, and generally converts a much higher percentage of its operating cash flow to free cash flow than Nidec does.



Nidec's failures to meet targets are made even worse by the highly aggressive accounting the company employs to boost reported profitability, and make the trend in its automotive business look more favorable than it really is. Nidec's JPY 36 billion in write-offs seem unjustified, and could have been improper. According to the company, the write-offs boosted reported profit by JPY 10 billion to JPY 15 billion per year.<sup>3</sup> Nidec has transferred businesses into the Automotive group in ways that misleadingly flatter the Automotive group's results. Furthermore, we have interviewed four former employees who have attested to Nidec Automotive group salespeople in China stuffing the channels (thereby improperly boosting reported sales). Nidec's auditor probably offers little safeguard against misleading accounts – in our opinion, Nidec's auditor is to audit failures what Michael Jordan was to basketball.<sup>4</sup>

Part of the myth underpinning Nidec's valuation is a notion that it is a superior acquirer of businesses. We think Nidec's acquisition strategy is more effective at masking weak organic growth than at creating value, and we see the extent to which it generates synergies as greatly overestimated. While Mr. Nagamori speaks publicly about buying companies such as Renesas Electronics Corp. (6723 JP) and Calsonic Kansei Corp. (7248 JP), he makes some highly questionable purchases, such as a recent acquisition of a small Romanian company from a convicted felon.<sup>5</sup> Former employees of some of Nidec's acquisition targets question the thoroughness of Nidec's due diligence, and the notion that there were synergies with Nidec's existing businesses. At the time Nidec announced it was acquiring Ansaldo Sistemi Industriali S.p.A., Mr. Nagamori brushed aside the rare analyst question about whether Nidec would be able to achieve its goal of generating a 10% operating profit margin in the business.<sup>6</sup> The most recent financials we have for that entity show that its OP margin halved since around the time of acquisition to 2.8%. Nidec's reasons for acquiring minority stakes in six formerly listed subsidiaries are unclear, but we note that Mr. Nagamori received JPY 29.5 billion in Nidec shares (at today's share price) for his ownership of these companies.

<sup>3</sup> We do not know the number of years for which this boosts (or boosted) profit.

<sup>4</sup> As we explain in *Nidec's Auditor is Highly Questionable*, our assessment is also based on the performance of Nidec's auditor's predecessor entities.

<sup>5</sup> <https://www.bloomberg.com/news/articles/2016-06-17/renesas-jumps-most-in-7-months-on-nidec-interest-in-acquisition>

<sup>6</sup> FY2011 Call.

Nidec in our view unduly promotes business opportunities with sex appeal, such as haptics (which led to a write-off), robots, drones, and LIDAR. These exciting products account for a tiny sliver of Nidec's overall business, and in our view, have received an inordinately large amount of attention from investors. Nidec's margin on sales of drone motors to Amazon.com (AMZN US) is likely to be significantly compressed once any scale is achieved.

We have real corporate governance concerns about Nidec. There are indications that management is able to override internal controls. Mr. Nagamori's receipt of Nidec shares worth today approximately JPY 29.5 billion for his stakes in subsidiaries raises questions, as does the JPY 14.5 billion loan he received from the company, which was repaid a few months later by mostly selling his Nidec shares to the company. It is disconcerting that Nidec was unable to hold onto Bunsei Kure, while the company's Chief Technology Officer, Mikio Katayama, was instrumental in running Sharp into the ground.

We value Nidec's shares at less than half of the price – JPY 4,764. At the current price, the implied valuation ascribed to its non-HDD businesses is approximately 21.5x EV / EBITDA. (Facebook trades at 24.9x.) Given Nidec's anemic organic growth, the seeming commoditization of many of its products, and the capital intensity of manufacturing, we can see no reason to justify a share price anywhere close to Nidec's current valuation. Unfortunately, Nidec's transparency has been decreasing over the years, and is poised to take a large step backward as the company plans to no longer file financial statements in the U.S. Unless Nidec resolves the U.S. filing and other transparency issues, we believe investors should exercise extreme caution when considering purchasing Nidec's shares.

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## Nidec Incessantly Fails to Hit Targets

Nidec says it is targeting JPY 2 trillion in revenue for FY 2020.<sup>7</sup> The 2020 target used to be its FY 2015 target. Nidec gives us an enormous number that is supposedly its FY 2030 target – JPY 10 trillion.<sup>8</sup> If history is any guide, Nidec will massively disappoint. Below is a summarized collection of missed Nidec targets from recent years.<sup>9</sup> It stuns us that analysts and investors give management any credence when they speak about targets and expectations – there seems to be a complete failure to hold Mr. Nagamori accountable.

<b>Nidec Missed Predictions</b>				
	<b>Missed By</b>	<b>Milestone Date</b>	<b>Prediction</b>	<b>Prediction Date</b>
Overall Business	-27%	FY 2011	Operating profit of JPY 100 billion	2009
	-29%	FY 2012	Sales of JPY 1,000 billion	2009
	-41%	FY 2015	Sales of JPY 2,000 billion	2010
	-1,090 bps	FY 2015	Organic growth CAGR of 11.4% FY 2011-FY 2015	2012
Automotive	-75%	FY 2012	Automotive sales of JPY 350 billion	2008
	-46%	FY 2015	Automotive sales of JPY 500 billion	2010
	-10%	FY 2012	Sell 8.5 million EPS units	2011
	-42%	FY 2015	Sell 20 million EPS units	2012
	-1,300 bps	FY 2015	EPS global market share of 36%	2012
Appliances	-41%	FY 2012	Nidec Techno Motor sales of JPY 70 billion	2009
Commercial	-43%	FY 2015	ACI sales of JPY 500 billion	2010
Industrial	-640 bps	FY 2015	ACI OP margin of 15%	2013
HDD & Small Precision	-55%	2014	HDD market demand exceed one billion units	2010
	-59%	FY 2015	Sell 882 million HDD units	2010
	-10%	FY 2015	Small precision motor sales of JPY 500 billion	2010

<sup>7</sup> H1 2016 Presentation, Slide 15.

<sup>8</sup> FY 2014 Presentation, Slide 32.

<sup>9</sup> For more detail on these predictions and misses, see the Appendix.

## Nidec's Organic Growth Barely Exists

We calculated Nidec's organic growth rates by subtracting currency effects and acquisitions. We calculate the organic growth CAGR from FY 2011 through FY 2015 as 0.05% - essentially zero. Our calculations are below:<sup>10</sup>

	FY 2012	FY 2013	FY 2014	FY 2015
Reported Revenue	JPY 709,270	JPY 875,109	JPY 1,028,385	JPY 1,178,290
- M&A Gain	JPY 66,194	JPY 85,524	JPY 61,257	JPY 48,119
- FX Gain	JPY 21,400	JPY 118,200	JPY 62,700	JPY 62,100
Organic Revenue	JPY 621,676	JPY 671,385	JPY 904,428	JPY 1,068,071
Prior Year Base	JPY 670,301	JPY 671,538	JPY 871,997	JPY 1,025,118
Est. Organic Growth	-7.3%	0.0%	3.7%	4.2%

In a manner that seems completely divorced from reality, management routinely speak on results calls as though Nidec has been generating strong organic growth. Examples include:

- “Please turn to Slide 11. We are continuing aggressive investments that support organic growth, which could be JPY 110 billion in fiscal year 2016.” – Q2 2016 call
- “Touching on the organic growth outlook of automotive on Slide 22, the business is expanding at a faster pace than originally expected.” – FY 2015 call
- “M&A is a very critical for us to grow. So organic growth and M&A to drive us of our high-growth.” – Q1 2014 call
- Q: “You gave some very bullish numbers on Techno Motors. You’re looking for sales to double to JPY 100 billion in fiscal March 2017. Can you talk about what is driving that double yen sales? How much of that is organic versus M&A?”  
A: “There are no acquisitions taken into consideration at all. This is completely due to organic growth.” – Q1 2013

It seems the sell-side does not understand the lack of organic growth. We would normally assume sell-side analysts have done similar calculations to estimate organic growth. However, sell-side report statements such as the following challenge that notion, and support our view that analysts are unquestioning in their acceptance of statements from Nidec management:

- “Looking toward FY 3/21 Nidec expressed confidence that it can increase automotive sales to JPY 600 billion solely through organic growth.” – October 25, 2016
- “Q1 in line; rising organic growth prospects.” – July 23, 2016
- “We do not think the medium and long-term growth in automotive household, commercial and industrial product is priced in.” – July 22, 2016

<sup>10</sup> These numbers are taken from the 20-F sections comparing the current fiscal year to the prior one (approximately p. 50-55). Nidec does not give all of the information necessary to make a precise calculation of organic growth (because there are FX impacts to the growth from M&A); however, we are comfortable that these calculations are fair representations.



- “Apply a 10% premium to the resulting theoretical value to reflect the high visibility of medium-term earnings growth. Reflecting the strong growth potential of the company’s business, especially its automotive operations.” July 22, 2016
- “Nidec emphasized organic growth and lifted FY20 organic growth goal by 20% to JPY 600 billion.” – October 25, 2016
- “We believe the main factors that put the company in sight of FY 3/21 autos-related sales of JPY 600 billion via organic growth are rising share for existing offerings such as electrical power steering motors, as well as increasing orders for items including motors for new-generation brake systems, and products combining ECUs and sensors.” – October 25, 2016

### Nidec’s Earnings Growth Seems Low Quality

Nidec’s earnings growth in recent years seems to be of low quality. A meaningful portion of Nidec’s reported EPS growth has come from lowered effective tax rates. Given the lackluster organic topline growth, it stands to reason that a large proportion of the remaining growth in reported EPS is likely due to currency swings and M&A.

Nidec could face an EPS headwind possibly as early as FY 2018 due to the expiration of foreign tax preferences that have accounted for over 5% of diluted EPS in each of the past three fiscal years. We estimate that decreases in Nidec’s effective tax rate since FY 2013 have respectively boosted FY 2014 and FY 2015 EPS by approximately 4.7% and 11.4%.<sup>11</sup> A substantial portion of the reduction Nidec’s effective tax rate between FY 2013 and FY 2015 was due to Japan’s statutory tax rate decreasing; however, Nidec’s FY 2015 effective tax rate was 22.2%, compared to Japan’s statutory corporate tax rate of 33.0%.

Nidec’s low tax rate is largely due to overseas tax preferences. The issue is that these preferences start expiring possibly as early as FY 2018 and FY 2019. The below table from Nidec’s 20-F shows the significant tax benefits Nidec receives in its foreign subsidiaries.<sup>12</sup>

	For the year ended		
	March 31		
	2014	2015	2016
Statutory tax rate	38 %	36 %	33 %
Increase (reduction) in taxes resulting from:			
Tax benefit in foreign subsidiaries	(14.6 )	(14.3 )	(12.9 )
Tax on undistributed earnings	2.2	2.7	1.1
Valuation allowance	(2.3 )	(4.3 )	(1.5 )
Liabilities for unrecognized tax benefits	(0.1 )	0.3	0
Reversal of deferred tax assets related to foreign tax	5.3	—	—
Deduction for foreign taxes	2.4	1.5	1.5
Withholding tax on dividends from overseas	0	2.3	1
Changes in Japanese income tax rates	0.3	0.7	0.5
Other	(0.8 )	2.2	(0.5 )
Effective income tax rate	30.4 %	27.1 %	22.2 %

<sup>11</sup> Assuming minority interests of 1% of net income.

<sup>12</sup> FY 2015 20-F, p. 46.



Nidec discloses that these foreign tax benefits accounted for 7.8%, 6.7%, and 5.5% of Nidec's diluted EPS in FY 2013 – FY 2015.<sup>13</sup> These benefits primarily relate to income sourced from subsidiaries in Thailand and the Philippines.<sup>14</sup> Nidec discloses that the Thailand benefit is a corporate income tax exemption granted in 2010, and lasts for eight years “from the date of commencement of certain revenue-generating activities”. (We are unsure of when that date was satisfied.) Nidec's Philippines income tax holiday is four years, and was renewed in September 2015. This date implies the preference expires in FY 2019 – we have no view on whether it is likely to be extended. Regardless, we believe investors should take into consideration how much of Nidec's EPS growth has come through organic growth, versus tax rate reductions and currency swings.

### **Nidec Boosted Reported Profitability Through Highly Questionable and Possibly Improper Write-offs**

We believe that in recent years, Nidec misleadingly and artificially boosted its reported profitability and growth in profits through highly questionable write-offs it took in FY 2012. (We also saw a meaningful write-off in 2010 at Nidec Motors & Actuators – see *Nidec's M&A: Scant Evidence of Excellence*.) In the Q3 2012 results, Nidec announced that it was going to take approximately JPY 36 billion in inventory and PP&E write-offs in the following quarter.<sup>15</sup> In its FY 2012 20-F, Nidec disclosed that the PP&E impairment portion of the write-offs was JPY 12.7 billion:

“...As a result, our losses related to fixed assets and personnel expenses related to severance payments increased ¥12,704 million and ¥1,762 million, respectively, for the year ended March 31, 2013 compared to the previous year.”<sup>16</sup>

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<sup>13</sup> FY 2015 20-F, p. 47.

<sup>14</sup> FY 2015 20-F, p. 46.

<sup>15</sup> Nagamori (emphasis added) Q3 FY 2012 call: And we should like to mention that although the amount for the structural reforms and other adjustments is JPY 40 billion, the actual cash out would be, in other words, the actual expenditures would be 10% of that. And what we will be doing is the cash out itself will be in the amount of JPY 4 billion. And so therefore, for the remaining JPY 36 billion, it will be on a noncash basis. In other words, what will be carried out are impairments, or we'll be taking out reserves. So what we'll be focusing upon is, in regard to the impairment of facilities or of the buildings and the consolidation of factory, that would be the core of our efforts. So what we would like to do is to be able to complete the process of structural reforms and other adjustments during this fiscal year so that from the next fiscal year onwards, we will be able to quickly recover to our profit levels and revert to our levels before, as well as to strive for achieving higher levels of profitability. And out of that, it will be approximately JPY 4 billion, where cash out or cash expenditures, such as the reduction of headcount or relocation of plants, would be carried out. And the remainder will be in regard to the impairment on buildings or consolidation of plants and also the review of our inventory assets, so that we'll be looking at our fixed assets, including the machinery and so on, and we will be looking into those areas. Now we have considered that when we are going to be implementing our structural reforms and other adjustments, then taking into consideration the changes that are taking place in the market, we felt that it would be better for us to be able to achieve a quicker recovery from the next fiscal year onwards, so it has been decided that this should be in the scale of JPY 40 billion. And so therefore, in regard to the current structural reforms and other adjustments, what we have done is to look at the overall improvements in the structure of our fixed assets. And also, we have looked into the impairment, and then we have also carried out the review of our inventory assets.

<sup>16</sup> FY2012 20-F, p. 61.

PP&E impairments of JPY 12.7 billion imply the inventory write-offs approximated JPY 23 billion (JPY 36 billion total write-offs and impairments, minus JPY 12.7 billion PP&E impairments.) According to Mr. Nagamori, these write-offs would create JPY 10 – 15 billion in annual cost savings going forward.<sup>17</sup>

Question: “Got it. And then my second question, Nagamori-san, is on Page 14. When I look at the mid-term target, you're talking about over JPY 100 billion in operating profit for fiscal '14. Can you help us understand a little bit of how you get there from JPY 70 billion in fiscal '13 in terms of how much of that JPY 30 billion year-over-year increase is coming from restructuring?”

Mr. Nagamori: “We believe that in terms of the structural reforms and other adjustments, then there'll be an effect realized per year of between JPY 10 billion to JPY 15 billion.”

The most obvious ways in which these write-offs would have improved subsequent reported profits is through a) decreased depreciation expense due to impairing PP&E, and b) reduced cost of goods sold due to writing off inventory so that when the written-off inventory is subsequently sold, it will not have matching costs.

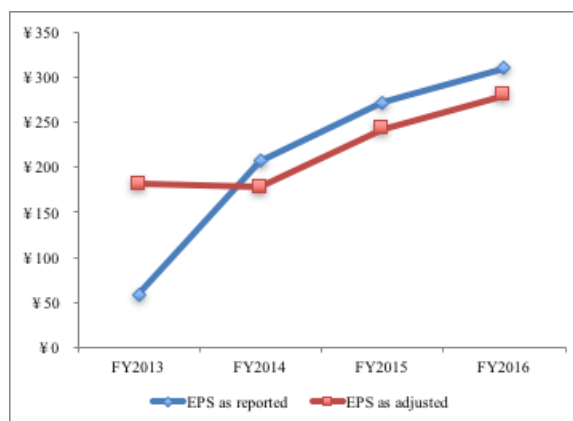
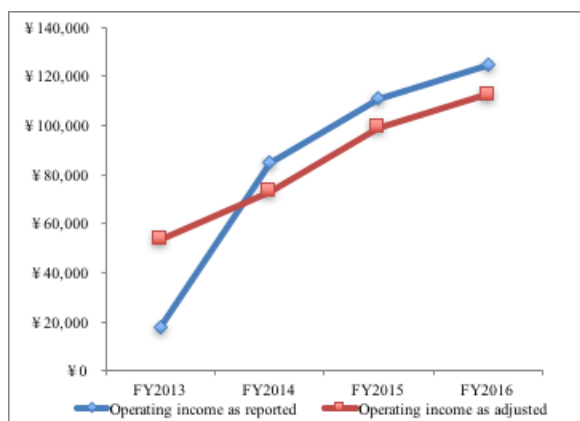
Assuming the mid-point of JPY 12.5 billion in annual expense reduction, the table below compares Nidec's reported operating profit and EPS to what we estimate it would have been without the write-offs. Note how the reported OP margin is approximately 150 basis points higher than in our adjusted numbers.

