## Toshiba Corp 6502.T s w

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			2016	2017
Price:	234.00	EPS	-92	11
Shares Out. (in M):	4,238	P/E	-2.6	21.7
Market Cap (in \$M):	9,500	P/FCF	0	0
Net Debt (in \$M):	15,500	EBIT	-4,000	900
TEV (in \$M):	25,000	TEV/EBIT	0	28
Borrow Cost:	General	Collateral		

### Description

### Thesis Summary:

Toshiba, the Japanese industrial conglomerate, is my highest-conviction short idea over the next 12-24 months. While a year-long accounting scandal and its effects have led to significant underperformance over the last year, the recent short covering-led rally has led to an excellent entry-point for what I consider still the early innings of a multi-year, value-destroying journey. Despite recent asset sales at better-than-expected terms, the balance sheet remains woefully over-levered, stuffed with intangibles, and at high risk for short and medium-term impairment. At the same time, the forward outlook on the post-restructuring business portfolio is at worst case dire, and at best case far less bullish than management guidance suggests. Under a variety of valuation methodologies, Toshiba equity looks to over-valued by 40-70%, with downside tail risk of full impairment in a couple of years. Base-case valuation in line with key comps like Hitachi – after needed recapitalization via equity issuance - suggests a stock price of ~80 JPY/share, or 65% downside from here, while even if Toshiba hits ambitious two year targets, a similar approach suggests the stock shouldn't trade north of 150 JPY (~35% downside). Further, this idea is highly actionable as the stock is extremely liquid, trading ~\$120-150mm ADV, and is an easy and cheap borrow.

### Key thesis points:

- Asset sales have not solved the leverage problem and balance sheet quality is as worse as it has even been
- Go-forward core businesses face large challenges
- Management mid-term guidance assumes beyond-heroic profit assumptions across many businesses
- Valuation on most all metrics is wildly divorced from direct comps and fully discounts a massive earnings recovery

Let's take each point one by one.

**Asset sales have not solved the leverage problem:** Without delving too deeply into the company's past, Toshiba – for many years before the accounting scandal came to light – had operated with too much

leverage and a balance sheet stuffed with intangibles. This was a function of debt-funded acquisitions (Westinghouse, in 2006, for \$5.4bn; Landis & Gyr, in 2011, for \$2.3bn; IBM's POS business, for \$0.9bn, in 2012) at peak-cycle prices - cumulatively, these added 600bn JPY in goodwill and at least 200bn+ in other intangibles to the consolidated balance sheet. Additionally Toshiba had large (300bn+ JPY) DTAs, a function of chronic losses in legacy consumer electronics businesses (TVs, PCs) as well as commoditized semiconductor segments. The cumulative pressure of a number of bad acquisitions, coupled with a bit of bad luck (the Fukushima nuclear disaster in 2011), were key factors in promoting the culture of accounting fraud that unraveled last year.

The key point is that pre-accounting scandal, Toshiba's equity ratio – a broad measure of balance sheet leverage, net assets (book equity) divided by total assets, that Japanese companies tend to focus on – was quite low, hovering in the 15-20% range from FY 2011-2014. Due to the preponderance of intangibles, tangible common equity has actually been NEGATIVE for many years, with Intangibles/Equity ratio hovering in the 120-140% range during the same time frame.

Of course, the accounting scandal demonstrated that past profitability had been massively over-stated across all divisions (by 220bn + over 5yrs), and necessitated the impairment of a whole host of DTAs (~300bn), along with restructuring costs/impairments to fixed assets in Energy, Nuclear, Semiconductor, and Consumer Electronics businesses totaling ~220bn in FY15 alone. Interestingly, only ~70bn of goodwill – related to the IBM PoS acquisition – was impaired, and nuclear/Landis & Gyr intangibles have not been touched (yet).

By 3Q15 (Dec'15), with a good chunk, but not all, of the aforementioned impairments taken, Toshiba's balance sheet had deteriorated to an 8.8% equity ratio, 235% intangibles/equity ratio, and adjusted net debt/equity ratio (including unfunded pension) of 232% – highly stressed levels, and this all DESPITE Toshiba having already raised ~200bn in cash from listed equity stake sales in the preceding two quarters. With the public equity markets closed to secondary issuance (Toshiba is on a TSE 'watchlist' due to the accounting fraud that won't be lifted until September at earliest), the company decided to sell its 'crown jewel', the Medical business, and garnered a king's ransom of ~690bn in gross proceeds (and ~520bn in net profits and approximate net cash), via selling the business to Canon.