Estimated Effect of Write-Offs on Income Statement				
	FY 2013 Reported	FY 2013 Adjusted	FY 2014 Reported	FY 2014 Adjusted
Revenue	875,109	875,109	1,028,385	1,028,385
Operating Profit	84,864	72,364	111,218	98,718
<i>OP Margin</i>	9.7%	8.3%	10.8%	9.6%
EPS - Basic	207	176	272	242

Assuming a mid-range of JPY 12.5 billion in cost reductions over the ensuing two years, the below graphs compare what Nidec's operating profit and EPS growth trajectories would have looked like without the write-offs, versus what Nidec reported as a result of the write-offs.

<sup>17</sup> Q4 FY2012 call

*Operating income and EPS growth adjusted to reverse an estimated JPY 12.5 billion cost savings, versus reported results.*



The Nidec presentation slides below compare the relatively unexciting projected growth in OP margin pre-charges to the rocket like growth post charges. Note in the post-charges slide that even with the benefit of a reduction of JPY 10 – 15 billion in annual expenses, Nidec was still expecting to fall short of the FY 2013 and FY 2014 OP margin goal it maintained just two quarters earlier. (Recall that Nidec has a long and rich history of missing its own projections – often by substantial amounts.)



#### The Write-Offs are Highly Questionable

In our opinion, it is difficult to justify the bulk of these charges, and they could therefore be improper. The indicators necessary to perform impairment tests on PP&E largely seem to us to have been absent. Management's statements about inventory levels before and soon after announcing the write-offs, and analysis of the inventory sub-accounts cause us to have a hard time believing that Nidec could have written off such a large amount of inventory. (We have little confidence that Nidec's troubled auditor is an effective safeguard against problematic

accounting – particularly given that on the two occasions the auditor’s U.S. regulator inspected the auditor, the regulator found inventory valuation issues in the audits of Nidec.<sup>18</sup> We provide more detail in *Nidec’s Auditor is Highly Questionable and Increases our Concerns about Nidec’s Internal Controls and Accounts*.) We note that while Nidec HDD competitor Minebea had write-offs around the same time, the write-offs primarily involved non-HDD businesses.<sup>19</sup>

### *Nidec’s PP&E Impairments are Suspect*

We strongly doubt that Nidec met the requirements to impair much of the PP&E. Under U.S. GAAP accounting standards, “indicators” of PP&E impairment must be present as a prerequisite for a company to perform impairment tests.<sup>20</sup> The indicators are designed to alert a company that events or changes in circumstances might have caused an asset’s carrying value to not be recoverable.<sup>21</sup> Based on subsequent results and management’s pronouncements during FY 2012 (excerpted below), we doubt these indicators existed at a sufficient level to do many of the requisite impairment tests.

Typical indicators of impairment include:<sup>22</sup>

- A significant decrease in the market price of a long-lived asset (asset group)
- A significant adverse change in the extent or manner in which a long-lived asset (asset group) is being used or in its physical condition
- A significant adverse change in legal factors or in the business climate that could affect the value of a long-lived asset (asset group), including an adverse action or assessment by a regulator
- An accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset (asset group)
- A current-period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset (asset group)
- A current expectation that, more likely than not, a long-lived asset (asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life. The term more likely than not refers to a level of likelihood that is more than 50 percent.

Management’s statements leading up to Q4 seem to contradict the purported need for PP&E (and inventory) write-offs. Some of management’s statements could even be construed as admitting that the primary purpose of the write-offs was to improve future reported profits. Our interpretations of some of management’s statements during FY 2012 are below. Per our

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<sup>18</sup> [https://pcaobus.org/Inspections/Reports/Documents/2014\\_PricewaterhouseCoopers\\_Kyoto.pdf](https://pcaobus.org/Inspections/Reports/Documents/2014_PricewaterhouseCoopers_Kyoto.pdf)

<sup>19</sup> See Minebea March 31, 2013 Annual Results, p. 29.

<sup>20</sup> See [http://www.ey.com/Publication/vwLUAssets/EY-impairment-or-disposal-of-long-lived-assets/\\$FILE/EY-impairment-or-disposal-of-long-lived-assets.pdf](http://www.ey.com/Publication/vwLUAssets/EY-impairment-or-disposal-of-long-lived-assets/$FILE/EY-impairment-or-disposal-of-long-lived-assets.pdf) p. 4.

<sup>21</sup> See [http://www.ey.com/Publication/vwLUAssets/EY-impairment-or-disposal-of-long-lived-assets/\\$FILE/EY-impairment-or-disposal-of-long-lived-assets.pdf](http://www.ey.com/Publication/vwLUAssets/EY-impairment-or-disposal-of-long-lived-assets/$FILE/EY-impairment-or-disposal-of-long-lived-assets.pdf) p. 10.

<sup>22</sup> [http://www.ey.com/Publication/vwLUAssets/EY-impairment-or-disposal-of-long-lived-assets/\\$FILE/EY-impairment-or-disposal-of-long-lived-assets.pdf](http://www.ey.com/Publication/vwLUAssets/EY-impairment-or-disposal-of-long-lived-assets/$FILE/EY-impairment-or-disposal-of-long-lived-assets.pdf) p. 10.

interpretations, it is very difficult to see how the environment necessitated PP&E impairments or inventory write-offs. (The statements we interpret are provided in the accompanying footnotes.)

- As of the Q1 2012 call, management expected to be able to manufacture more high margin HDD products without incurring additional capex. This indicates that there could be no reason to impair HDD PP&E.<sup>23</sup>
- As of the Q1 2012 call, management felt the HDD industry was headed in a “much more healthier direction”, and Nidec apparently had little excess inventory.<sup>24</sup>
- On the Q2 2012 call, Mr. Nagamori stated that Nidec “was not thinking of taking any tests for impairment to take place.”<sup>25</sup>
- As of the Q2 2012 call, Nidec did not expect a declining HDD market over the long-term.<sup>26</sup>

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<sup>23</sup> Nagamori (emphasis added): “Rather than say that it's the volume, it's always better to move forward with a better product mix in terms of the profitability. So this means that a better profitability can be achieved not necessarily by increasing volumes. [Japanese] So therefore, our thinking does not call for the necessity of volumes to go up in order for us to improve profitability. That is not the way we think. [Japanese] Rather, we are moving forward with the improvements on the assumption that if volumes go up, then this will be a further added benefit for us. [Japanese] Rather, if volumes go up, then this would mean that it will be necessary also to increase capital expenditures, so that this will mean a burden on our investment situation and there will also be the burden imposed on dealing with depreciation. [Japanese] Rather, on the contrary, we believe that the product mix will improve if we increase more of our 7-millimeter height and later on the 5-millimeter height products, which are more technically difficult. [Japanese] Or the profitability will also improve more if we had more of these server multidisc type, which have 3, 4 and 5 platters. [Japanese] And it should be mentioned that for the first quarter that has just ended, we were lower in volume by 10 million units compared to plan but our profits were higher.”

<sup>24</sup> Nagamori (emphasis added): “In regard to the breakdown, it will not be possible for us to give you the details because of the contractual situation with our customers. [Japanese] However, we believe that from here onwards it will not be like in the past, whereby the prices went steadily down. [Japanese] Now, naturally, there is the change in the product mix and also the customers will not be reducing the prices of the hard disks that easily. And so, therefore, we believe that the pattern that will be absorbed from here onwards in this regard will be different from that which was observed in the past. [Japanese] So therefore, our outlook on the situation is that the hard disk drive industry has changed considerably compared to 1 year ago. [Japanese] And our expectation is that the direction that it is headed for is in a much more healthier direction. [Japanese] And in terms of the adjustments made on production at the end of June, we have seen that it has been much quicker in regard to the action taken then in the past, whereby things were stopped so that excess inventory was not kept on our side nor on the side of the customer. So we believe that in that sense it is a very healthy market... There was a slight buildup in the end of June but we believe that now it is returned to an appropriate level. [Japanese] I believe also, though, there are some areas where there are shortages and some where there are some excesses of inventory. We believe that on the whole, it is at a very appropriate level. [Japanese] So whereas in the past such inventory adjustment took 3 months or so to make, we see that now things are moving very quickly. [Japanese] It seems like things change in a matter of 2, 3 weeks or 4 weeks, whereby things are dropped very quickly.”

<sup>25</sup> Nagamori (emphasis added): “I believe that the capacity question was in regard to spindle motors and in terms of excess capacity there, whereas there are three factories in Thailand currently, the idea is to reduce by one factory. And in the Philippines there are two factories which we are looking to reduce to one. However, this does not mean that we will be closing those factories, but rather a transition will be made to a new business. And we're thinking already of moving into the area of SCD fans, a new market for us which we are entering and the volumes are going up there. So this transition is being made for that. So therefore, we're not thinking of taking any tests for impairment to take place.”

<sup>26</sup> Nagamori (emphasis added): “The results of the first half have been in accordance, for the most part, with the plans that we had. And for the hard disk market, from here onwards in the medium-term growth rate, we are looking at the hard disk market growth rate to be at an annual growth rate of 3% to 5%. So therefore, we are looking forward to a very rapid improvement in the situation of cost of goods sold as a result of these activities.

- On the Q3 2012 call announcing the write-downs, management seems to us to admit that their primary motivation in taking the charges is to improve future reported profits.<sup>27</sup>
- On the Q3 2012 call, management acknowledges conditions do not necessitate the impairments, and indicates to us that they view impairments as a matter of its discretion. That view appears to contravene accounting rules, and in our opinion, demonstrates that management is able to override internal financial controls.<sup>28</sup>
- On the Q3 and Q4 2012 calls, management made multiple statements that were positive about the outlook for HDD (and consistent with statements earlier in the year).<sup>29</sup> However, Small Precision Motors recorded over half of the write-offs.<sup>30</sup>

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[Japanese] So we are confident that the kind of results that we were able to generate as a result of WPR 1 will also be seen as a result of carrying out WPR part 2.

<sup>27</sup> Nagamori (emphasis added): “And we should like to mention that although the amount for the structural reforms and other adjustments is JPY 40 billion, the actual cash out would be, in other words, the actual expenditures would be 10% of that. And what we will be doing is the cash out itself will be in the amount of JPY 4 billion. And so therefore, for the remaining JPY 36 billion, it will be on a noncash basis. In other words, what will be carried out are impairments, or we'll be taking out reserves. [Japanese] So what we'll be focusing upon is, in regard to the impairment of facilities or of the buildings and the consolidation of factory, that would be the core of our efforts. [Japanese] So what we would like to do is to be able to complete the process of structural reforms and other adjustments during this fiscal year so that from the next fiscal year onwards, we will be able to quickly recover to our profit levels and revert to our levels before, as well as to strive for achieving higher levels of profitability... So the policy is that for all of our businesses and all of our group companies, we will be pursuing the same direction so that we can carry out our structural reforms and other adjustments, then quickly generate results. [Japanese] And at the same time, we'll be implementing structural reforms and other adjustments for our currently highly profitable businesses so that they will have even higher profitability realized.”

<sup>28</sup> Nagamori (emphasis added): “And generally speaking, many companies often carry out these kind of structural reforms and other adjustments when things have turned very bad. However, we believe that it's necessary to be able to be proactive so that these reforms are carried out before the profitability gets thoroughly in a poor situation. And rather, by taking this step, it will be possible to move forward in a positive direction and become a stronger company... And so what we do is to carry out impairments very quickly and rather than try to consider that the market may recover if we wait a little bit longer. And as a result of waiting, there will be many Japanese companies that will suffer even greater damage but -- so that it will not be sufficient just to carry out impairments, but -- in order to recover. But what we are trying to do is to anticipate and act quickly.”

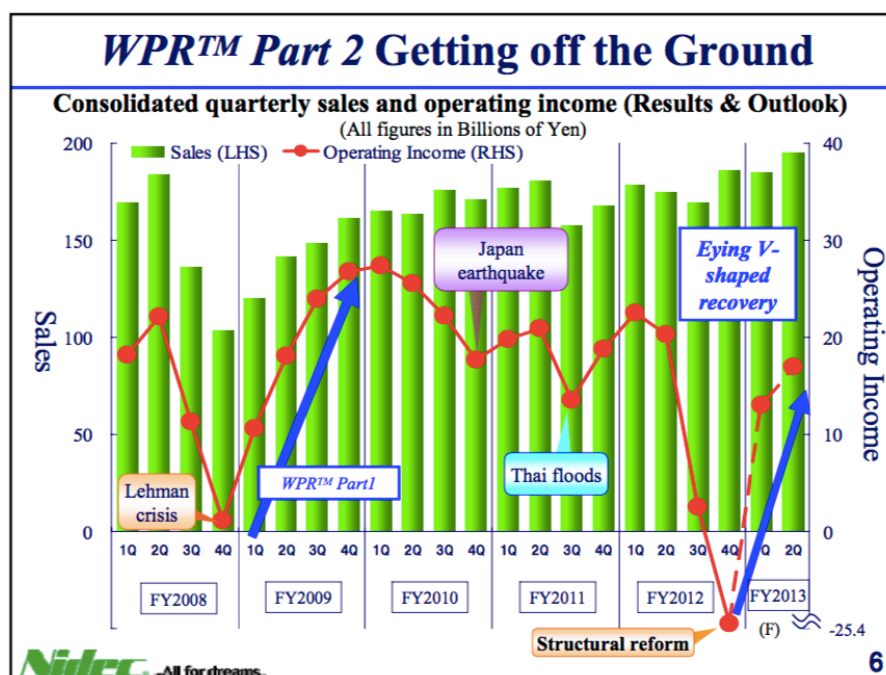
<sup>29</sup> Question Q3 2012 call: “I wonder if the company could say when they expect Nidec's production volume of HDD spindle motors to bottom out?” Nagamori (emphasis added): “Rather than say bottom out, I believe that for the next 1-year period, the situation will remain flat. Well, most likely there are expectations that for the next fiscal year, the numbers will go up. However, we believe that things will remain flat so that, whereas the hard disk market for last year was at a level of JPY 580 million, we believe that it will be transitioning at a level of JPY 550 million. And my feeling is that it would be better to consider the upside as starting from 2014 onwards.”

Nagamori\_Q4 2012 call (emphasis added): “So the current efforts that have been made in regard to structural reforms and other adjustments were carried out on the assumption that in the conventional PC-related markets, as well as in the digital camera markets and the liquid crystal display markets have become very weak. And so therefore, it was decided to move forward with the structural reforms and other adjustment efforts. The basis, therefore, in the changes that had been carried out by us is a business plan which assumes that we'll see a stable situation continue in regard to the hard disk drive situation, and that we will not be expecting growth in this area. And this likewise applies for the digital camera market as well.

<sup>30</sup> FY2012 Q3 Call.



- On the Q4 2012 call, management expressed a view that its business would quickly recover (“a V-shaped recovery”), which we believe illustrates how unnecessary the write-offs were.<sup>31</sup> In our opinion, the slide below really shows how unwarranted the impairments were – in our experience, it is rare to see a company talk about large write-offs at the same time it is giving such a bullish forecast for the next year.



We are highly incredulous that Nidec could or should have written off JPY 23 billion in inventory.

Inventory that has been written off can often be sold later, providing a boost to reported profit because there are no matching costs. Under Nidec’s own accounting policy, which is consistent with our understanding of U.S. GAAP, inventory write-offs are only acceptable when inventory has not moved for one year or there is no possibility of future sales or use.<sup>32,33</sup> Under U.S.

<sup>31</sup> Nagamori (emphasis added): “First of all, when we made the announcement about the results for the third quarter in January of this year, we made an announcement about how we would be changing our profit structure. And then, from the third quarter onto the fourth quarter, we carried out, throughout our entire group, the structural reforms and other adjustments. [Japanese] I am strongly confident of the fact that we have been able to completely come through with those structural reforms and other adjustments. [Japanese] So therefore, we have increased our confidence that for fiscal year 2013, we’ll be heading towards a V-shaped recovery. Especially in the previous fiscal period, we moved forward with the CCC, or Cash Conversion Cycle, improvement. [Japanese] And it was possible for us to clear the objective which we had set of a 30% improvement here. [Japanese] So therefore, we have been able to achieve a record breaking operating cash flow of JPY 110.3 billion.”

<sup>32</sup> FY 2013 20-F, p. 83: “We periodically assess the market value of our inventory, based on sales trends and forecasts and technological changes and write off inventories with no movement for one year or when it is apparent that there is no possibility of future sales or usage.”

<sup>33</sup> Based on Nidec’s descriptions of the charges, we believe it is referring to write-offs, as opposed to write-downs. If the inventory were written-down, it would be revalued at realizable value.

GAAP, a drop in selling price does not in and of itself necessitate a write-off.<sup>34</sup> We believe Nidec's inventory write-offs were largely unjustified for the following reasons:

- a) The magnitude of the estimated write-off seems too large relative to Nidec's Q3 FY2012 and Q4 FY2012 inventory balances to be believable – we estimate the write-off represents approximately 22% of Q3 FY2012 inventory of JPY 106.2 billion.<sup>35</sup> Inventory at Q4 FY2012 was little changed from the prior quarter at JPY 99.8 billion.<sup>36</sup> This relatively insignificant QoQ change during the quarter in which this massive write-off occurred implies that at some point during the fourth quarter, Nidec's inventory surged to at least approximately JPY 123 billion (see the Appendix). The improbability that 22% of Nidec's Q3 inventory balance was excess – especially given some of management's comments in earlier quarters about the health of the HDD industry and inventory levels – supports our opinion about the write-offs.<sup>37</sup> (We infer that the majority of the inventory write-offs were in the HDD segment because the largest disclosed swings in operating profit attributed at least in part to inventory write-offs were in the Thailand and Philippines segments, which primarily sell HDD motors.<sup>38</sup>
- b) As shown below, no single sub-account of inventory changed materially QoQ during the periods preceding the write-offs and the quarter in which they were taken.<sup>39</sup> The company was turning inventory approximately 5.5x to 6.0x per year (roughly every two months). It is incredible to us that the company claims to have had such a massive write-off in Q4 when the sub-account opening and closing balances were so little changed – for this to have been justified, Nidec would have had to have had a massive intra-quarter blowout in one or more of these inventory sub-accounts.

	FQ1/CQ2 Jun-30-2012	FQ2/CQ3 Sep-30-2012	Restated FQ3/CQ4 Dec-31-2012	Restated FQ4/CQ1 Mar-31-2013
+ Work in Progress	23,771.0	23,759.0	26,090.0	23,526.0
+ Raw Material	26,448.0	27,103.0	30,956.0	30,839.0
+ Finished Good	43,681.0	41,382.0	45,515.0	42,599.0
+ Projects in Progress	-	-	-	0
+ Supplies and Other	3,495.0	3,320.0	3,617.0	2,862.0
<b>Inventory</b>	<b>97,395.0</b>	<b>95,564.0</b>	<b>106,178.0</b>	<b>99,826.0</b>

- c) As excerpted below, Management's FY 2012 statements also make us strongly doubt there was significant inventory (as well as PP&E) that met the criteria for write-off.

In Q1 2012, Mr. Nagamori stated that HDD prices will not continue to steadily decline, that it is a “very healthy market”, and that neither Nidec nor its customers have excess inventory. Note the lack of excess inventory in this quarter is important vis-à-vis Nidec's

<sup>34</sup> The implementation examples for ASC 330-10-55-8 to 12 illustrates a situation in which no loss is to be recognized when sales price drops.

<sup>35</sup> Q3 FY 2012 6-K, p.28

<sup>36</sup> FY2012 20F, p.F-4.

<sup>37</sup> FY2012 20-F, pp. 75-80 state that the inventory losses for Nidec Electronics (Thailand) Segment, Nidec (Dalian) Segment Nidec Philippines Segment Nidec Techno Motor Segment, and All Others Segment related to excess inventories.

<sup>38</sup> FY2012 20-F, pp.76-80

<sup>39</sup> Source: CapitalIQ

inventory accounting standard that provides for write-offs only for inventory that has not moved for one year (or when it is apparent there is no possibility of future use or sale).

Mr. Nagamori said on the call “We believe that from here onwards, it will not be like in the past, whereby the prices went steadily down. Now, naturally, there is the change in the product mix and also the customers will not be reducing the prices of the hard disks that easily. And in terms of the adjustments made on production at the end of June, we have seen that it has been much quicker in regard to the action taken then in the past, whereby things were stopped so that excess inventory was not kept on our side nor on the side of the customer. So we believe that in that sense it is a very healthy market...

...There was a slight buildup in [Hard Disk Drive chain inventory levels] at the end of June but we believe that now it is returned to an appropriate level. I believe also, though, there are some areas where there are shortages and some where there are some excesses of inventory. We believe that on the whole, it is at a very appropriate level. So whereas in the past such inventory adjustment took 3 months or so to make, we see that now things are moving very quickly. It seems like things change in a matter of 2, 3 weeks or 4 weeks, whereby things are dropped very quickly.”

On the Q3 2012 call when Nidec announced the upcoming write-offs, Mr. Nagamori stated that the company was writing off the inventory in anticipation of losses on it in the future. This view appears to completely contravene U.S. GAAP, which provides that “if a business is expected to lose money for a sustained period, the inventory shall not be written down to offset a loss inherent in the subsequent operations.”<sup>40</sup> On the call, Mr. Nagamori stated “And so what we do is to carry out impairments [and inventory write-offs] very quickly and rather than try to consider that the market may recover if we wait a little bit longer.”<sup>41</sup> And as a result of waiting, there will be many Japanese companies that will suffer even greater damage but -- so that it will not be sufficient just to carry out impairments, but -- in order to recover. But what we are trying to do is to anticipate and act quickly.”

## **Manipulating Profitability of Automotive**

The Automotive product group is key to the bull thesis on Nidec. It is well-known that Nidec’s core business of HDD motors is in long-term structural decline. The below table of overall EBIT margins makes clear that Nidec is no more profitable today than it was five years ago.<sup>42</sup> It is clear to us that Nidec’s lofty valuation is largely due to high expectations about the future of Automotive.

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<sup>40</sup> ASC 330-10-35-7

<sup>41</sup> Mr. Nagamori was discussing the entire amount of the charges (JPY 40 billion including personnel-related costs), so the implication is that he was describing PP&E impairments and inventory write-offs.

<sup>42</sup> “Profitable” here refers to EBIT margin.

	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015
EBIT Margin	13.7%	10.7%	2.5%	9.7%	10.8%	10.6%

Source: S&P CapitalIQ

Nidec entered the Automotive business in 2006 when it acquired Valeo Motors & Actuators. In our opinion, one of Nidec's imperatives is to show that it can grow the OP margin of the Automotive group. We see evidence that Nidec is manipulating its reported Automotive OP margin in order to try to show an upward trend.

One example is that Nidec waited four years from acquisition to start reporting a high OP margin business as part of the Automotive group. Another example is Nidec (Dalian), which appears to have been using its Small Precision Motors business to subsidize the OP margin of the Automotive group. A final example is Nidec Elesys Corp., which Nidec acquired from Honda at the end of FY 2013. Nidec's investor relations has told us that Elesys's OP margin has significantly improved; however, the financials we have for several of Elesys's entities cast significant doubt on that statement.

#### *Unnamed Nidec Motor Corp. Subsidiary Flatters Automotive Operating Profit*

In FY 2014, Nidec transferred an apparently highly profitable subsidiary of the Appliance, Commercial, and Industrial product group ("ACI") to the Automotive product group.<sup>43</sup> (Nidec does not disclose the name of the subsidiary.<sup>44</sup>) We understand from Nidec investor relations that the business makes switches for the auto manufacturer General Motors. According to IR, the business had been part of the Emerson Motors business Nidec acquired in FY 2010, and until the transfer it had been grouped with ACI. We estimate that the transferred subsidiary generated an OP margin in FY 2013 of 10.9%.

It is curious that it took so long to group this subsidiary into Automotive. Subsidiaries in the ACI group generally produce motors for home appliances, and commercial and industrial equipment.<sup>45</sup> On the other hand, Motors & Actuators subsidiaries primarily produce automotive products.<sup>46</sup> At least two possible reasons for the delay suggest themselves. One is that Nidec was too busy to correctly classify the company for about four years. Another, unfortunately dodgy possibility is that Nidec saved the regrouping for a time when it really wanted to show growth in its Automotive business. If our estimate of the unnamed subsidiary's OP margin is correct, the transfer would have nicely flattered the OP margin of Motors & Actuators, which was 6.3% in FY 2013.<sup>47</sup>

We estimated the revenue and operating profit of the transferred subsidiary by comparing the Motor segment numbers originally reported in the FY 2013 20-F to the restated numbers shown

<sup>43</sup> Nidec disclosed that the business had been transferred to Nidec Motors & Actuators, which is in the Automotive group.

<sup>44</sup> FY2014 20-F, p. 64.

<sup>45</sup> <http://www.nidec.com/en-NA/corporate/about/business/motor/bu03/>

<sup>46</sup> FY2014 20-F, p. 64.

<sup>47</sup> FY2013 20-F, p. 80.

in the FY 2014 20-F. Nidec's disclosure of the transfer strongly implies that the sole difference in the two sets of Motor segment numbers is due to the transfer.<sup>48</sup> Below are the financials:

	Original FY 2012	Restated FY 2012	Subsidiary Implied	Original FY 2013	Restated FY 2013	Subsidiary Implied
Nidec Motor Total Re	119,247	117,390	1,857	175,934	171,959	3,975
Nidec Motor Operatin	723	728	(5)	9,314	8,880	434
OP Margin			N/A			10.9%

The other thing to note is that this subsidiary appears to have been growing quite quickly at the time – potentially transferring a small gem to Automotive.

### *Nidec Dalian*

With Nidec Dalian (“Dalian”), Nidec could be using a Small Precision Motors business to inflate the operating profit margins of the Automotive product group. Dalian owns one manufacturing facility in China.<sup>49</sup> It produces both other Small Precision Motors and Automotive products. In August 2009, Nidec regrouped part of Dalian's business to Motors & Actuators.<sup>50</sup> (Motors & Actuators is in the Automotive product group.) We understand that the Dalian segment from that point forward only included the Small Precision Motors portion of the business.

Subsequent to the move, Dalian's OP margin declined from 15.4% in FY 2009 to 10.6% in FY 2010, indicating that the Automotive portion of Dalian was much higher margin than the Small Precision Motors portion. This is counter-intuitive, as we estimate that Other Small Precision Motors generally produces an OP margin slightly higher than that of Automotive products.

In order to better understand the financials of the respective businesses within Dalian, we obtained the PRC financials (“SAIC filings”) for Dalian and its subsidiaries.<sup>51</sup> From the SAIC filings, which are on a calendar year, we can try to estimate the revenue and operating profit of the Automotive portion of Dalian. Because Nidec stopped separately disclosing Dalian in calendar Q4 of 2014, we have to estimate the Small Precision Motors business's revenue and OP for that one quarter. (We do not think CY 2013 is a good year to use for this purpose because in calendar Q1 CY 2013, Dalian showed an operating loss of JPY -0.8 billion, which we assume was probably due to the FY 2012 write-offs.)

From Nidec's quarterly filings, we see that from January 1, 2013 through September 30, 2013, Dalian's Small Precision Motors business (as disclosed in U.S. quarterly filings) recorded an OP margin of 1.7%. In order to estimate the Dalian's calendar Q4 2013 Small Precision Motors business, we use quarterly revenue of JPY 2.3 billion, which is the average quarterly revenue of

<sup>48</sup> See FY 2014 20-F, p. 64: “One of the subsidiaries previously reported as part of this segment has been transferred to the Nidec Motors & Actuators segment for the year ended March 31, 2015. All prior period segment information has been reclassified in accordance with the current period presentation to enable comparisons between the relevant amounts.”

<sup>49</sup> [http://www.nidec.com/~media/nidec-com/en-global/ir/library/earnings/archive/2011/Q4\\_1](http://www.nidec.com/~media/nidec-com/en-global/ir/library/earnings/archive/2011/Q4_1)

<sup>50</sup> FY2009 20-F, p. 60.

<sup>51</sup> The data is available from the State Administration of Industry and Commerce.

the prior three quarters; and, operating profit of .04 billion (a 1.7% OP margin). From there, we derive estimates for the revenue and operating profit for Dalian's Automotive business.

	CY2013	CY2014(E)
SAIC filings <sup>(1)</sup> JPY millions	JPY millions	JPY millions
Rev	23,732	24,756
Op income	597	2,503
HDD as per SEC filings <sup>(2)</sup>		
Rev	10,098	9,194
Op income	(450)	156
OPM	N/A	1.7%
Auto (SAIC-SEC)		
Rev	13,634	15,562
Op	1,047	2,347
OPM	7.7%	15.1%

<sup>(1)</sup> Converted from CNY at 15.88 and 17.19 in 2013 and 2014, respectively.

<sup>(2)</sup> Calendar Q4 estimated based on average of Calendar Q1-Q3.

Under the aforementioned assumptions, Dalian's Automotive business generated an OP margin in CY 2014 that was 670 basis points higher than that of the FY 2014 Automotive product group of 8.4%.<sup>52</sup> Assuming our full year Small Precision Motor business assumption of a 1.7% OP margin is anywhere near correct, Dalian's CY 2014 OP margin would have been much lower than our estimate of Nidec's FY 2014 other Small Precision Motors OP margin of 9.5%.<sup>53</sup>

Dalian is of particular concern because it contains two businesses at one site. As a result of the shared facilities, Nidec likely has to make a number of judgment calls about how to allocate expenses between the Small Precision Motors and Automotive businesses. Given the likely performance differences Dalian's Small Precision Motors and Automotive businesses generated versus their product group averages, we are concerned that Nidec is using the non-Automotive business at Dalian to subsidize a higher OP margin for Automotive. Using the above estimates, if we reallocated Dalian's expenses so that Small Precision Motor's OP margin increased by 10 percentage points to 11.7%, it would knock Dalian Automotive's OP margin down to 9.2%. These theoretical OP margins are much closer to what their product groups generate company-wide.

<sup>52</sup> FY2014 Results Presentation, Slide 14.

<sup>53</sup> On the FY2014 call, Nidec management stated that HDD OP margin for the year had been 22%.

## *Elesys*

In March 2014, Nidec acquired Elesys from Honda. Elesys produces electronic control units for automobiles. One oddity about how Nidec treated Elesys right after the acquisition is that during its first two quarters as part of Nidec (Q1 and Q2 FY 2014), Nidec classified Elesys as part of the All Others operating segment. In Q3 2014, Nidec transferred Elesys to the Nidec Motors & Actuators segment. At the time it was transferred to Motors & Actuators, it appears to have been grouped with an unknown business that had also been in All Others. The unknown business seems to have been generating roughly JPY 5 billion in revenue per quarter. (The foregoing is based on the assumption that Elesys was generating JPY 8 billion to JPY 9 billion in quarterly revenue at the time.) The foregoing might (or might not be) pertinent to our concerns about Elesys's stated OP margins.

Nidec told investors on the Q1 2015 call that Elesys's OP margin had greatly improved since the acquisition:

Masuo Yoshimatsu - Chief Financial Officer, First Senior Vice President and Director:  
“Yes, actually, before our acquisition of Elesys, their profitability was like average of automotive components business as you may know. And since then, we have been improving their profitability at least twice, in some cases, 3x before the acquisition. So that's the contribution from Elesys.”

Investor relations has given us the following information about Elesys's OP margins:

	FY 2014	FY 2015	Q1 FY 2016	Q2 FY 2016
OP Margin	10.24%	13.26%	13.58%	14.7%

On the surface, the OP margin jump in FY 2015 is very impressive. However, the information we have makes this jump seem unlikely – if not impossible. Investor relations attributed the jump in FY 2015 to Elesys taking advantage of Nidec's scale to purchase semiconductors at lower prices. Importantly IR also stated that Nidec does not purchase semiconductors for Elesys centrally – Elesys purchases from suppliers directly. This means that the jump in OP margin would be reflected in financial statements for the various Elesys entities. The information we have on China and Japan does not match the jump. (According to IR, China is about 20% of sales, Japan 40%, and the U.S. 40%.)

We obtained financials for Elesys China from SAIC.<sup>54</sup> We have Japan financial information from a Japanese credit bureau, Teikoku Databank.<sup>55</sup> The piece that is missing is the U.S., but IR confirmed that Honda accounts for substantially all of Elesys's volume company-wide, and that the OP margins in the U.S. are similar to those of Japan and China.

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<sup>54</sup> The data is available from the State Administration of Industry and Commerce.

<sup>55</sup> <https://www.tdb.co.jp/english/company/index.html>



Elesys Japan			Elesys China				
JPY millions	Mar-15	Mar-16	Rmb000	2012	2013	2014	2015
Sales	24,728	37,902	Sales	475,035	643,222	810,362	615,545
Cost of Sales	18,054	30,732	Cost of Sales	410,686	565,061	700,468	532,626
Gross Profit	6,674	7,170	Gross Profit	64,349	78,161	109,895	82,919
Operating Income	2,104	2,412	Operating Income	44,755	54,038	77,390	54,432
Net Income	1,901	2,911	Net Income	44,244	31,558	55,048	34,770
Gross Margin	27.0%	18.9%	Gross margin	13.5%	12.2%	13.6%	13.5%
OP Margin	8.5%	6.4%	Operating margin	9.4%	8.4%	9.6%	8.8%

From the above financials, we can see that the supposed 10.24% OP margin in FY 2014 is reasonably close to the data we have. However, the delta between the above numbers and the claimed FY 2015 OP margin of 13.26% is substantial, and has increased substantially while our Japan and China financials show decreasing margins (both gross and operating). If Elesys is purchasing its own semiconductors, and the OP margins are reasonably similar in the U.S., then how did Elesys generate a 13.26% OP margin in FY 2015?

### China Automotive Employees Appear to Stuff the Channels

In FY 2015, China accounted for 22.9% of Nidec's overall revenue.<sup>56</sup> We have spoken with four former employees of Nidec's China operation who have provided evidence alleging channel stuffing at quarter and fiscal year ends in the Automotive product group.<sup>57</sup> (The former employees often referred to the practice as "pulling forward" sales.) Three of the four former employees had first-hand knowledge of these practices, while the other one attested to knowing this was occurring in the company. (One of the former employees who demonstrated firsthand knowledge had been employed by a Nidec majority-owned joint venture, Nidec Kaiyu Auto Electric (Jiangsu) Co. Ltd.<sup>58</sup>)

The magnitude of the alleged channel stuffing and its potential impact on Nidec's financials is not entirely clear. The allegations we encountered focus on the automotive business. Key points and comments from each of the interviews are below.