I have a number of problems with the price and transaction (Canon basically paid 25x EV/EBITDA for a business showing negative top and bottom line growth the last three years, when other companies in the same industry trade at low teens EBITDA multiples), but the salient point is that despite this windfall gain, and also the subsequent sale of their home appliance business to a Chinese competitor for ~54bn, Toshiba's pro-forma balance sheet remains in a precarious position and still desperately in need of recapitalization:

As of **Dec'15**, Tosh had 528bn of equity, 1224bn of net debt, 1913bn of adjusted net debt (including pensions and guarantees for third-party debt), equating to 8.8% equity ratio, 232% net debt/equity, 363% adjusted net debt/equity, and 235% intangibles/equity ratio

Pro-forma **Mar'16** for all announced transactions and estimated 4Q losses, Tosh will have ~618bn of equity, 854bn of net debt, 1673 of adjusted net debt, equating to a **10.4% equity ratio**, **140% net debt/equity**, **271% adjusted net debt/equity**, **and 201% intangibles/equity ratio** 

When looking at the equity ratio, a quick rule of thumb (in Japan, at least), suggests that below 20% is too levered; below 10% is far, far, far too levered. As a general principle Japanese banks are extremely uncomfortable lending long-term funds to corporations when the equity ratio falls below 10% - especially when that company – like Toshiba – has large extant debt and long and tenuous working capital cycles. Recall also that both times Sharp, the pre-eminent distressed Japanese corporate, fell below 10% equity ratio in the last four years, either a large equity issue or a debt for equity swap followed in the subsequent quarters.

The main reason for the lack of absolute improvement is a huge increase in unfunded pension liability (~130bn QoQ increase as guided by the company). Toshiba has one of the largest unfunded pensions (559bn as of 3Q) in Japan, and as of Mar'15 assumed a discount rate of 1.5% on future obligations. With Japanese government bond rates now 10bps NEGATIVE on the 10yr and just 300bps for the 30yr – along with the correction in the equity market hurting the asset side of the book – it is highly likely that the additional 130bn in charges taken in 4Q is just the start. Goldman Sachs, for example, estimates that every 0.5% change in the discount rate increases the unfunded liability by 180bn – that alone is ~30% of pro-forma book equity at year end.

Why the balance sheet pain could get even worse: Of course the elephant in the room during this discussion has been the massive remaining goodwill balance (~680bn as of Dec'15). As mentioned, the only goodwill hit taken thus far during the restructuring process was a 70bn writeoff related to the IBM PoS business. This is surprising for a few reasons:

The acquired Westinghouse business has underperformed targets for years, and indeed has <u>not won a</u> <u>single new reactor order</u> since Fukushima (2011);

<u>Westinghouse actually impaired its goodwill at the subsidiary level **TWICE** (in 2012, and 2013) by a cumulative \$1.5bn (~180bn JPY); but Toshiba did NOT impair the consolidated balance sheet on either occasion (nor did it disclose the impairments to the market until prompted by a whistleblower leak late last year), suggesting instead that the 'overall' valuation for Westinghouse had risen despite specific subsegments (new construction) underperforming (??);</u>

Toshiba actively impaired a number of ongoing nuclear projects both this year and last year, which likely included Westinghouse business (though Tosh did not disclose the impairments on a project by project basis)

In any case, recent reports in the Asahi newspaper suggest Toshiba is considering up to 200bn in goodwill impairments related to the Westinghouse business as part of its year-end (Mar'16) accounting. This is likely an opportune time to finally come clean, given:

a) the sale of Toshiba Medical has reduced, for now, the critical solvency questions surrounding the parent accounts;

b) as part of the accounting scandal fallout, Toshiba will move to new auditors from Apr'16 – so it is likely the new accounting staff is pushing to fully clean house before taking over the books (the former auditors, E&Y ShinNihon, were massively fined for being negligent for many years and the treatment of Westinghouse intangibles was a major topic therein); and

c) US government departments, apparently the DoJ and SEC, have subpoenaed documents relating to Toshiba's inappropriate accounting, perhaps related to the fact that Westinghouse is a US-based (Pennsylvania) corporation and Toshiba maintains a US ADR listing.

As such you would think the parent Toshiba has multiple, good reasons to further impair the business now.

The earlier discussion on pro-forma leverage does **NOT** include any further intangible impairments. A 200bn impairment as is being discussed (still only ~30% of total goodwill, and just 60% of Westinghouse-specific goodwill) would constitute a ~33% hit to pro-forma equity (from already stressed levels) and take the equity ratio back down to all-time low distressed levels, around **7.5**%. And this doesn't even account for the possibility for further writedowns in other parts of the goodwill (Landis & Gyr, to be discussed later), or further fixed asset impairments in remaining, problematic business units (HDDs, PCs); or further mark-to-market losses in the unfunded pension as rates in Japan compress ever lower.

In any case – even in the best case outcome of no further writedowns at all, Toshiba's balance sheet remains so levered and of such poor quality that a large equity offering is basically a matter of time. The company has stated they wish to return to 1000bn of book equity (vs ~620bn pro-forma as of Mar'16) and 100% debt/equity ratio (they conveniently ignore unfunded pension from this calculation). But getting to 1000bn book equity, having sold the crown jewel business and with little left to sell at a premium to book value (and with more book-impairing losses to come), seems an impossibility without a large equity offering. Indeed, the company may have presaged this during a recent business plan (Mar 18<sup>th</sup>), when Toshiba labeled the FY16 year (ending Mar'17') as a "Return to the Capital Markets" year. Frankly, I anticipate a large (300bn-400bn) equity offering as soon as practicable, probably later in the year once the TSE warning designation is removed from the stock and the company can claim to have returned to 'normalized' accounts.

Some may argue that the company has ample liquidity and could delay an offering indefinitely until business performance recovers. While this is certainly a risk, that approach is complicated by the business imperative to return to an IG rating (Toshiba was recently downgraded to junk). As a large chunk of Tosh's go-forward growth strategy is aligned with the long-term, capital-intensive, nuclear construction business, it will be extremely difficult (nay, near impossible) to win meaningful new business on attractive terms when it cannot provide the financing during the bidding process for new projects (we will touch more on this point later). Suffice to say, there are compelling business rationales, and not just the balance

sheet rationale, to try to delever quickly, even if this means significant dilution.

Timing wise, this would probably occur after 1H'16 accounts are reported, thus, October/November in the early case, or maybe early 2017 in the late case. Our subsequent discussion of valuation will take into account the near-certainty that share count will increase, and value the stock on a pro-forma, assumed-dilution basis given this reality (something I don't believe the street realizes fully).

**Go-forward 'core' businesses face massive challenges:** in addition to the horrid balance sheet and prospect of significant dilution, I love this short because the go-forward business portfolio that Toshiba has assembled looks to face significant challenges. Despite the optimistic outlook for recovery painted in recent management meetings, the company has historically been a very poor forecaster of its own business (even when it was cooking the books) and some of its specific unit forecasts are fairly incredulous. After a bit of background, let's take a look at three specific problem areas: memory, storage, nuclear, and smart meters (Landis & Gyr). Collectively these 'problem' segments will comprise ~45% of Toshiba's annual revenues going forward.

**Quick background**: one of the many outcomes of the accounting scandal has been a reshuffling of Toshiba's business portfolio. On the one hand, Tosh is abandoning many long-held 'sacred cow' businesses like TVs, PCs, home appliances; home appliances has been sold, TVs have been minimized/reduced to runoff, and PCs is apparently going to be merged and moved off-balance sheet (though this remains a source of risk as the three-way merger with Vaio and Fujitsu appears to have fallen apart). At the same time, some of the more commoditized semi-conductor businesses (LSI and Discretes) have been radically restructured and will not be needle-moving going forward. Instead, Tosh is going to focus on three key pillars going forward: Storage/Memory (~25% of group sales, mostly NAND memory as well as HDDs); Infrastructure (everything from elevators to smart meters to rail cars to PoS systems to smart city products, batteries, etc etc – maybe ~25-30% of group sales); and Energy (Nuclear and nonnuclear large scale projects, fuel & maintenance, etc – maybe 30-35% of group sales).

Due to the complexity I will not dwell too much on the Infrastructure segment (except Landis & Gyr) – it has historically been a collection of low margin, low cash return businesses and grows with some correlation to Japanese and global GDP growth. The business has historically taken its fair share of lumpy losses (eg the 70bn goodwill impairment in the PoS business this year) but Tosh is forecasting a return to low single digit (~3-3.5%) operating margins and low/mid-single digit topline growth. Those forecasts seem reasonable to me and frankly are very difficult to granularly build up to from the bottom, given the diversity of products within the segment. I believe it is more fruitful to look at the challenges facing some of Toshiba's other segments.

**Memory:** Memory has long been Toshiba's earnings pillar – for most of the past couple years (before a rapid deterioration in the last few quarters), NAND was a consistent operating profit generator (if not a

massive cash generator), thanks to its favored cost structure (Japanese operations in Yen vs USD contract sales via its JV with Sandisk) and supportive NAND prices. Toshiba has never fully broken out NAND margins and earnings independent of its wider 'Electronic Devices' segment (which includes HDDs as well as what remains of LSI/Discretes), but my estimates suggest NAND alone was responsible for as much as ~75% of group operating profits in FY13 and more than 100% in FY14; by my math NAND profits peaked at ~240bn in FY15 when operating margins were around 27%.