<sup>56</sup> Source: S&P Capital IQ.

<sup>57</sup> Each former employee had terminated his employment with Nidec at least one year earlier.

<sup>58</sup> <http://en.nidec-kaiyu.com/about/i=2&comContentId=2.html>

Source	Division	Employed Until	Comments
A	Auto	2013	<ul style="list-style-type: none"> <li>- Salespeople pulled forward future sales to meet quarterly and yearly sales targets. He estimates that about 20% of the accounts would have one to three months of future demand pulled forward.</li> <li>- He estimated that in aggregate in his company, 5% to 10% of annual revenue could have been pulled forward at the end of the fiscal years while he worked there.</li> <li>- Customers often weren't happy to accommodate requests to pull sales forward. Salespeople would take the customers to dinner to smooth things over.</li> <li>- Customers keep a "safety" or "buffer" stock, which they don't pay for until they use it. Customers would often add the excess inventory to their buffer stock, but sometimes Nidec salespeople would "compromise" with the customers and send part of the orders to third party logistics companies' warehouses. The goods would usually be stored for one week to one month.</li> <li>- End of fiscal year channel stuffing magnitude was about 2x the end of quarter stuffing.</li> <li>- If a motor shipped out from a Nidec warehouse or assembly line, Nidec's CRM will show it as sold, regardless of whether it went to a warehouse belonging to a customer or a 3PL.</li> </ul>
B	ACI	2012	<ul style="list-style-type: none"> <li>- Has heard of channel stuffing in automobiles (different division than his), but has no first hand knowledge of channel stuffing activities.</li> <li>- Mr Nagamori frequently set targets that senior division managers think are unattainable, but division managers know that if they don't hit the targets, they are likely to be fired or demoted.</li> </ul>
C	Auto	2015	<ul style="list-style-type: none"> <li>- Admitted to having personally having pulled customer sales forward.</li> <li>- Explained that salespeople have "guanxi" with Nidec's shipping people, so that if a customer cannot take an order, the shipping department will keep the goods on the loading dock often for up to seven days. The delays can be extended through shipping times.</li> <li>- Regarding unwinding the stuffing: "In the case of completed product, we are dealing with the customer to clean up the inventory." For components, customers would often subsequently receive discounts on components (with 10% to 15% discounts not uncommon).</li> </ul>
D	Auto (Kaiyu JV)	2015	<ul style="list-style-type: none"> <li>- He described a very problematic JV operation in which skimming on capex by local management, and revenue fraud was occurring. He admitted to taking part in the capex skim.</li> <li>- He said that Changzhou salespeople would pull sales forward, and send the unwanted goods to 3PL warehouses.</li> </ul>

It is important to note that we have not done our own independent verification of these allegations. To the extent these interviews are accurate, the takeaways are that management in Japan sets unrealistically high sales targets for the China operation. There is apparently little tolerance for employees who do not meet their targets. These difficult to attain goals appear to result in tremendous pressure to meet targets, and allegedly push some employees over the line.

From these interviews, the way the alleged channel stuffing seems to work is that a salesperson asks a client to take delivery of items that were planned for the subsequent period. It was explained that Nidec's CRM systems record a sale when the goods leave the warehouse. (As we argue below, this is where a more conservative revenue recognition policy would help prevent channel stuffing.)

Allegedly, usually the clients agree to take the goods into their buffer or safety stock. (Customers do not pay for goods in their safety stock until they use them). Sometimes, the customers direct that the goods be held in a third party logistics provider's warehouse. Moreover, Nidec salespeople allegedly can slow down the shipment by working with Nidec warehouse workers to keep the goods on the loading dock for about one week. Depending on the destination, additional transit time can chew up more time.

Nidec's revenue recognition policy is not as conservative as it can be, and in our opinion, could help to enable the alleged channel stuffing. Nidec recognizes revenue without regard to customer "acceptance", which could enable Nidec to record revenue without actually receiving payment. China's auto industry generally runs on a "Just in Time" inventory management

system,<sup>59</sup> which means buyers usually only acknowledge an obligation to pay once the goods have been used in their production.<sup>60</sup> While Nidec's revenue recognition policy could suffice for more developed markets, in China there is a non-negligible possibility that employees would exploit the lack of necessary acceptance to stuff channels. Below is a comparison of Nidec's revenue recognition policy to those of two PRC-listed automotive suppliers.<sup>61</sup>

Nidec recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred, the sales price is fixed or determinable and collectability is reasonably assured. For small precision motors, automotive, appliance, commercial and industrial products and electronic and optical components, these criteria are generally met at the time a product is delivered to the customers' site which is the time the customer has taken title to the product and the risk and rewards of ownership have been substantively transferred. These conditions are met at the time of delivery to customers in domestic sales (FOB destination) and at the time of shipment for export sales (FOB shipping point). Revenue for machinery sales is recognized upon receipt of final customer acceptance. At the time the related revenue is recognized, Nidec makes provisions for estimated product returns. Revenue from a part of sales of automotive, appliance, commercial and industrial products under long-term construction type arrangements are recognized under the percentage-of-completion method. Under the percentage-of-completion method, revenue is recognized as a percentage of estimated total revenue that incurred costs to date bear to estimated total costs after giving effect to estimates of costs to complete based upon the most recent information.<sup>62</sup>

U.S. GAAP provides that revenue should not be recognized until acceptance occurs.<sup>63</sup> As was explained, customers are not obligated to pay for goods in safety stock, and thus they have not been accepted.

b. Customer acceptance.

After delivery of a product or performance of a service, if uncertainty exists about customer acceptance, revenue should not be recognized until acceptance occurs. FN22 Customer acceptance provisions may be included in a contract, among other reasons, to enforce a customer's rights to (1) test the delivered product, (2) require the seller to perform additional services subsequent to delivery of an initial product or performance of an initial service (e. g., a seller is required to install or activate delivered equipment), or (3) identify other work necessary to be done before accepting the product. The staff presumes that such contractual customer acceptance provisions are substantive, bargained-for terms of an arrangement. Accordingly, when such contractual customer acceptance provisions exist, the staff generally believes that the seller should not recognize revenue until customer acceptance occurs or the acceptance provisions lapse.

FN22 FASB ASC paragraph 985-605-25-21. Also, Concepts Statement 5, paragraph 83(b) states "revenues are considered to have been earned when the entity has substantially accomplished what it must do to be entitled to the benefits represented by the revenues." If an arrangement expressly requires customer acceptance, the staff generally believes that customer acceptance should occur before the entity has substantially accomplished what it must do to be entitled to the benefits represented by the revenues, especially when the seller is obligated to perform additional steps.

The revenue recognition policies for Chinese auto parts manufacturers Wanxiang Qianchao Co Ltd. (000559 CH) and Weifu High-Technology Group (000581 CH) seemingly make it harder to stuff channels in the manner that the former Nidec employees have alleged.

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<sup>59</sup> FY2015 20-F, p. 29, FN 59.

<sup>60</sup> See: <http://auto.sina.com.cn/news/2001-08-27/13236.shtml>

<sup>61</sup> Translation by Muddy Waters Capital LLC.

<sup>62</sup> 2015 20-F, p. F-16.

<sup>63</sup> <https://www.sec.gov/interps/account/sabcodet13.htm>

Wanxiang: “The company sells constant-speed drive shaft, car wheel units and drive shaft and other products. Revenue recognition for domestic sales meet the following conditions: the product has been delivered to the customer according to the contract, and the amount of product’s sales revenue is determined, the payment has been collected or a payment voucher has been obtained, the associated economic benefits will likely flow to the company, the costs related to the products can be reliably measured.”<sup>64</sup>

Weifu: “Concrete judging criteria for time of recognized the income from goods sales: The Company's domestic sales revenue recognition time: The company delivers goods as agreed, checks the goods that the buyers have received and inspected during the period of the last reconciliation date and this reconciliation date with the buyers on the reconciliation date as agreed, and transfers the risks and remunerations to the buyers after checking, the Company issues the invoices to the buyers in accordance with the recognized varieties, quantities and amounts and affirms the sales revenue realization on the reconciliation date.”<sup>65</sup>

### **Nidec’s Auditor is Highly Questionable**

Including with its predecessor firms, Nidec’s auditor, Pricewaterhousecoopers Kyoto (“Kyoto Audit”), has issued unqualified audit opinions on no fewer than six accounting scandals. The PCAOB has found troubling issues in two inspections of the firm in its current incarnation – including weaknesses in its audits of Nidec.<sup>66</sup> (Some of the PCAOB’s specific criticisms of Kyoto Audit resonate with certain issues we have identified.)

The accounting scandals for which Chuo Aoyama PwC had served as auditor include:

- Yaohan Japan Corp.<sup>67,68</sup>
- Yamaichi Securities<sup>69,70</sup>
- Ashikaga Bank<sup>71</sup>
- Kanebo Ltd.<sup>72</sup>
- Nikko Cordial Corp.<sup>73</sup>
- Sanyo Electric<sup>74</sup>

<sup>64</sup> <http://disclosure.szse.cn/finalpage/2016-02-27/1202003307.PDF> (MWC translation).

<sup>65</sup> [http://pdf.dfcfw.com/pdf/H2\\_AN201604180014399451\\_1.pdf](http://pdf.dfcfw.com/pdf/H2_AN201604180014399451_1.pdf) p. 121.

<sup>66</sup> We note that the PCAOB inspected PricewaterhouseCoopers Kyoto in 2016, and found no issues at that time. Since the previous two inspections, the firm might have gotten better at auditing, or being inspected, or both.

<sup>67</sup> [http://www.ft.com/cms/s/0/16440dc8-e153-11da-90ad-0000779e2340.html?ft\\_site=falcon&desktop=true#axzz4RQzvwO00](http://www.ft.com/cms/s/0/16440dc8-e153-11da-90ad-0000779e2340.html?ft_site=falcon&desktop=true#axzz4RQzvwO00)

<sup>68</sup> The audit issues predate the 2000 merger of Chuo Shinko Audit Corp. with Aoyama Audit Corp.

<sup>69</sup> <http://www.japantimes.co.jp/news/2005/09/14/national/four-cpas-arrested-over-kanebo-scandal/#.WD4VAlecHBI>

<sup>70</sup> The audit issues predate the 2000 merger of Chuo Shinko Audit Corp. with Aoyama Audit Corp.

<sup>71</sup> <http://www.japantimes.co.jp/news/2005/09/14/national/four-cpas-arrested-over-kanebo-scandal/#.WD4VAlecHBI>

<sup>72</sup> [http://www.ft.com/cms/s/0/16440dc8-e153-11da-90ad-0000779e2340.html?ft\\_site=falcon&desktop=true#axzz4RQzvwO00](http://www.ft.com/cms/s/0/16440dc8-e153-11da-90ad-0000779e2340.html?ft_site=falcon&desktop=true#axzz4RQzvwO00)

<sup>73</sup> <https://www.accountancyage.com/aa/news/1776704/pwc-shut-japanese-affiliate>

<sup>74</sup> <http://www.marketwatch.com/story/sanyos-accounting-woes-a-big-blow-to-shareholders>

The Kanebo scandal led to three Chuo Aoyama accountants being indicted.<sup>75</sup> Chuo Aoyama was actually suspended from auditing public companies for two months from audit practice by Japan's Financial Services Agency in 2006.<sup>76</sup> This was the first suspension given to a large auditor in Japan.<sup>77</sup>

In reaction to these scandals, in 2006, PwC split Chuo Aoyama into two firms: PwC Arata and Chuo Aoyama. Arata was a new firm, and Chuo Aoyama was renamed Misuzu. Only about one quarter of Misuzu's staff went to Arata, with most of the rest staying at Misuzu.<sup>78</sup> The Financial Times wrote the following about the apportionment of personnel between the two firms, giving the impression that the restructuring was effectively a "good firm / bad firm" solution – with Misuzu being the bad firm:

"Speaking in unusually blunt terms, [the chairman of PricewaterhouseCoopers global] told the Financial Times yesterday that Arata's limited size reflected the availability of staff who met the firm performance standards."<sup>79</sup>

It was not long before PwC figured out that the firm needed more than a name change. Accounting scandals continued to come to light throughout 2006. In early 2007, the firm announced that in the wake of the Nikko Cordial scandal, Misuzu would be wound down.<sup>80</sup>

Nidec disclosed that following Misuzu's July 2007 dissolution, the Chuo Aoyama / Misuzu team that audited Nidec had transferred to a newly established audit firm, Kyoto Audit Corp. (emphasis added):

"As MISUZU PricewaterhouseCoopers terminated its operations on July 31, 2007, the Kyoto office of MISUZU PricewaterhouseCoopers decided to establish Kyoto Audit Corporation to succeed to the business it formerly carried out as part of MISUZU PricewaterhouseCoopers. As such, Kyoto Audit Corporation is the successor to the assurance practice and business of the Kyoto office of MISUZU PricewaterhouseCoopers. Kyoto Audit Corporation's personnel are substantially the same as those previously employed by the Kyoto office of MISUZU PricewaterhouseCoopers, including those who have been assigned to us."<sup>81</sup>

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<sup>75</sup> [http://www.ft.com/cms/s/0/16440dc8-e153-11da-90ad-0000779e2340.html?ft\\_site=falcon&desktop=true#axzz4RQzvwO00](http://www.ft.com/cms/s/0/16440dc8-e153-11da-90ad-0000779e2340.html?ft_site=falcon&desktop=true#axzz4RQzvwO00)

<sup>76</sup> <http://www.japantimes.co.jp/news/2006/05/11/business/chuoayama-handed-suspension-order-heads-roll/#.WD4WD1ecHBI>

<sup>77</sup> <http://www.japantimes.co.jp/news/2006/05/11/business/chuoayama-handed-suspension-order-heads-roll/#.WD4WD1ecHBI>

<sup>78</sup> <http://www.japantimes.co.jp/news/2006/09/02/business/chuoayama-reopens-doors-as-misuzu-audit/#.WD4XCFecHBI>

<sup>79</sup> [http://www.ft.com/cms/s/0/1b5761a0-c151-11db-bf18-000b5df10621.html?ft\\_site=falcon&desktop=true#axzz4RQzvwO00](http://www.ft.com/cms/s/0/1b5761a0-c151-11db-bf18-000b5df10621.html?ft_site=falcon&desktop=true#axzz4RQzvwO00)

<sup>80</sup> <http://retheauditors.com/2007/02/21/pwcs-two-card-monte-game-in-japan-fails-update/>

<sup>81</sup> FY 2007 20-F, p. 103.

Kyoto Audit Corp. is now PricewaterhouseCoopers Kyoto.<sup>82</sup> As of its 2013 PCAOB inspection, Kyoto Audit audited only two companies that filed financials in the U.S.: Kyocera and Nidec.<sup>83</sup> The public version of the PCAOB inspection report is troubling. It identifies issues with each audit (without identifying to which company's audit it is referring.) In both cases, the PCAOB report stated that Kyoto Audit failed to perform sufficient audit procedures to test inventory. In the case of one company, the auditor also failed to perform sufficient audit procedures with respect to cost allocation, and the occurrence and allocation of revenue. In the case of the other company, PwC Kyoto failed to sufficiently test internal control deficiencies. (Note that in our report, we have discussed issues with Nidec's inventory accounting, revenue recognition, and internal controls.)

That was the second time the PCAOB rang up Kyoto Audit for its audits of these two companies. In 2010, the PCAOB cited the firm's two audits for identical reasons: deficiencies in testing revenues, doubtful accounts, and inventory valuations.<sup>84</sup> Kyoto Audit's managing member is Yukihiro Matsunaga.<sup>85</sup> He is one of Nidec's designated engagement partners, just as he appears to have been in 2005 while with Chuo Aoyama.<sup>86,87</sup> (We infer that he has been the most senior engagement partner, given his topmost position on the letterheads of the two audit report cover letters we cited.)

In our opinion, Kyoto Audit missed a mistake Nidec made in part of its accounting for the FY 2012 write-offs (in addition to the propriety of the charges themselves). JPY 2.4 billion of the PP&E impairment was booked as a loss on disposal as part of a sale and leaseback transaction.<sup>88</sup> This appears to be incorrect accounting treatment, as we believe it should have been booked as prepaid rent expense, given the overall profitable operations at Nidec. The omission of the sales and leaseback disclosures could imply a lack of understanding of relevant U.S. GAAP at both Nidec and Kyoto Audit.

In our opinion, Kyoto Audit is to audit failures what Michael Jordan was to basketball.<sup>89</sup> It is extremely questionable why a company with a JPY 3,000 billion market cap and that is this widely held would still use an auditor with such a checkered history, including having been publicly censured twice by a regulator for doing a poor job on its audits. Our guess is that Nidec likes having a weak auditor so that it can manipulate its accounts to appear to be more profitable and faster growing than it actually is.

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<sup>82</sup> <http://www.pwc.com/jp/en/japan-press-room/press-release/2013/kyoto-audit130315.html>

<sup>83</sup> See Kyocera 20-F and

[https://pcaobus.org/Inspections/Reports/Documents/2014\\_PricewaterhouseCoopers\\_Kyoto.pdf](https://pcaobus.org/Inspections/Reports/Documents/2014_PricewaterhouseCoopers_Kyoto.pdf)

<sup>84</sup> [https://pcaobus.org/inspections/reports/documents/2011\\_Kyoto\\_Audit\\_Corporation.pdf](https://pcaobus.org/inspections/reports/documents/2011_Kyoto_Audit_Corporation.pdf)

<sup>85</sup> <http://www.pwc.com/jp/en/kyoto/corporate/message.html>

<sup>86</sup> <http://www.nidec.com/~media/nidec-com/en-global/ir/calendar/meeting/2016Proxy1.pdf?la=en-Global> p. 40.