The problem of course is what has happened since then, and more importantly, what will happen over the next couple of years. The back end of the planar, 2D NAND phase over the last couple years was a huge profit generator for all the main players (Samsung, Hynix, Micron and Toshiba/Sandisk) as a stable oligopoly enjoyed the fruits of the secular growth in smartphones, increasing SSD adoption at the expense of HDDs in servers and enterprise, and lower-than-normal capex burdens as planar NAND matured. But as in any cyclical industry, the above-average margins enjoyed for a couple of years only sowed the seeds of the current situation: a massive industry-wide ramp in capacity, a stagnating growth outlook as the smartphone adoption curve slows rapidly, and more price competition from increasingly less-disciplined players whom have seen their other profit centers (like DRAM and/or cellphones, for the likes of Samsung) rapidly diminish. In addition you have had the entrance to the market of a new, irrational, state-backed player (namely, Xinghua and the quasi-Chinese government), determined to build a strategic presence in the memory business with no regard for industry profitability in the interim. And compounding all this has been the inevitable technology transition, where the move to 3D NAND promises large cost per bit improvements on a multi-year view, but incrementally larger capex needs that depress profitability during ramp up.

To put a point on it: <u>Toshiba is one of the biggest losers from the current situation in the NAND industry</u> (perhaps Micron is the other big loser). The reasoning is fairly simple: Toshiba is the furthest behind the 3D NAND adoption curve (perhaps equally with Micron, perhaps a bit further behind), and at the same time is the most delayed in adding incremental capacity (all the major players – Samsung, Hynix, Micron, Intel, the Chinese, and now Toshiba – are adding new capacity thru the next 3 years). Thus – while Samsung (and Hynix to a lesser extent) had invested exponentially large \$\$ in R&D through the cycle and was mass producing 3D NAND even a year ago (Apr'15) with commercial shipments from at least 2H'15, the likes of Toshiba and Micron are now only beginning to mass produce their versions of 3D NAND, and hope to ramp to commercial shipments in 2H this year. In the meantime, Samsung et al are enjoying all the fruits of their cost advantage, having already ramped, and are thus in a position to happily push prices lower, gaining share while still making consistent margins at lower ASPs.

The likes of Toshiba, meanwhile are forced to accept lower ASPs whilst still laboring with the majority of their lines on planar production technologies – all the while consuming incrementally more capex dollars to try to catch up on 3D NAND. Is it any surprise, then, that Toshiba NAND margins look set to fall to ~5% in 4Q (Mar'16) this year and probably continue heading lower? Micron NAND operating margins have already turned negative and the recent quarterly report included some fairly dour comments on both

supply and demand in the near-term (simply put, there is no end in sight to ASP pressure). The sad (for Toshiba) reality is that despite the secular shift to SSDs and the increasing NAND usage that this has caused and will continue to cause, being so far behind in the technology transition means most all the benefits of this shift will accrue to the bigger, better capitalized, R&D-heavier players who positioned much earlier than Tosh did for the shift.

This is where I have a big problem with Toshiba's forward guidance. In the Mar 18<sup>th</sup> business presentation, they suggested NAND margins would be 'at least 5%' for FY16 (Mar'17), and then return to 'above 10%' in the next two years. This, however, is a massive assumption at fairly large odds with what is going on in the market and the recent behavior in the industry; it is also at odds with what we know tends to happen to commoditized, over-supplied markets with the entrance of irrational players, as well as being at odds with the specific history of the memory industry. In reality, I expect NAND average operating margins to continue to decline well into negative territory (as is currently the case for DRAM) and has been the historical norm for cyclical lows in the memory industry in the past.

**Storage:** Some do not realize, but Toshiba is still a significant player in the HDD market, with ~15% global share. The problems facing HDDs have been well analyzed by others and I do not mean to rehash them here; I simply bring this unit up as it is a great example of how Toshiba's guidance remains disconnected from reality. Again, in the same Mar18th presentation, Toshiba suggested they will **GROW** HDD revenues 30% YoY in FY16 – this despite the fact that their HDD sales likely fell ~14% in FY15, and only the other day Seagate pre-announced horrible guidance on both top and bottom lines. More incredulous is the claim that this growth will be driven by new product offerings in the nearline cloud-focused segment – basically the only sub-segment of the HDD market that is growing (and, thus, increasingly competitive). In fact, Toshiba's historical focus in HDDs has been on notebook/PC smaller sized offerings – the particular part of the market that is seeing the most rapid secular decline and that STX called out recently for being the most price-competitive.

Putting it all together, I would be shocked to see Toshiba maintain flat YoY sales in HDD at ~430bn JPY next year. Furthermore, Toshiba took some restructuring pain this fiscal year in HDDs (around 45bn) but given the ongoing scope of this business as well as the pace of secular decline as presaged by the better operators like STX, I expect that even break-even next year will be very tough to maintain. Thus I believe Tosh's forecasts for both rapid growth and a return to profitability in the unit to be a nothing more than a pipedream, and we are likely to see further losses and asset impairments in this segment over the next year.

**Nuclear Energy:** Beyond memory/storage, Toshiba's forecasts for their nuclear business are similarly devoid of any historical precedent or reasonable basis in fact. As part of the attempt to increase disclosure post the accounting scandal, Toshiba actually disclosed historical profitability for its nuclear unit (both the acquired Westinghouse, since 2006, as well as the legacy Toshiba nuclear business), in an attempt to 'come clean.' Unfortunately (for Tosh), these disclosures only made their go-forward forecasts

seem more ridiculous. To highlight a few basic points:

Since 2006, EBITDA margins across all nuclear have been around 9% on average, with profitability peaking pre-Fukushima at 12% in FY10, while recent years have been in the 4-7% range

The construction business – as distinct from the fuel + maintenance segment – has only had three years of profitability in the last ten (and even those margins were 3-4%), and has been loss-making for the last four years straight

Absolute EBITDA peaked out at 73bn in FY10 and in the last two years has only been around 20bn

# DESPITE ALL THIS, Tosh guides AVERAGE annual EBITDA for the ELEVEN YEAR PERIOD FY18-29 to be 180bn – or 2.5x peak EBITDA enjoyed in but one year, pre-Fukushima, of the last ten

Let's look at some of the forecasts underlying this rather bullish set of earnings assumptions:

<u>Company guidance</u>: Toshiba will win 64 new reactor orders by 2029, out of about 400 globally planned for construction (ie ~16% market share). <u>REALITY</u>: Toshiba has not won a single new order in the last five years (since Fukushima), and as many 1/3 of the planned bids make no economic sense in the 'new oil era'

<u>Company guidance</u>: Toshiba will generate an average of 60bn in construction EBITDA each year between 2018-2029. <u>REALITY</u>: Toshiba peak construction EBITDA was ~4bn (in 2010), and has been loss-making for the last four years

<u>Company guidance</u>: Toshiba will learn from its initial AP1000 (reactor design) experiences to achieve cost efficiencies and on time delivery for future orders. <u>REALITY</u>: existing projects for the AP1000 (for all but one project in China) are in developed countries (UK, US), and in any case are uniformly 2-3+ years behind schedule and over-budget. There is no historical evidence that Toshiba can deliver on time even in good jurisdictions

This should give you a taste of how ridiculous the company's targets are. Toshiba also likes to point out that the goodwill impairment threshold is not actually 64 units, but only 46 – nevertheless this would still amount to an average of 4-5 new orders a year, for the next 8-9 years (given the lead time to construction by 2029), and again – Toshiba has received NO new orders since Fukushima and has not delivered a single project on time and on budget. In fact, Toshiba was basically forced to buy out CB&I's nuclear construction business, Stone & Webster, to try to get the troubled Vogtle and VC Summer projects in Georgia and South Carolina back under some semblance of control and budget, given multi-billion dollar cost overruns and at least a 3yr delay to launch. Projects from China (Sanmen) to the UK (the Nugen JV at Moorside) face similar problems – indeed the Nugen project is likely to face funding issues in 2018 when a final investment decision is required, due to Toshiba's new-found financial difficulties, the inability for Tosh to fund their share of the project, and the new (and dented) economics of nuclear power in the new era of low gas prices.

Indeed, it is worth focusing on the macro picture here for a moment. Pre-Fukushima and when oil was >\$100/barrel, there were significant tailwinds for nuclear adoption, both in the developed and emerging world. But after the Japan disaster, much of the West (read – all of Western Europe, essentially) has abandoned nuclear power as a long-term energy source. Meanwhile the advent of cheap natural gas in the US has essentially neutered the nuclear rationale in Toshiba's two home markets – Japan and the United States. Japan's reactors will one day be operational again – though there will never be another new nuclear reactor built in Japan, mostly due to popular backlash against the industry, and indeed many extant reactors there will not live out their expected ~40yr lives (due to higher safety standards). Meanwhile in the US, low gas prices make new nuclear projects – with all the financing, implementation, and execution risk they entail – essentially non-starters. Since ~65% of Westinghouse's historically completed nuclear reactors are located in the US – as well as 4 of the 8 Westinghouse currently has under construction – this is not exactly a great outcome for the future of their nuclear construction and maintenance businesses.

Indeed this has already been demonstrated with the effective suspension of the South Texas Project for lack of financing last year (this cost Toshiba ~50-60bn in total impairments), as the project no longer makes economic sense with gas prices where they are. While Toshiba likely didn't count too much on the US as a growth engine for new nuclear plants and while there are still growth opportunities in places like India and China (overwhelmingly the two major markets that all nuclear players pin their hopes on), the market has undeniably shrunk and thus the competition for new orders amongst the major players has only become more intense. The IAEA, as well, has recognized this new reality repeatedly over the last few years, steadily lowering its forecasts for global nuclear power generation, every year since the Fukushima accident in 2011.