<sup>87</sup> <http://www.nidec.com/~media/nidec-com/en-global/ir/calendar/meeting/archive/050623-012> p. 18.

<sup>88</sup> The JPY2.4 billion loss in connection with the sales and lease-back arrangement was calculated by subtracting the disclosed JPY 10.3 billion PP&E loss on sale, disposal, or impairment (FY 2012 20-F, p. 48) from the JPY 12.7 billion losses related to fixed assets (FY 2012 20-F, p. 61).

<sup>89</sup> In this context "PwC Kyoto" includes its predecessor Chuo Aoyama / Misuzu.

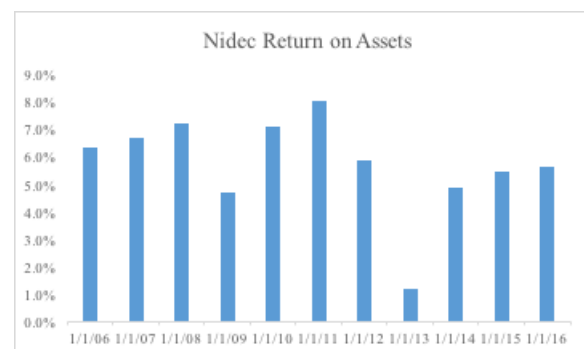
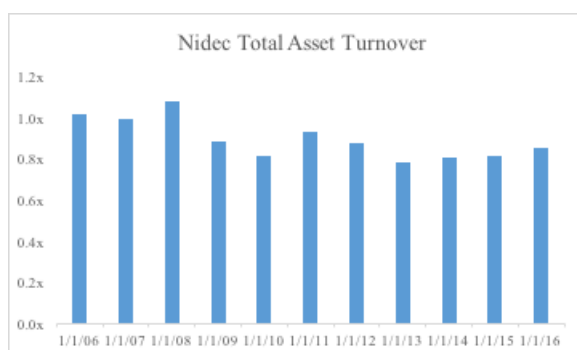
## Nidec's M&A: Scant Evidence of Excellence

It seems that investors and analysts have been unquestioning in their acceptance of the proposition that Nidec has some “secret sauce” that makes it a great acquirer. Indeed, a recent search of sell-side research covering Nidec yielded the words “synergy” and “synergies” in 153 Nidec reports over the past five years.<sup>90</sup> However, we see no evidence that Nidec is that rare great acquirer of companies. Instead, we see Nidec as a much more typical serial acquirer that usually does not create value – or even destroys it. We believe the following about Nidec and its acquisition activity:

- Its acquisitions help to mask weak organic growth, and the complexity it adds to Nidec's accounting makes it more difficult for investors to understand the performance of Nidec's existing businesses.
- The extent to which it generates synergies with existing businesses is greatly overestimated.
- Nidec's due diligence – particularly outside of Japan – can be lacking.
- Nidec has a taste for highly questionable companies at times.
- Its record of creating value through acquisitions is at best mixed.

With so many moving parts (e.g., currencies, regroupings and reorganizations, inter-company sales, asset impairments, capex, timing differences), it is difficult to concretely evaluate the performance of Nidec's acquisitions. As we discuss in *Prescription for Transparency*, it is alarming how as Nidec has become more complex, it is also becoming substantially less transparent, which will make analyzing the effectiveness of Nidec's acquisition strategy even more difficult.

At a high level, we argue that the two graphs below showing Nidec's return on assets and asset turnover over 10 years does not support the proposition that it creates value through acquisitions, or that there are substantial synergies with the businesses it acquires. The graphs show that in recent years, Nidec's asset efficiency is generally lower than it was at the beginning of the period.



<sup>90</sup> Search performed on Alpha-Sense.



Nidec seems at least partly responsible for the seemingly widespread perception that it creates significant value through acquisitions. When Mr. Nagamori was asked on the FY 2011 call how realistic his 10% operating profit margin goal was for a recent ex-Japan acquisition, he rebuked the analyst by stating “We think you will study more carefully the mergers and acquisitions which we carried out in the past.”<sup>91</sup> As we discuss below, that particular acquisition does not seem to have gone the way investors were led to expect. Some of Nidec’s acquisitions are frankly questionable, given the parties from whom they are purchasing or significant legacy issues at the business. Former employees of acquisition targets have voiced opinions about Nidec’s acquisition strategy that run contrary to the view that it is a great acquirer.

A former senior of Emerson motors and controls who, subsequent to the sale to Nidec, helped Nidec evaluate acquisition opportunities, gave an opinion that “I don't want to say there was no strategy. You know, [Nagamori] just -- he wanted to become the world's biggest motor maker, you know, and things that were somewhat related, you know, set that strategy. It was a little bit - it was definitely a lower hurdle than what Emerson would have used, I'll say that.”<sup>92</sup>

Ansaldo Sistemi Industriali S.p.A.: Nidec’s 2012 acquisition of ASI has generated no meaningful improvement through FY 2014. ASI was approximately 160 years old at the time of the acquisition, and makes industrial motors.<sup>93</sup> When Nidec acquired ASI, it projected that it would increase the OP margin from the mid-single digits to 10%.<sup>94</sup> ASI’s financials show this has not yet happened at least as of March 31, 2015.

Below is a comparison ASI’s summary financials of the last full year before Nidec acquired it (CY 2011) to the most recent year for which we obtained financials (FY 2014):

ASI Summary Financials Comparison (€ millions)			
	CY 2011	FY 2014	Change
Revenue	241.1	196.3	-18.6%
Operating Income	13.7	5.5	-59.9%
OP Margin	5.7%	2.8%	
Net Income	9.1	3.8	-58.2%

Source: European Business Register

Nidec was supremely confident about its ability to significantly improve ASI’s profitability at the time of the acquisition. The quote at the beginning of this section in which Mr. Nagamori admonished the analyst to more closely study his M&A track record was in response to a question expressing skepticism about acquiring ASI. Specifically, the analyst questioned the feasibility of projected 10% OP margin due to competition from Hitachi and Mitsubishi Electric.

Our conversations with two former ASI employees who were there at the time of the sale offers some surprising reasons why this acquisition has not (from our perspective) met expectations.

<sup>91</sup> FY2011 Call.

<sup>92</sup> Emerson Source A transcript. All sources interviewed for our research has not been employed by the company for at least one year.

<sup>93</sup> <http://www.nidec.com/en-EU/corporate/news/2012/news0029/>

<sup>94</sup> FY2011 Call.

“As I mentioned, I was not physically there. But I was talking daily about the due diligence process. And I remember that everybody was kind of astonished by the way the due diligence was accomplished, the time frame, because it is very short compared to the amount of documents. And also, my view – the reason why I’m saying probably didn’t ask the right questions because it pretty – my view was pretty superficial. Basically, once they had some information, the first level information, they (unintelligible) and from a product perspective, in my view, they didn’t really look detail, in detail what was needing, what was the view of the future of the production, that was actually the integration of the solar and wind parts.”<sup>95</sup>

“The product was completely different. This means Nidec coming with approach and mentality of mass production, means consumer product for PNC, for disc, for iPod and so on. Ansaldo and ASI, coming from experience of large industrial product, large machine. This means complementarity, full complementarity of product. Brother completely different, what did they have, the market completely different what they have, and this means that synergy, yes is possible, but in reality was integration of a product line that they don’t have. I cannot integrate my motor of 150 ton with their motor of 20 grams. You understand...Nidec, they are very close to three, four customer, I give you an example, make iPod and so on and so on. Ansaldo is more in big industrial product. This means customer is not the same. Okay.”<sup>96</sup>

Our former Emerson motors and controls source was involved in evaluating the ASI acquisition for Nidec. He described ASI as being “so far from what the Emerson business did” that he questions Nidec’s rationale for purchasing ASI.<sup>97</sup>

Sole Motors: In January 2010, Nidec acquired Sole Motors, which develops, manufactures, and sells household motors.<sup>98</sup> Its manufacturing plants are in Italy and Hungary. Since the acquisition, Sole’s net revenue has declined 12.9%, and it only recently generated positive OP margin.

EUR (000)	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Revenue	123,425	123,112	126,883	119,143	107,544
Operating Income	(3,914)	(3,862)	(6,410)	(1,701)	722
OP Margin	N/A	N/A	N/A	N/A	0.7%

<sup>95</sup> ASI Source A transcript. All sources interviewed for our research have not been employed by the company for at least one year.

<sup>96</sup> ASI Source B transcript. All sources interviewed for our research have not been employed by the company for at least one year.

<sup>97</sup> Emerson Source A transcript. All sources interviewed for our research have not been employed by the company for at least one year.

<sup>98</sup> <http://www.nidec-motor.com/Trusted-Brands/Sole/Overview>

Below is a Q2 2009 slide promoting the acquisition as part of Nidec's M&A "Growth Path".<sup>99</sup>

**M&A - Back on Growth Path -**

**Nidec Techno Motor Holdings**

**Acquisition of "Sole Motors"**  
Home Appliances Motor business of ACC (Italy)

**1 To obtain No.1 market share in Europe**

**2 To acquire R&D and production sites close to the market**

**3 To accelerate next-generation product R&D by providing brushless motor technology**

**Rising to the Top**  
market position in European home appliances motor market

Head Office	Pordenone, Italy
Sales	Approx. 190 million Euro (FY2008)
Employees	1,181
Operations	R&D, manufacturing and sale of home appliances motors (washing machine, tumble-dryer, dishwasher, etc.)

Transaction process to be completed by the end of 2009

**Pordenone, Italy**

**Bercel, Hungary**

Washing machine

Dish washer

**18**

In January 2012, Mr. Nagamori described the acquisition as though it had been successful "...things are functioning quite well [at Sole]. And also because common development work was being carried out, then we are now having very good synergies being generated."<sup>100</sup> Based on the above results, we believe this response was misleading.

In FY 2014, Sole underwent a corporate restructuring.<sup>101</sup>

ANA IMEP S.A.: This FY 2016 acquisition has a particularly dodgy background, and left us wondering "Of all the companies in the world, why would Nidec have bothered to acquire this one?" Nidec acquired 94.8% of the company. ANA IMEP is a Romanian manufacturer of household motors founded in 1967.<sup>102</sup> Its sales have declined 29.8% from RON 90.6 million in CY 2010 to RON 63.6 million (approximately JPY 1.7 billion) in CY 2015.<sup>103</sup>

<sup>99</sup> [http://www.nidec.com/~media/nidec-com/en-global/ir/library/earnings/archive/2010/Q2\\_1](http://www.nidec.com/~media/nidec-com/en-global/ir/library/earnings/archive/2010/Q2_1)

<sup>100</sup> Q3 2011 Call.

<sup>101</sup> Nidec Sole Motor Corporation S.r.l. FY2014 annual report.

<sup>102</sup> <http://www.nidec.com/en-Global/ir/news/2016/news0422-01/>

<sup>103</sup> Romanian financial statements.



Nidec is buying ANA IMEP from George Copos (pictured above).<sup>104</sup> (Note that Nidec did not mention him by name in the press release – it only referred to him as the “major shareholder”.<sup>105</sup>) Copos was released from prison two weeks before agreeing to sell the company to Nidec.<sup>106</sup> Copos had been sentenced to four years in connection with sales of real estate to the Romanian state lottery.<sup>107</sup> He had also been sentenced to prison for tax evasion and money laundering involving the illegal transfer of football players.<sup>108</sup> Previously, Copos had been indicted by the Romanian Anti-Corruption Authority, which accused him of stock manipulation and money laundering.<sup>109</sup> Copos was Romania’s vice prime minister from 2004 to 2006.<sup>110</sup> He resigned from the Conservative Party in 2006 amid a corruption scandal.<sup>111</sup>

One eyebrow-raising connection is that according to LinkedIn, ANA IMEP’s Sales and Marketing Director from 2014 until this year was Nidec Sole Motors’ Sales Director until 2013.<sup>112</sup>

#### Nidec Motors & Actuators (fka Valeo Motors & Actuators business):

In 2006, Nidec entered the Automotive product business by acquiring Valeo S.A.’s motors and actuators business for approximately JPY 25 billion.<sup>113</sup> It is very difficult to evaluate the financial performance of this acquisition given that local financials are unavailable for significant portions of the business, among other factors.<sup>114</sup> A former Valeo senior executive who stayed on

<sup>104</sup> <http://www.zf.ro/eveniment/copos-a-vandut-94-8-din-actiunile-fabricii-ana-imep-catre-japonezii-de-la-nidec-15268858>

<sup>105</sup> <http://www.nidec.com/en-Global/ir/news/2016/news0422-01/>

<sup>106</sup> <http://www.romania-insider.com/george-copos-released-on-parole/>

<sup>107</sup> <http://www.romania-insider.com/romanian-businessman-copos-gets-another-final-jail-conviction-no-parole-in-tax-evasion-case/129929/>

<sup>108</sup> <http://www.gandul.info/stiri/ultima-ora-sentinta-in-dosarul-transferurilor-copos-3-ani-si-8-luni-de-inchisoare-cu-executare-mm-stoica-3-ani-si-6-luni-borcea-6-ani-si-4-luni-ioan-becali-6-ani-si-4-luni-12192834>

<sup>109</sup> <http://www.romania-insider.com/george-copos-released-on-parole/>

<sup>110</sup> [https://en.wikipedia.org/wiki/George\\_Copos](https://en.wikipedia.org/wiki/George_Copos)

<sup>111</sup> [https://en.wikipedia.org/wiki/George\\_Copos](https://en.wikipedia.org/wiki/George_Copos)

<sup>112</sup> <https://it.linkedin.com/in/roberto-appiana-98765922/de>

<sup>113</sup> <http://www.nidec.com/-/media/nidec-com/en-global/corporate/news/2006/news0075/061115.pdf>

<sup>114</sup> Other factors include timing of starting production in Poland, and inability to see eliminations of inter-company transactions.

for several years post acquisition expressed the opinions that during his time at Valeo post-acquisition a) it took almost four years for Nidec to attempt any major initiatives to improve performance of the business (the first major initiative in his view was shutting down the headquarters in France), b) the combination with Nidec did not help Valeo win any major customers, and c) there was no R&D synergies.<sup>115</sup>

One other item to note is that in FY 2008, the German entity, Nidec Motors & Actuators GmbH impaired its goodwill by €18.1 million, which cut its annual depreciation and amortization expense roughly in half (approximately €3 million). While this could have been entirely justified, it benefitted reported OP margin through decreased amortization.

#### Avtron Industrial Automation:

In 2012, Nidec acquired Avtron Industrial Automation, which produces industrial and commercial motor controls.<sup>116</sup> A former Avtron executive told us that he understands from former colleagues “only in the last two or three months that the integration has sort of really begun to get some traction. Again, I think the reason for that is Nidec was a little bit naive and a little bit slow in pushing for a more vigorous integration program or a better structured integration program.”<sup>117</sup> He also stated that Nidec’s due diligence process was lighter touch than what he was used to “I think the transaction was -- relative to other transactions I've seen I would say relatively painless. I think from your perspective that might suggest that perhaps Nidec did not do as vigorous or aggressive due diligence process as other acquirers might do...Nidec's diligence was very much trust but verify, but it was, what I would call, a very gentle verification. They didn't go into everything with a fine tooth comb.”

#### Consolidating listed subsidiaries:

Mr. Nagamori has increased his holdings in Nidec when the company has fully consolidated previously publicly traded subsidiaries through share swaps. Adjusted for splits, the table below shows the shares Mr. Nagamori has received per consolidation transaction, and the approximate value at today’s share price (JPY 29.5 billion).

Oct-10 NSRV	148,200	¥1,511,640,000
Oct-12 NSNK	306,272	¥3,123,974,400
Oct-13 NCPL	1,179,984	¥12,035,836,800
Oct-13 NTSC	744,000	¥7,588,800,000
Oct-14 NCEL	282,624	¥2,882,764,800
Oct-14 NRCJ	233,280	¥2,379,456,000
	2,894,360	¥29,522,472,000
Value of shares	¥29,522,472,000.00	

NSRV, NSNK, NCPL and NTSC are adjusted for the 2 for 1 stock split announced on 3/8/2014

<sup>115</sup> We do not detail the number of years in order to protect the former employee’s identity. He has not been employed by the company for at least one year.

<sup>116</sup> <http://www.nidec-avtron.com/drivesystems/news/archived/avtron-industrial-automation-acquired-by-nidec>

<sup>117</sup> The former executive left Avtron at least one year ago.

On the FY 2009 results call after announcing the acquisition of Servo minority interests, Mr. Nagamori said the following about consolidating listed subsidiaries:

“Our policy is that we would only have an arrangement of a 100% subsidiary in the case purely when the subsidiary company’s management and employees strongly desired it, and there is no change in our policy in this regard.”