This is where Toshiba's junk rating and limited financing ability will become a real problem. As alluded to earlier, financing is a very important component in the bidding process for new nuclear construction projects: other than a nominal deposit, most all providers agree to extend financing until the completion and delivery of the project, in essence making any new project win hugely cash consumptive during the multi-year (even decade) construction period. This makes an investment grade rating, or otherwise the ability to raise large amounts of financing at competitive terms, incredibly central to the drive to win new business. But Toshiba is already suffering from its precarious fiscal position: the UK press reported that Toshiba had asked the Japanese banks to provide Tosh's share of the financing for its Moorside project (part of the NuGen JV) – an extremely unusual move that the Japanese banks likely are balking at, and – in my view – will ultimately lead to Toshiba abandoning the project by 2018 (probably leading to more impairments). In any case, the upshot of Toshiba maintaining its current state of over-leverage is a necessary decline in forward business opportunities, which in turn will only hasten impairments in this business and thus a vicious cycle – this, again, is one of the main reasons why I foresee a large equity raising as soon as practicable.

Landis & Gyr: Landis & Gyr (L&G) is one of the less problematic areas of the Toshiba mélange, but here

too there remains significant risk of earnings disappointment and intangible impairment over the next couple of years. L&G, a smart-meter production company, is, according to competitor Itron, a leader in electricity meters (with ~9% share), but is not really a major player in other types of meters such as gas and water meters. Nevertheless, Toshiba growth targets mandate fairly aggressive worldwide growth – again, despite the fact that earnings have been essentially flat since acquisition. Thus, in FY12 – the first full year of acquisition – L&G did 18bn in EBITDA; this year (Mar'16) Toshiba estimates it will do 20bn EBITDA on ~17% cumulative top line growth (over the last 3yrs). However, Tosh forecasts the company to increase sales and profitability by a step function in FY17, suggesting the top line will jump 20% and EBITDA will expand to 28bn (and then to 39bn in FY18). Given relatively flat depreciation, these numbers imply a doubling of operating profits (9bn ->17bn) in FY16->17, then another big jump to 28bn in FY18.

Once again – within the context of Toshiba's aggressive guidance elsewhere and much more modest historical performance, it is reasonable to be quite skeptical of this guidance. This is underlined by the more modest tone evident at some of Toshiba's competitors (like Itron), where developed market meter penetration is already high; whilst in emerging markets, price competition is intense.

The cost of missing forecasts, is, once again, a large potential haircut to intangibles. Tosh has ~180bn in goodwill on balance sheet associated with L&G (~30% of pro forma book equity), along with ~40bn of other intangibles. Even a small miss to aggressive out-year forecasts could thus imply a meaningful hit to book equity in the form of a partial writedown of goodwill and/or related intangibles.

**Pro-forma valuation is very expensive:** The final piece of the puzzle is valuation. This is a little bit of a thorny subject given all the moving pieces so I gravitate to a multi-part approach: sum-of-the-parts, price/book, and price/normalized earnings (EPS). At the outset I should mention that price/normalized FCF is not really a usable metric given Toshiba historically generates very little free cash flow, and on a go forward basis I believe it is somewhere between chronically cash flow negative and break even. Of course, this ultimately only underlines the bear case as Toshiba has and will continue to generate horrible cash returns.

**Method 1: sum-of-the-parts**. Despite the fact that Toshiba will soon reorganize its segments, we will use legacy segments (ex healthcare) to determine fair value today use a comp multiple approach for each of the remaining pieces. My methodology for each segment was as follows:

Energy & Infrastructure: apply a 7x EBITDA multiple to pro-forma FY17E earnings. This is the high end of relevant Japanese comps which trade in the 4-7x range (Hitachi, Mitsubishi Elec, Sumitomo Heavy, IHI)

Community Solutions: apply a 7x EBITDA multiple to pro-forma FY17E earnings. This is the high end of relevant Japanese comps that trade in the 3-7x range (Toshiba TEC, Hitachi, Brother Industries, Mitsubishi Elec)

Electronic Devices: apply a 6x EBITDA multiple to pro-forma FY17E earnings. This is <u>many turns</u> above the listed US/Korean memory multiples (MU trades at <3x, Hynix at <3x, WDC at ~3.5x, STX at ~5.5x) while

SNDK was acquired at ~9x with a very large acquisition premium

Others: apply a 6x EBITDA multiple to pro-forma FY17E earnings (small segment, all the other hodge podge)

In addition – I give Toshiba full credit for all asset sales proceeds announced, treat securities investments held on balance sheet as cash (~123bn), treat the unfunded pension as debt (689bn), treat off-balance sheet debt guarantees as debt (125bn, excluding LNG purchase commitments)