When Nidec announced the consolidation of Sankyo by share exchange, one analyst expressed surprise on the FY 2011 call noting the inconsistency with the above statement.<sup>118</sup> Mr. Nagamori responded that what he “may” have said in the past does not necessarily apply in the future. He also reminded the questioner that there were still four publicly-traded subsidiaries, and that if it made sense to consolidate them in the future, Nidec would do so. Less than one year later, Nidec became less equivocal when it announced the consolidation of Copal, Tosok, and Semitsu. Mr. Nagamori stated with perhaps a tinge of revisionism “We had, in the past, explained that it would not be a positive thing for us to continue a situation whereby both the parent company and the subsidiary of that company remain listed.”<sup>119</sup>

We do not purport to know the reasoning behind consolidating these companies, and the timing of these transactions. We do find the inconsistency in Nidec’s discussion of the rationales for these transactions a little troubling, particularly given Mr. Nagamori’s financial interests in them.

Adjusted for splits, Nidec has issued 30.2 million shares to consolidate the subsidiaries.<sup>120</sup> Adjusted for splits, during this time Nidec has bought back 19.8 million shares for about JPY 71.6 billion.<sup>121</sup>

	Shares repurchased	Value (JPY)
<b>2010</b>	1,716,000	6,366,360,000
<b>2011</b>	4,633,400	14,982,400,000
<b>2012</b>	8,460,800	26,715,200,000
<b>2013</b>	3,175,760	9,408,290,000
<b>2014</b>	0	0
<b>2015</b>	1,789,800	14,149,700,000
<b>2016</b>	0	0
<b>Total</b>	19,775,760	71,621,950,000

\*Note 2010 - 2013 have been adjusted to reflect the 3/8/2014 stock split  
Source: Bloomberg

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<sup>118</sup> FY 2011 Call.

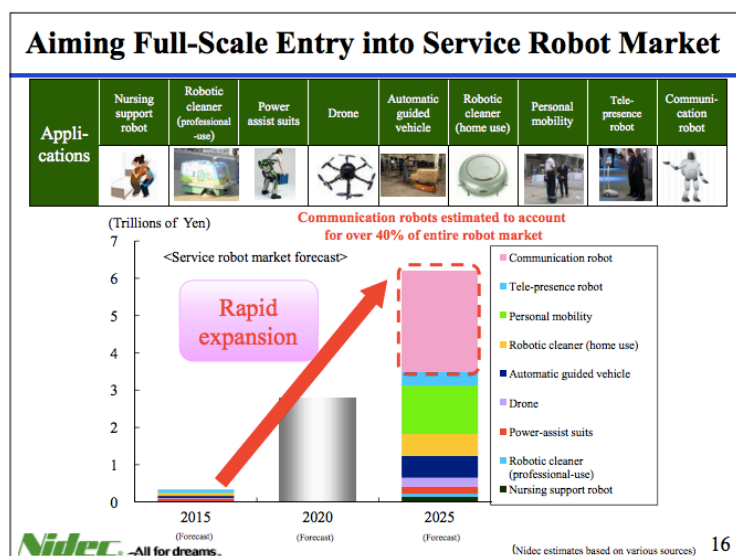
<sup>119</sup> FY 2012 Call.

<sup>120</sup> Source data from Bloomberg.

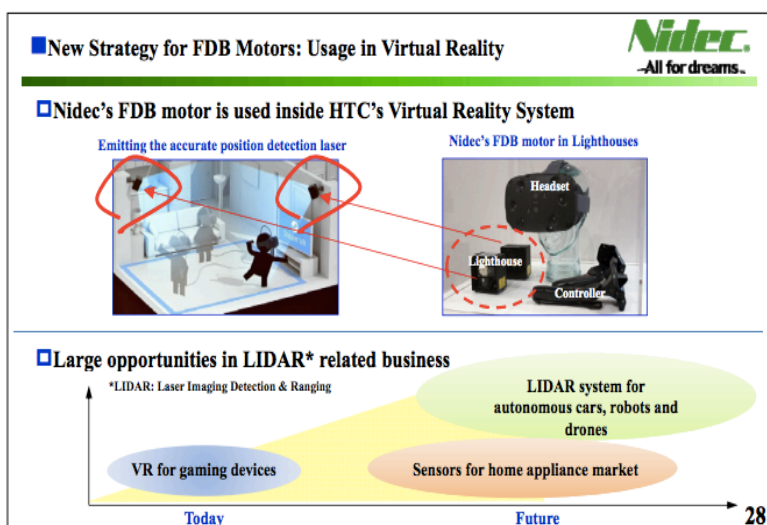
<sup>121</sup> Source: Bloomberg.

## Sex Appeal

We doubt that even Sade could make a motors business sound as sexy as Nidec does. In recent times, Nidec has been emphasizing a future of robots, drones, speed reducers, ADAS, and LIDAR. In reality, these areas are a tiny portion of Nidec's present (and likely future) business. To get investors excited, the company's presentations can show slides with severe up and to the right slopes that shout "Rapid expansion":<sup>122</sup>



Or telling us how there's a "new strategy" built around virtual reality – perhaps "alternate reality" is more suitable:<sup>123</sup>



<sup>122</sup> Q1 2015 presentation.

<sup>123</sup> FY 2015 presentation.



We understand that revenues from these categories (including drone and robotics-related sales to a “US online retail behemoth”) contributed 4.2% of total sales in FY 2015.<sup>124</sup> We understand that management forecasts that they will contribute approximately 5.2% to FY 2016 total sales.<sup>125</sup> However, when excluding the portion of revenue from Nidec Sankyo’s LCD robots, which is a business that Nidec has been in since at least FY 2003,<sup>126</sup> these exciting new areas only represent approximately 2.6% of forecast FY 2016 revenue. Below is a table breaking out our understanding of Nidec’s historical and forecast FY 2016 revenues in these categories:

<b>Nidec Exciting Products Sales by Year and Percentage of Total Sales</b>						
	<b>FY 2014</b>	<b>% of Total</b>	<b>FY 2015</b>	<b>% of Total</b>	<b>FYE 2016</b>	
ADAS	2	0.2%	18	1.5%	20	1.7%
LCD Robots (Nidec Sankyo)	18.5	1.8%	27	2.3%	30	2.6%
Lidar	0	0.0%	0	0.0%	1.2	0.1%
Speed reducers	0	0.0%	0.2	0.0%	2	0.2%
"US Retail behemoth" (drones/robots)	0.4	0.0%	5	0.4%	7	0.6%

A number of investors appear to be excited about Nidec’s provision of motors to a “U.S. retail behemoth” for drones and robots. One of the reasons for the excitement is that the OP margins recorded so far are high (we understand in the 20% to 30% range). Based on our interview with a former senior Amazon.com Inc. drone program executive, as Amazon ramps its purchases for both robot and drone motors, Nidec is likely to become a price taker. The former executive stated that Amazon’s focus right now is on research and development of these products, and it is not yet cost conscious about its suppliers. He believes the motors are relatively easily switched to another supplier if Nidec does not ultimately reduce its prices. Investors might think that Nidec has some proprietary advantage vis-à-vis supplying these motors because of statements such as this:

“Then that's the reason why we believe that we do have some technological edge to making those motors for drones, and that's the reason why we are just educating in that area.”<sup>127</sup>

Nidec’s description of its “technological edge” reminds us of Nidec’s once uber-bullish statements on haptic, and the resulting disappointing reality.

“Then for that point [haptic], we do believe that we do have technological superiority over our competitors.”<sup>128</sup>

In the FY 2014 presentation, Nidec gets us hyped about Haptic:

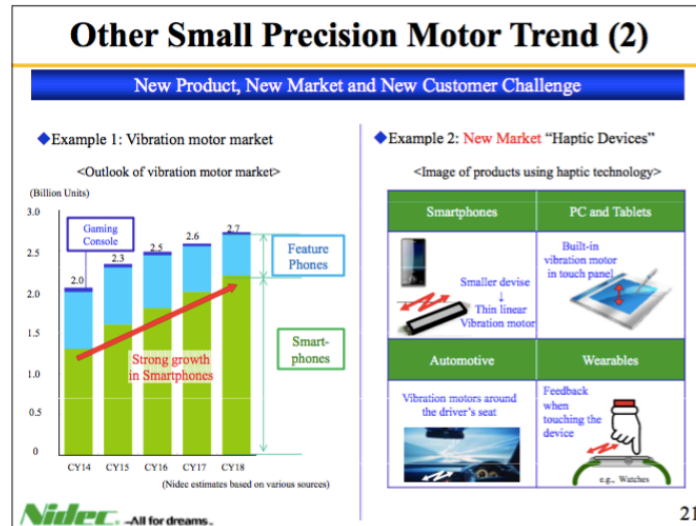
<sup>124</sup> We understand some investors are excited about these sales.

<sup>125</sup> Source: Nidec investor relations.

<sup>126</sup> FY2003 20-F, p. 33.

<sup>127</sup> Masuo Yoshimatsu, Q1 2015 Call.

<sup>128</sup> FY2014 Call.



Nidec had even once guided to Haptic sales of over JPY 100 billion over the long-term.<sup>129</sup> Yet, when pressed by an analyst on the FY 2014 call to explain the assumptions behind the JPY 100 billion projection regarding the time needed to reach the goal and ASPs, Nidec's CFO was unable to provide any details.<sup>130</sup> On next call, Nidec management stated Haptic "applications are endless, and has a huge potential".<sup>131</sup> By the end of FY 2015 though, Haptic appears to have turned into a substantial disappointment. In Q4 2015, Nidec impaired assets in Small Precision Motors, which appears to have been largely related to Haptic products.<sup>132</sup>

Despite Nidec hyping product lines by pointing to secular trends and presenting hockey stick growth in presentations, these businesses are still subject to significant fluctuations. Nidec Sankyo and its "robotics" business has previously suffered significant fluctuations in demand for its products. On the Q3 2011 call, management expressed confidence in the future of Nidec Sankyo:

Q: Do you think Sankyo can benefit a lot from Samsung's OLED investment?

A: Yes of course, we do believe so. But we cannot talk about the details because the relationship we have with the customer. And it's not possible to reveal our mutual secrets of course. But the reply we would like to give is that we are moving forward with our management activities with confidence.

On the Q1 2014 call, we learn that Nidec Sankyo dragged down the machinery segment:

Q: "And second question, this may be quite small question, but looking at the first quarter number, machinery sector's operating profit was down 14%. Are you just concerned about this? Or does this seem as something special factor?"

A: "Okay, so you're asking quarter-to-quarter in machinery?"

<sup>129</sup> See the exchange near the end of the FY 2014 call between Mr. Yoshimatsu and Benjamin Lu.

<sup>130</sup> See the exchange near the end of the FY 2014 call between Mr. Yoshimatsu and Benjamin Lu.

<sup>131</sup> Q1 2015 Call.

<sup>132</sup> FY 2015 Call.

Q: “Yes, this is actually year-on-year. And so I thought this is year-on-year comparison the machinery sector, operating profit of JPY 2.8 billion minus 14% year-on-year?”  
A: “Okay. So the largest factor of that decline is robot produced by Nidec Sankyo. So there is a fluctuation of demand, and this is just temporary decline, we think.”

### **It’s Hard Not to Go Blind When Staring at “The Man Hotter than the Sun”: The Cult of Nagamori-san**

We could almost stop at this (read right to left):<sup>133</sup>



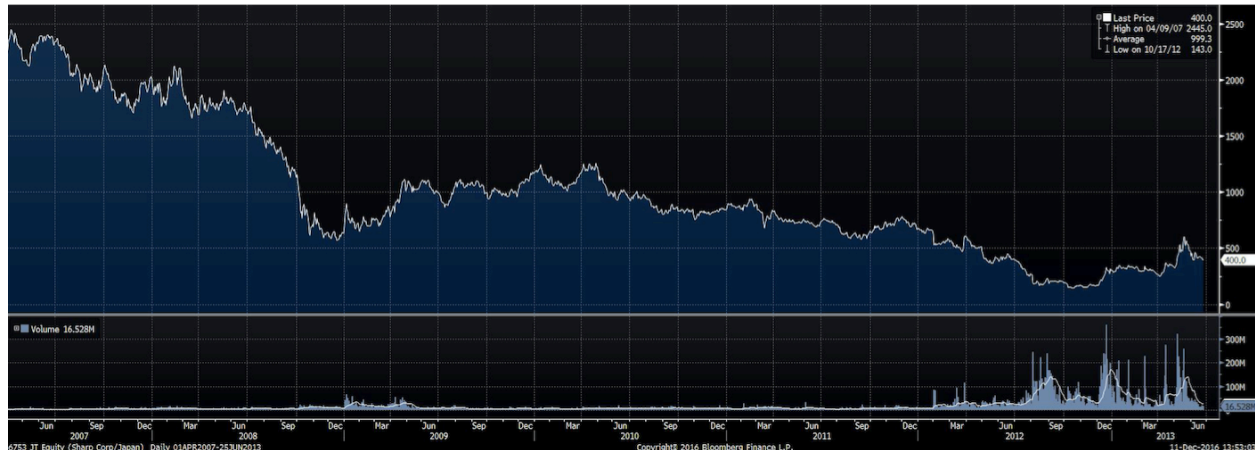
“The Man Hotter Than the Sun” tells us that basically by saying inspiring things to employees, having them keep themselves and their desks clean, and occasionally eating lunch with them, Mr. Nagamori is able to turn around struggling companies. While we understand this is a comic and is partly meant to entertain, it is propaganda that illustrates the efforts that have gone into shaping investors’ perceptions of Mr. Nagamori. Through our conversations with sell-side analysts, reviews of earnings call transcripts, and analysis of Nidec’s valuation, we believe this effort has been largely successful. We are happy to be the first analysts to publicly call bullshit on this myth of a nearly infallible CEO.

To be clear, Mr. Nagamori is a very impressive businessperson. He built Nidec into a massive company that dominated its niche of HDD motors. Our issue is that we do not believe he is a great acquirer of other businesses – particularly outside of HDD – or that he is creating much value through diversification. Much of this report discusses our view that Nidec actively misleads investors about its performance. We understand that his management style has created an environment that can make it hard to attract and retain top talent. One prominent example is that of former Nidec COO (and one-time potential successor to Nagamori) Bunsei Kure. Messrs.

<sup>133</sup> <http://www.nidec.com/en-Global/corporate/about/message/comics/~//media/nidec-com/en-global/corporate/about/message/comics/nagamori>

Nagamori and Kure reportedly did not get along, and Mr. Kure left to become CEO of Renesas Electronics.<sup>134</sup> (Nidec had tried to buy Renesas in 2015, but the sale was blocked by automotive companies that own stakes in Renesas.<sup>135</sup>)

Perhaps as telling about the culture is who is still at Nidec. In 2014, Nidec hired former Sharp president and executive chairman Mikio Katayama as Chief Technology Officer.<sup>136</sup> Mr. Katayama is expected to be a leader at Nidec post-Nagamori.<sup>137</sup> Neither his current, nor possible future, role should be reassuring to investors. Below is the chart for Sharp during Mr. Katayama's tenure as president / COO and then executive chairman.



Another curious aspect of the Cult of Nagamori is his very recent public reversal on employee working conditions. The comic (and numerous articles and interviews we have conducted) make clear that blood, sweat, and tears has been a significant part of the Nagamori / Nidec ethos. An August 2016 Bloomberg article had the following to say:<sup>138</sup>

“That doesn’t mean life at Nidec is easy. Even in a nation renowned for devoted workers, the company stands out for its demands on employees. Meetings, Nagamori says, are held on weekends or after regular tasks are done. New staff are sometimes told to clean toilets, and taking days off is seen as lazy. Nagamori makes no apologies.”

“These days, if you tell people to put everything into their work, you’re soon dubbed a black company,” he says, referring to the Japanese term for firms that flout labor standards. “I have no problem saying that. If you don’t work, you lose. The only ones I can’t stand are layabouts.”

<sup>134</sup> <http://asia.nikkei.com/Business/Companies/Carmakers-behind-Renesas-choice-of-new-chief?page=1>

<sup>135</sup> <http://asia.nikkei.com/Business/Companies/Carmakers-behind-Renesas-choice-of-new-chief?page=1>

<sup>136</sup> <http://www.nidec.com/en-Global/corporate/about/board/katayama/>

<sup>137</sup> <http://asia.nikkei.com/Business/Companies/Nidec-to-tap-ex-Sharp-president-as-technology-chief>

<sup>138</sup> <http://www.bloombergquint.com/onweb/2016/08/11/the-eccentric-billionaire-who-ignores-investors-to-get-them-rich>

“Nagamori decries what he sees as a lack of ambition in Japan. Too many young people are content with only “small happiness,” like going home to their children in the evening rather than working late to become their company’s next president, he says.”

Only two months later, Mr. Nagamori apparently completely changed his views on working conditions:<sup>139</sup>

“But Nagamori spent much of Monday's press event explaining how Nidec is earning more by working shorter hours. ‘There are no more moretsu working for us,’ he said, using a buzzword once applied with admiration to corporate Japan's most die-hard workaholics.”

“For a year, the company has urged employees to leave work on time. They cannot stay past their regular hours without obtaining permission from a supervisor that morning, and overtime is not approved for unnecessary tasks.”

“Overtime was slashed 30% without affecting productivity. ‘Even if there is still work to be done, they tell us to go home when it's past time to punch out,’ a young research and development staffer said. ‘That has made us think hard about how to work more efficiently.’

Before Mr. Nagamori publicly changed his mind on working conditions, the impression that we got from conversations with sell-side analysts was that they felt the demanding culture was a positive for investors, and was another demonstration of Mr. Nagamori’s value. The impression that we have received from the sell-side since Mr. Nagamori’s reversal is that he is once again doing something smart for investors. To the extent our impressions are correct, this illustrates how unquestioning many investors have been of Mr. Nagamori – in our view, blindly accepting that his every move is a great one.

There was at least one time that Mr. Nagamori was pretty cold, and the result raises significant corporate governance concerns. In our opinion, Nidec effected a bailout of Mr. Nagamori. In December 2008, Nidec made what appears to be a JPY 14.5 billion emergency loan to Mr. Nagamori (via an asset management company he indirectly owns).<sup>140</sup> In early 2009, the board and auditor realized the loan was a violation of U.S. securities law. Mr. Nagamori repaid the loan by selling Nidec shares – 87% of the shares were purchased by Nidec.<sup>141</sup>

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<sup>139</sup> <http://asia.nikkei.com/Business/Companies/Cutback-in-overtime-drives-Nidec-to-record-result?page=2>

<sup>140</sup> FY2008 20-F, p. 34.

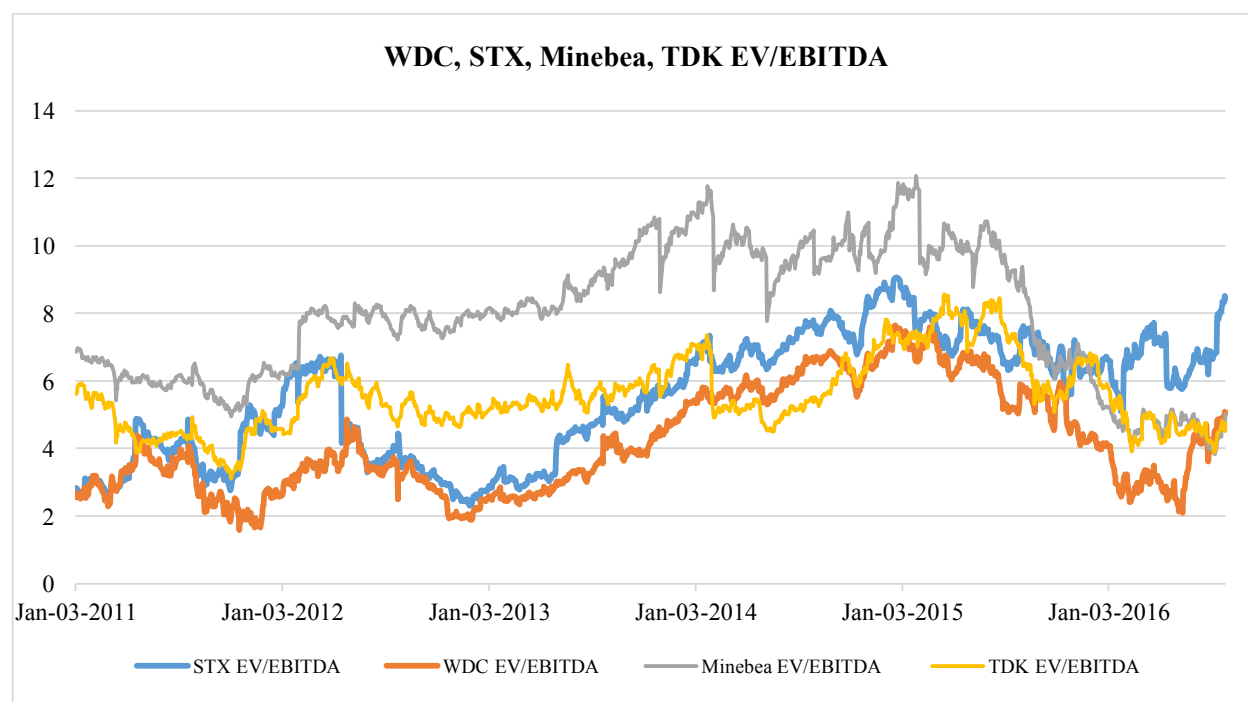
<sup>141</sup> FY2008 20-F, p. 34.

## Nidec's Ex-HDD Valuation Approaches Facebook's – this Does Not Make Sense

We value Nidec's shares at JPY 4,764 – less than half of the current price.

We estimate that Nidec's current share price presently implies an enterprise value of its non-HDD businesses that is 21.5x LTM EBITDA. Facebook Inc. (FB) trades at 24.9x EV / LTM EBITDA. FB is growing organically at 35%+ per year. In contrast, Nidec seems lucky to generate 5% organic growth in a given year. We see many of Nidec's products as commoditized.

Our research indicates that approximately 40% of Nidec's EBITDA, or JPY 74 billion, is derived from HDD motors. Based on HDD comparables, we think Nidec's HDD business should trade at 7.5x Enterprise Value (EV) / EBITDA or lower, a premium over its main competitor Minebea Co. Ltd. (6479 JP) and on the high end of the pure play HDD comparables. This results in a JPY 555 billion HDD motor segment valuation. The HDD motor industry effectively consists of only Minebea and Nidec (approximately 20% share and 80% share respectively).<sup>142</sup> TDK is another Japanese HDD supplier that trades at 6.5x EV/EBITDA and historically has traded at very low valuations. HDD manufacturers Seagate and Western Digital trade at 7.6x to 5.8x EV / EBITDA, respectively. HDD companies have historically traded at low valuations due to slower growth in PCs and technology obsolescence risks (see the chart below for historical EV/EBITDA multiples). However, Seagate has been able to perform better on the enterprise side and has historically been a better executor and thus the premium over Western Digital. We give Nidec's HDD business a slight valuation premium over Minebea, although their product lines and financial profiles are very similar (see comparable table below).



<sup>142</sup> [http://www.nidec.com/~media/nidec-com/en-global/ir/library/earnings/2016/Q1\\_1; Slide 8.](http://www.nidec.com/~media/nidec-com/en-global/ir/library/earnings/2016/Q1_1; Slide 8.)



\*Capital IQ: Data was from Jan. 2011 to July 2016, prior to Western Digital's acquisition of SanDisk, when pro forma financials changed due to the acquisition.

Holding the HDD motor segment valuation constant at JPY 555 billion and taking into account Nidec's remaining ex-HDD EBITDA of JPY 111 billion, Nidec's ex-HDD implied valuation is 21.5x EV/EBITDA – very close to that of Facebook.

In Billions of JPY

	Low		LTM		High	
<b>Total EBITDA</b>	\$	175	\$	185	\$	195
<b>HDD EBITDA</b>	\$	70	\$	74	\$	78
<b>EBITDA less HDD</b>	\$	105	\$	111	\$	117

Multiple Range

5.5x	385	407	429
6.0x	420	444	468
6.5x	455	481	507
7.0x	490	518	546
7.5x	525	555	585
8.0x	560	592	624
8.5x	595	629	663
9.0x	630	666	702
9.5x	665	703	741

**HDD Enterprise Value**

2556	2534	2512
2521	2497	2473
2486	2460	2434
2451	2423	2395
2416	2386	2356
2381	2349	2317
2346	2312	2278
2311	2275	2239
2276	2238	2200

**Enterprise Value ex HDD**

5.5x	24.3x	22.8x	21.5x
6.0x	24.0x	22.5x	21.1x
6.5x	23.7x	22.2x	20.8x
7.0x	23.3x	21.8x	20.5x
7.5x	23.0x	21.5x	20.1x
8.0x	22.7x	21.2x	19.8x
8.5x	22.3x	20.8x	19.5x
9.0x	22.0x	20.5x	19.1x
9.5x	21.7x	20.2x	18.8x

**EV/EBITDA Multiple ex HDD**

## Revaluing the non-HDD Business

With a low single digit organic growth profile, we think the ex-HDD business needs to be revalued at lower multiples. The Auto, Appliance, Industrial and Commercial (AACI) segment accounts for 37% of Nidec's EBITDA and receives the highest valuation. However, similar companies in the auto sector are growing revenues at 7% and trade in the 6.0x to 9.0x range (e.g. Denso, Continental, Visteon and Delphi) – not 21.5x.

We believe the ex-HDD business should be revalued to 8.0x, which is still a premium to many of its peers in the AACI segment. At an 8.0x valuation multiple, the non-HDD business valuation is JPY 888 billion, and when combined with the HDD business at 7.5x, our total estimate for enterprise value is JPY 1,420 billion or a combined EV/EBITDA multiple of 7.7x. This implies a downside to the current stock price of over 50% or an implied share price of 4,764. Given Nidec's issues with accounting transparency, the stock could have even further downside.

	Low	LTM	High	
6.0x	630	666	702	
6.5x	683	722	761	
7.0x	735	777	819	
7.5x	788	833	878	
8.0x	840	888	936	<b>Enterprise Value ex HDD</b>
8.5x	893	944	995	<b>Using Re-Valued Multiples</b>
9.0x	945	999	1,053	
9.5x	998	1,055	1,112	
10.0x	1,050	1,110	1,170	

992	1,050	1,108	
1,080	1,143	1,206	
1,167	1,235	1,303	
1,255	1,328	1,401	
1,342	1,420	1,498	<b>Combined Re-Valued</b>
1,430	1,513	1,596	<b>Enterprise Value</b>
1,517	1,605	1,693	
1,605	1,698	1,791	
1,692	1,790	1,888	

5.7x	5.7x	5.7x	
6.2x	6.2x	6.2x	
6.7x	6.7x	6.7x	
7.2x	7.2x	7.2x	
7.7x	7.7x	7.7x	<b>Combined Re-Valued</b>
8.2x	8.2x	8.2x	<b>Enterprise Value/EBITDA</b>
8.7x	8.7x	8.7x	<b>Multiple</b>
9.2x	9.2x	9.2x	
9.7x	9.7x	9.7x	

3,328	3,523	3,717	
3,622	3,833	4,044	
3,915	4,143	4,371	
4,209	4,453	4,698	
4,502	4,764	5,025	<b>Implied Share Price</b>
4,796	5,074	5,352	
5,089	5,384	5,679	
5,382	5,694	6,006	
5,676	6,005	6,333	

\*Note the Combined Re-Valued Enterprise Value includes net cash position of Yen 22.7 billion



-67%	-65%	-63%
-64%	-61%	-59%
-61%	-58%	-56%
-58%	-55%	-53%
-55%	-52%	-49%
-52%	-49%	-46%
-49%	-46%	-43%
-46%	-43%	-40%
-43%	-40%	-36%

**Implied Stock Downside**

### Comparables:

<b>HDD Comparables EV/EBITDA</b>	
Minebea	7.3x
Seagate	7.6x
Western Digital**	5.8x
TDK	6.5x
<b>Average</b>	<b>6.8x</b>

<b>EV/EBITDA</b>	
Facebook	24.9x

<b>AACI Comparables EV/EBITDA</b>	
<b>Autos</b>	
Denso	6.2x
Continental	7.0x
Delphi	10.0x
Visteon	8.9x
Valeo	7.8x
<b>Appliances</b>	
Whirlpool	8.4x
Electrolux	7.4x
<b>Average</b>	<b>7.9x</b>

\*Data from Bloomberg and CapIQ

\*\*Western Digital EBITDA adjusted for SNDK acquisition

## Japanese Comparables:

Issuer: in JPY Billions	NIDEC	Minebea	TDK Corp
<b>Ticker</b>	<b>6594 JT</b>	<b>6479 JT</b>	<b>6762 JT</b>
Cash	299	62	305
Total Debt	268	151	403
Net Debt	(31)	89	99
Equity Mkt Cap	2,964	464	1,043
<b>EV</b>	<b>2,933</b>	<b>553</b>	<b>1,142</b>
Gross debt/EV	9%	27%	35%
Debt/LTMEBITDA	1.4x	2.0x	2.3x
EV/LTMEBITDA	15.8x	7.3x	6.5x
EV/LTM Revenues	2.5x	0.9x	1.0x
Revenues LTM	1,155	589	1,144
EBITDA LTM	185	76	175
EBITDA Margin	16%	13%	15%
Consensus 17E Revenue Growth	7%	(3%)	3%
Consensus 17E EBITDA Growth	11%	1%	8%
<b>HDD Exposure</b>	<b>High</b>	<b>High</b>	<b>High</b>
Major Products	HDD spindle motors Brushless DC motors Cooling Fans Vibration mechanism for smartphone AC Motors SR Motors DC/AC Blower Fans Inspection Measuring Sensors Auto Components Automation Units Machines ODD Motors	HDD spindle motors Brushless DC motors Fan motors HDD LED backlights EMS Stepping motors Brush DC motors Measuring components Precision motors Bearings Roller bearings Bushings Pivot assemblies Mechanical assemblies Aerospace fasteners Automotive fasteners	Capacitors Inductive Devices Auto Passive Components HDD Magnetic Heads HDD Suspension DC Converters Magnets for motors Lithium Batteries

\*Data from Bloomberg, CapIQ and company's annual reports

## Prescription for Transparency

While Nidec's share price has been increasing in recent years, in our opinion the company has materially reduced transparency. We call upon Nidec to reverse its decision to no longer be subject to U.S. filing requirements. We believe investors would be well-served by simple, consistent, and transparent segment and product group disclosures. Most of all, we wish to see an attitude that respects investors' rights to clearly see the company for what it is – the good and the bad. Companies that successfully pump their stocks on the back of incomplete or misleading disclosures divert capital from companies that are more forthright, and thus harm markets, investors, and other companies.

The most pressing issue is that Nidec is terminating its sponsorship of its U.S. ADSes, and will therefore cease filing financials in the U.S.<sup>143</sup> We see this as a negative for both foreign and Japanese investors. Nidec claims that its goals in listing its ADSes in 2001 have been fulfilled,

<sup>143</sup> <https://www.sec.gov/Archives/edgar/data/1158967/000115896716000057/f160502noticeondelistingamer.htm>

so it does not make sense for the company to continue to file.<sup>144</sup> We do not think Nidec is being completely honest about its reasons. We see the de-listing decision as Nidec quitting while it is ahead.

The U.S. securities regulations – as imperfect as they are – in our opinion, mandate more disclosure than those of any other market. Nidec has established itself as a core Japanese holding for international investors, and we suspect management feels that continuing to be subject to the increased transparency requirements of the U.S. would make it easier for investors to see Nidec’s problems and inconsistencies. Nidec is larger than it has ever been, and the additional cost of maintaining U.S. reporting is inconsequential. Cessation of U.S. reporting seems incongruent with maintaining investor relations representatives on three continents.<sup>145</sup>

Even in its U.S. filings, Nidec’s reporting strikes us as unnecessarily confusing. Some of the most critical elements for Nidec investors to know are the performance of the HDD and Automotive product groups. It seems unnecessary and unhelpful to bundle Automotive with Appliance, Commercial, and Industrial motors. (We also fail to see the relationship between Appliance on one hand, and Commercial and Industrial motors on the other.) We believe investors would benefit if Nidec’s filings separately reported HDD, Other Small Precision Motors, Automotive, Appliances, Commercial and Industrial, Machinery, Electronic and Optical, and Other. We further call upon Nidec to provide both organic (ex-currency fluctuations) and consolidated metrics for each of the aforementioned product groups. The organic and consolidated product group metrics Nidec should provide investors include revenue, EBITDA, operating profit, pretax income, and net income.

Nidec should make clear which entities (or portions of entities) report into which product group. While Nidec generally breaks out product group revenue and operating profits on calls and in presentations, it is unclear how these numbers are calculated. As we discuss in this report, there are apparently businesses inside of entities (i.e., reporting segments) that can be grouped into product groups different from the product groups matching the entities’ primary businesses. The lack of clarity about which entities contribute what revenue and operating profits to each product group gives rise to our suspicions that Nidec manipulates its product group disclosures.

We call upon Nidec to disclose historical financial performance for every business it acquires, regroups, or reclassifies; and, to continue to provide such disclosure on for at least four quarters after the transaction. This way, investors could better understand how these maneuvers affect reported performance.

Nidec seems to use its All Others reporting segment in ways that could mislead investors. For example, after Nidec acquired Elesys, Elesys sat inside All Others for two quarters before being transferred to Nidec Motors & Actuators.<sup>146</sup> (It appears that when it was transferred out of All Others to Motors & Actuators, it was grouped with approximately JPY 20 billion in annual revenue from another business. If we are correct about the bundling, it is also unclear whether that apparent additional business transfer suddenly boosted reported Automotive group results.

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<sup>144</sup> <http://www.nidec.com/en-Global/corporate/news/2016/news0411-01/>

<sup>145</sup> <http://www.nidec.com/en-Global/ir/inquiry/>

<sup>146</sup> FY2014 20-F, p. 63.

Entities with revenues totaling JPY 106 billion (in the year before they were reclassified) disappeared from segment reporting because they were moved into other segments. This number represents 9.1% of FY 2015 total revenue pre-elimination. Pre-reclassification revenue from entities moved into the All Others segment accounted for JPY 70.0 billion, showing the growing scope of All Others. In FY 2015, All Others represented 15.0% of pre-elimination revenue, versus 11.5% in FY 2011. All Others represented 22.4% (JPY 29.0 billion) of pre-elimination operating profit in FY 2015. The incessant movement of entities into All Others (and occasionally out of the segment) strikes us as odd and unhelpful to investors.

Nidec's incessant reclassifications and restatements make it very difficult to compare its reporting segments from period to period. For investors to access to S&P Capital IQ, the inordinate amount of changes to segment reporting can be seen by looking at quarterly segment reporting, and selecting All Filings (as opposed to only original or the latest filings). We hope that Nidec will minimize its restatements and reclassifications going forward.

The Nidec Corporation segment is also confusing, as it has significant inter-company sales (84.1% of its total); and manufactures products across multiple product groups. This entity's operating profit has increased from 10.0% of pre-elimination operating profit in FY 2011 to 13.9% in FY 2015.