Also, I do NOT penalize Toshiba with any conglomerate discount (though other Japanese conglomerates, like Softbank/Hitachi/trading companies, generally do incorporate an additional 10+% haircut for this)

This generates an implied equity value of ~80 JPY/share (vs 230 JPY/share currently, or 65% downside). The implied composite EV/EBITDA is also 6.6x, which looks rich versus where the closest comp – Hitachi – trades, which is itself a much better collection of businesses with less leverage/balance sheet issues and no problematic memory exposure

**Method 2: Price/book**. Given the variability of earnings and chronic low capital returns, many equity analysts simply try to use pro-forma book value as a floor. I don't really agree with this approach – especially since, as discussed, tangible book has been and remains strongly negative, so I don't think that is a floor. Indeed, most Japanese comps (again, Hitachi, but also Mitsubishi Elec, IHI, etc) trade at reasonable discounts to book value. In any case – pro-forma book value for Toshiba – assuming NO equity dilution and NO further impairments to intangibles – is **~146 JPY/share** (~620bn in pro-forma equity dividend by 4.238bn shares out). This alone is **37% downside** to current, and again – I think there are still large book impairment to Westinghouse intangibles gets you to **~100 JPY/share**.

**Method 3: Pro-forma multiple on 'normalized' EPS, post expected dilution.** This is what I view as the most accurate way to value the stock today (and, I believe, is where the street will gravitate towards over time). That is – we estimate the normalized earnings picture and then adjust the share-count for how much new equity we believe will be issued by Tosh to delever the balance sheet. As mentioned earlier – I believe Toshiba needs somewhere between 300 and 400bn in new equity to get somewhat comfortable. If we assume they could sell, say 350bn of new stock at 190 JPY/share (this may be aggressive), that would imply 1.84bn new shares out or ~42% dilution versus current share count (~4.24bn). My current net income estimate for FY17 is fairly close to my normalized, go-forward estimates (that is, I expect memory +nuclear earnings to not recover in the medium term, off-setting any incremental improvement in the industrial/infrastructure part of the business). Since I currently expect Toshiba to post ~47bn JPY net income next year, this would be ~7.5-8 JPY/share on an adjusted new share count of ~6.06bn shares.

It is worth keeping in mind that EVEN in this scenario, Toshiba would still carry pro-forma adjusted net leverage of ~4.8x EBITDA (1340bn adj net debt vs ~280bn in EBITDA) so you could still argue this is far

too levered. But in any case – even at ~8 JPY/share, given where the best comps trade, and the underlying poor economics of most all of the businesses, a multiple north of 10x would be a stretch (Hitachi, for example, trades at ~7x FY18 consensus EPS). Hence, I envisage a similar target price to that implied by the SoTP, or ~75-80 JPY/share, or perhaps lower (thus again, 65%+ downside).

To try to quantify the downside to the trade – Toshiba has guided to 'at least' 100bn in net profit in FY18 (ie, 3 years out), which is itself based upon more than doubling operating profits from ~120bn to 270bn over the next 3 years. Clearly I do not believe Toshiba's medium-term forecasts for one iota (they are predicated, as discussed, on a massive recovery in nuclear and particularly memory), but EVEN IF they came true, on our new diluted share count of 6.06bn shares, this would imply EPS of ~16.5 JPY – which, at Hitachi-like normalized multiples (say 8-9x), in turn only suggests a stock price 132-149 JPY – ie, still at least 35% down from here, with all the negative optionality not even thrown in.

A couple of additional points:

There is no value to the equity in the SoTP if you give the Electronic Devices business a market multiple. That is to say, if the market valued Toshiba's middle-of-the-pack NAND business, and worst-inclass HDD businesses, at where its US comps trade (somewhere between 3-4x EBITDA), **Toshiba stock** would essentially be a zero

Bulls may argue that my implied valuation (~6.5x EBITDA on SoTP and ~high single digits PE) are meaningful discounts to where the stock has historically traded (7-8x EBITDA and mid-teens PE the last 5-6yrs). This may be true – but I would counter that Toshiba deservers to trade at all-time troughs in terms of valuation given the deterioration in balance sheet quality, chronic over-leverage, dire forward outlook in a number of core businesses, and – frankly – the inability of the stock historically to capture the low quality of the underlying businesses (as was made clear by the accounting restatements)

**Current valuations look extremely stretched:** at 230, the stock is trading at ~9.5x EBITDA, 1.5x book, and ~21x EPS – assuming NO dilution – based on my FY17E numbers. This is insane versus direct memory and storage comps (as discussed), as well as direct Japanese industrial comps (generally <6x EBITDA, below book, and low teens or single digit PEs). I can only explain this by referencing the large short position in the stock, which was a hangover from a different trade (the accounting/restatement over most of last year) and some 'fatigue' with the story as near-term, direct catalysts appear to have mostly played out. The story from here has evolved into one of chronic business underperformance with the still not-insignificant risk of further balance sheet impairment.