We see Nidec as wanting to increasingly control investors' perceptions of the company's performance, rather than presenting unvarnished information. This is unfortunate and unnecessary. Mr. Nagamori has already cemented his position as one of Japan's greatest industrialists. He is an amazing executive, but he is not supernatural. To us, Nidec seems unwilling to admit that is unable to replicate the success of its HDD business as it diversifies. We urge Nidec and Mr. Nagamori to become comfortable their impressive achievements, rather than continuing to voice unattainable targets and obfuscating the reality of Nidec's diversification strategy.

While an appropriate level of transparency would likely result in a much lower valuation, it would be a net benefit for Japan's capital markets and economy. Long-side activists help to make companies more worthy of capital investment. Short-side activists help prevent companies from taking capital for inefficient uses. Companies that have attracted more capital than they deserve starve other companies of capital, and harm investors. Japan – and the world – therefore need both long-side and short-side activists.

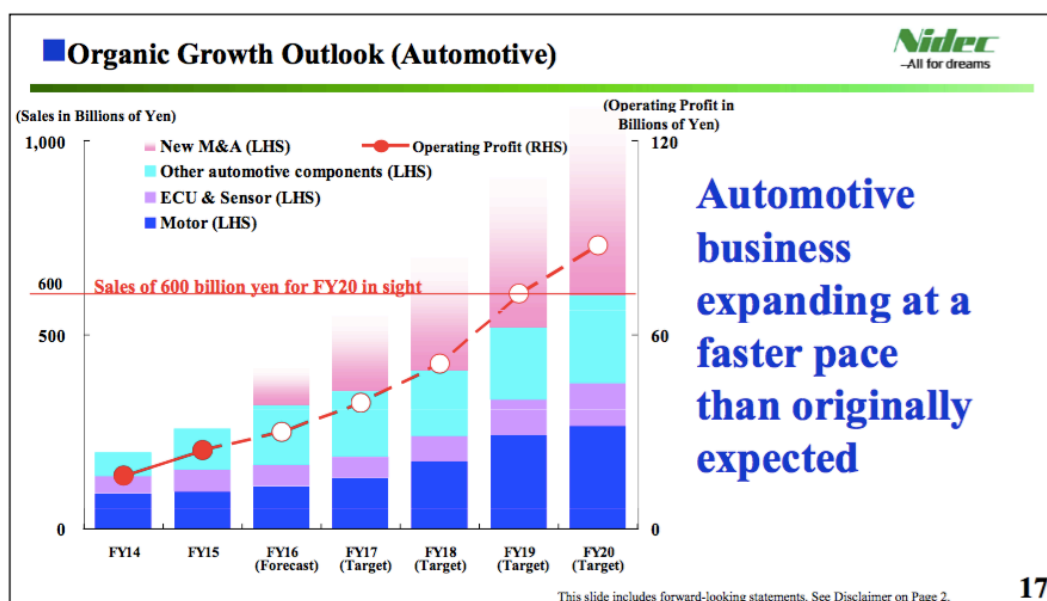
## Appendix A: Detail on Promotion and Missed Targets Detail

### Overall:

- In 2009, Nidec predicted FY 2011 operating profit of JPY 100 billion.<sup>147</sup> Reality turned out to be JPY 73 billion, a miss of 27%.<sup>148</sup>
- In 2009, Nidec predicted FY 2012 sales of JPY 1,000 billion.<sup>149</sup> Reality turned out to be JPY 709 billion, a miss of 29%.<sup>150</sup>
- In 2010, Nidec predicted FY 2015 sales of JPY 2,000 billion.<sup>151</sup> Reality turned out to be JPY 1,178 billion, a miss of 41%.<sup>152</sup>
- In 2012, Nidec predicted that its organic growth CAGR from FY 2011 through FY 2015 would be 11.4%.<sup>153</sup> We calculate that the organic growth CAGR was 0.05%.<sup>154</sup>

### Automotive:

Nidec recently published this slide that tells us Automotive is growing at a “faster pace than originally expected”!



We question what management means by “originally expected”.

<sup>147</sup> Q1 2009 Presentation, Slide 7.

<sup>148</sup> FY2011 20-F, p. 92.

<sup>149</sup> Q1 2009 Presentation, Slide 7.

<sup>150</sup> FY2012 20-F, p. 92.

<sup>151</sup> FY 2009 Presentation, Slide 17.

<sup>152</sup> FY2016 20-F, p. 92.

<sup>153</sup> H1 2012 Presentation, Slide 13 Data points extracted from Nidec graphic using Plot Digitizer, available from <http://plotdigitizer.sourceforge.net/>

<sup>154</sup> See Nidec's *Organic Growth Barely Exists* for an explanation of our organic growth estimates.

- In 2008, Nidec predicted FY 2012 Automotive motor sales of JPY 350 billion.<sup>155</sup> Reality turned out to be JPY 86.7 billion, a miss of 75%.<sup>156</sup>
- In 2010, Nidec predicted FY 2015 Automotive motor sales of JPY 500 billion.<sup>157</sup> Reality turned out to be JPY 271 billion, a miss of over 45%.<sup>158</sup>
- In 2011, Nidec predicted that in FY 2012, it would sell 8.5 million electric power steering (“EPS”) units.<sup>159</sup> Reality less than two years later turned out to be that Nidec sold approximately 7.6 million EPS units, a miss of approximately 10%.<sup>160</sup>
- In 2012, Nidec predicted that in FY 2015, it would sell 20 million EPS units.<sup>161</sup> Reality less than three years later turned out to be that Nidec sold approximately 11.7 million EPS units, a miss of approximately 42%.<sup>162</sup>
- In 2012, Nidec predicted that in FY 2015, its EPS global market share would be 36%.<sup>163</sup> Reality less than three years later turned out to be market share of 23%.<sup>164</sup>

### Haptic:

- In Q1 2015 Nidec predicted that its FY 2015 sales of Haptic motors would reach JPY 100 billion.<sup>165</sup> In Q4 2015, Nidec wrote-off a portion of its Haptic business.<sup>166</sup>

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<sup>155</sup> H1 2008 Presentation, Slide 35

<sup>156</sup> FY 2012 Presentation, Slide 15

<sup>157</sup> H1 2010 Presentation, Slide 11. This slide shows sales FY 2015 sales predictions for its “4 Pillars” (JPY 500 billion each). It materially missed the predictions for every pillar. Nidec re-published the slide in its FY 2012 Presentation, slide 15 with far more conservative FY 2015 targets. It still missed three of these targets by appreciable margins.

<sup>158</sup> FY 2015 Presentation, Slide 19

<sup>159</sup> Q1 2011 Presentation, Slide 9

<sup>160</sup> FY 2012 unit volume is calculated from disclosures on Q1 2016 Presentation, Slide 13.

<sup>161</sup> Q1 2012 Presentation, Slide 9

<sup>162</sup> FY 2012 unit volume is calculated from disclosures on Q1 2016 Presentation, Slide 13.

<sup>163</sup> [http://www.nidec.com/~media/nidec-com/en-global/ir/library/download/1025\\_2](http://www.nidec.com/~media/nidec-com/en-global/ir/library/download/1025_2), Slide 12.

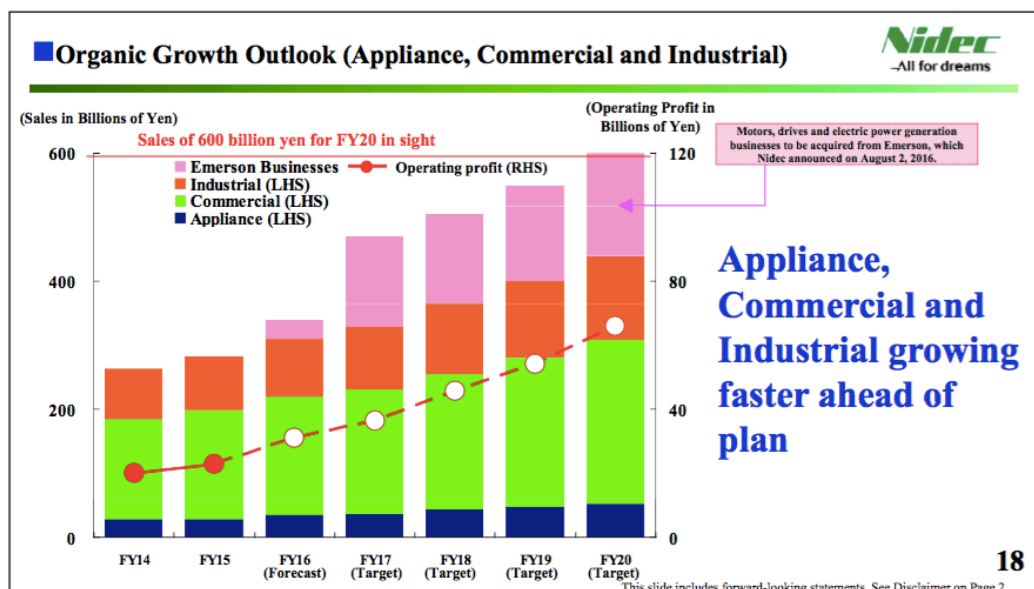
<sup>164</sup> Q1 2016 Presentation, Slide 13

<sup>165</sup> See the exchange near the end of the FY 2014 call between Mr. Yoshimatsu and Benjamin Lu.

<sup>166</sup> FY 2015 Call.

ACI:

Nidec recently published this slide that tells us ACI is growing at a “faster ahead of plan”!



We question which plan management is referencing.

- In 2009, Nidec predicted that Nidec Techno Motor Holdings Corp. would achieve FY 2012 sales of approximately JPY 70 billion.<sup>167,168</sup> Reality turned out to be JPY 41 billion, a miss of over 40%.<sup>169</sup> This result also represented roughly zero growth from FY 2008.
- In 2010, Nidec predicted FY 2015 Industrial and Home Appliance motor sales of JPY 500 billion.<sup>170</sup> Reality turned out to be JPY 283 billion, a miss of over 43%.<sup>171</sup> Nidec is now predicting JPY 400 billion to 600 billion in sales for FY 2020.<sup>172</sup>
- In 2013, Nidec predicted Nidec Techno Motor sales would reach JPY 100 billion in FY 2016.<sup>173</sup> This appears highly unlikely, given that its FY 2015 sales were only JPY 63 billion.<sup>174</sup>

<sup>167</sup> FY 2008 Presentation, Slide 18

<sup>168</sup> Nidec Shibaura and Nidec Power Motor were merged into Nidec Techno Motor Holdings in 2011.

<sup>169</sup> Nidec 2012 20-F, p. 35.

<sup>170</sup> H1 2010 Presentation, Slide 11. This slide shows sales FY 2015 sales predictions for its “4 Pillars” (JPY 500 billion each). It materially missed the predictions for every pillar. Nidec re-published the slide in its FY 2012 Presentation, slide 15 with far more conservative FY 2015 targets. It still missed three of these targets by appreciable margins.

<sup>171</sup> FY 2015 Presentation, Slide 19.

<sup>172</sup> FY 2014 Presentation, Slide 29.

<sup>173</sup> Q1 2013 Presentation, Slide 14.

<sup>174</sup> Nidec FY 2015 20-F, p.31.

- In 2013, Nidec predicted FY 2015 ACI OP margin of 15%.<sup>175</sup> Less than three years later, reality turned out to be only 8.0%.<sup>176</sup>

#### HDD / Small Precision Motors:

- In 2010, Nidec predicted HDD market demand would exceed one billion units in 2014.<sup>177</sup> Reality turned out to be 442 million units, a miss of over 55%.<sup>178</sup>
- In 2010, Nidec predicted it would sell 882 million HDD units in FY 2015.<sup>179,180</sup> Reality turned out to be 362 million units, a miss of 59%.<sup>181</sup>
- In 2010, Nidec published a slide predicting HDD Density would average 40% annual growth over the long-term.<sup>182</sup> In 2012, Nidec published the same slide, but with a prediction that HDD areal density would average annual growth over the long-term of only 20%.<sup>183</sup>
- In 2010, Nidec predicted FY 2015 Small Precision motor sales of JPY 500 billion.<sup>184</sup> Reality turned out to be JPY 448 billion, a miss of over 10%.<sup>185</sup>
- In 2013, Nidec predicted that HDD and other small motors would only represent 33% of its revenue in FY 2015.<sup>186</sup> Less than three years later, reality turned out to be 38%.<sup>187</sup>

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<sup>175</sup> H1 2013 Presentation, Slide 18.

<sup>176</sup> FY 2015 Presentation, Slide 23 – data extracted from the slide shows sales of JPY 280 billion and operating profit of JPY 22.5 billion.

<sup>177</sup> FY 2009 Presentation, Slide 18.

<sup>178</sup> FY 2015 Presentation, Slide 13.

<sup>179</sup> FY 2009 Presentation, Slide 18.

<sup>180</sup> Data points extracted from Nidec graphic using Plot Digitizer, available from <http://plotdigitizer.sourceforge.net/>

<sup>181</sup> FY 2015 Presentation, Slide 13, sum of quarters: 87+99+96+80.

<sup>182</sup> Q1 2010 Presentation, Slide 9.

<sup>183</sup> FY 2011 Presentation, Slide 9.

<sup>184</sup> H1 2010 Presentation, Slide 11. This slide shows sales FY 2015 sales predictions for its “4 Pillars” (JPY 500 billion each). It materially missed the predictions for every pillar. Nidec re-published the slide in its FY 2012 Presentation, slide 15 with far more conservative FY 2015 targets. It still missed three of these targets by appreciable margins.

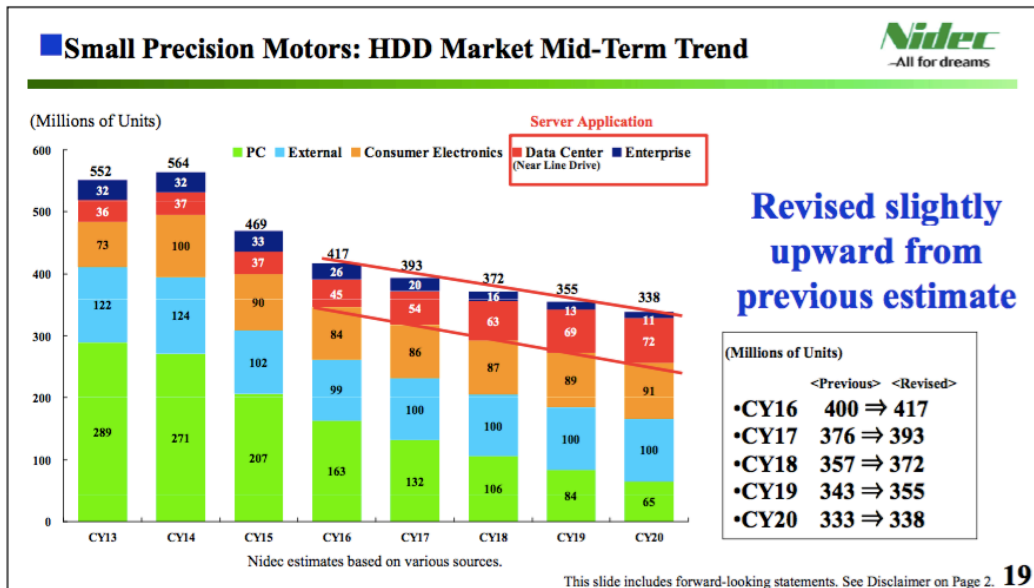
<sup>185</sup> FY 2015 Presentation, Slide 19.

<sup>186</sup> H1 2013 Presentation, Slide 15.

<sup>187</sup> FY 2015 Presentation, Slide 35.



- In 2013, Nidec predicted that CY 2020 HDD market demand will be 543 million units.<sup>188</sup> As of Q2 2016, Nidec now predicts CY 2020 HDD demand will be only 338 million units.<sup>189</sup> In its latest presentation, Nidec comically highlights that it has upsized market size predictions from its previous prediction.<sup>190</sup>



- In 2014, Nidec predicted that “Big Data” would lead to CY 2020 market demand for HDD for data center applications to be 91 million units.<sup>191</sup> In its H1 2016 presentation, Nidec revised the forecast down to 72 million units.<sup>192</sup>

#### Other:

- In 2010, Nidec predicted FY 2015 Other sales of JPY 500 billion.<sup>193</sup> Reality turned out to be JPY 176 billion, a miss of 65%.<sup>194</sup>

<sup>188</sup> H1 2013 Presentation, Slide 24.

<sup>189</sup> Q2 2016 Presentation, Slide 19.

<sup>190</sup> *Id.*

<sup>191</sup> FY 2014 Presentation, Slide 19.

<sup>192</sup> H1 2016 Presentation, Slide 19..

<sup>193</sup> H1 2010 Presentation, Slide 11. This slide shows sales FY 2015 sales predictions for its “4 Pillars” (JPY 500 billion each). It materially missed the predictions for every pillar. Nidec re-published the slide in its FY 2012 Presentation, slide 15 with far more conservative FY 2015 targets. It still missed three of these targets by appreciable margins.

<sup>194</sup> FY 2015 Presentation, Slide 19.

## Appendix B: Inventory Reconciliation for FY 2012 Write-Offs

	Q4 FY2012 JPY millions
Beginning balances	106,178.0
Add:	
Inventory balances from M&A	6,000.0
	112,178.0
Add:	
Unknown addition	10,948.0
Ending balances	123,126.0
	123,126.0
Less:	
Write off	(23,300.0)
Ending balances	99,826.0