**Risks/what could go wrong:** Other than management outperforming, let along hitting, their medium-term targets, the biggest risk is some kind of further asset sale at an irrational price (as we saw with the Medical business). While this was one of the proximate causes for the relief rally, given Tosh has little left to sell (other than stockholdings, which would not generate book equity gains needed to delever, just

cash), this is much less of a risk going forward. The actual risk the entire entity gets sold, or even a piece of one of its main businesses (nuclear or NAND) is very small. In nuclear – any sale would necessarily catalyze a large impairment, given where valuations are today versus a decade ago: this is why the company has chosen not to sell down a minority stake in the last couple of years (as they admittedly tried to do). Meanwhile there is simply no viable buyer for even a piece of the NAND business, now that WDC has bought out Sandisk – effectively giving them veto power on any potential sale of the remaining piece (ie, Toshiba's) to another competitor. Even if we assumed WDC would allow a competitor to buy a minority piece of Toshiba's stake, there are relatively few buyers that would make sense, outside of Chinese competitors (since Seagate is likely already too levered to contemplate that kind of acquisition). Thinking imaginatively, perhaps a Japanese quasi-governmental entity like the INCJ would pony up for a minority stake – but even then I don't think that would happen unless the entire Toshiba group became much more distressed. It is all rather a moot point, though, as Toshiba has strategically doubled down on memory by committing to large scale capex to build out another fab at Yokkaichi, meaning they are likely in memory for the long-term, for better or worse. Meanwhile, a sale of the HDD business would be putatively very difficult, given the declining nature of the business and already-oligopolistic nature of the industry.

The other main risk as I see it is simply what has led to outperformance the last month or so: somewhat crowded positioning on the short side, and general fatigue with the bear case. I believe this will change over time as the market gradually realizes the 'impossible dream' nature of management's recovery targets; and as large equity dilution becomes more imminent. Also, the already-extreme nature of proforma valuation vis-à-vis comps gives me comfort for a medium-term holding period. That said – the recent rally has been painful and there is no guarantee the stock cannot keep squeezing for a while.

I do not hold a position with the issuer such as employment, directorship, or consultancy. I and/or others I advise hold a material investment in the issuer's securities.

## Catalyst

- Quarterly earnings releases
- Sudden intangible impairments
- Secondary equity offering

### Messages

Subject	Nikkei reporting 300bn JPY Westinghouse impairment
Entry	04/21/2016 07:45 PM
Member	puppyeh

The Nikkei newspaper is reporting Westinghouse impairments will near 300bn JPY, not 200bn as had been previously reported. This would be the majority of the WH goodwill (~350bn) so on the one hand this would remove this overhang somewhat. However given the preponderance of intangibles post this assumed writedown (~790bn in other intangibles, including ~180bn in Landis & Gyr goodwill), and the balance sheet damage (book equity would fall to ~320-340bn pro-forma), the intangibles/equity ratio actually goes UP post this writedown.

In fact, if this is true, Toshiba's balance sheet will be at an all-time low in terms of quality and in desperate need of recapitalization, despite the asset sales that have occurred. Assuming the number is 300bn, equity ratio goes to 6% (vs 8.8% at Q3 end), net debt/equity to 245%, adjusted net debt/equity (incl pension) to 484%.

Again - an extremely large equity dilution remains a matter of time.

Subject260bn Westinghouse impairment taken, equity ratio down to 5.5%Entry04/26/2016 09:07 AMMemberpuppyeh

Toshiba announced they would take a 260bn impairment to Westinghouse goodwill (out of 330bn FX-adjusted total WH goodwill). Interestingly, the company explained the writedown not due to deterioration in the prospects for the nuclear business, but purely due to the worsened financing environment Toshiba has been suffering in the last few months (they were cut to junk by S&P, etc). In fact, the accompanying presentation (linked below) suggests long-term nuclear profitability will actually go UP (2018-2030 average estimated EBITDA now 190bn per year, from 180bn forecast in November last year). This is fairly incredulous since, as mentioned in the writeup, the company has not won a single order since 2011 and the go-forward prospects for the business are much dimmer now than even a few years ago. While this removes the near-term impairment risk in nuclear, there remains at least 220bn in intangibles (70bn remaining goodwill, 150bn in brand name, etc) which are subject to impairment if (or when) the nuclear doesn't meet ambitious profit targets over the next few years (or sooner if the business deteriorates faster or Tosh's funding situation becomes worse)

Pro-forma fiscal year end (Mar'16), Toshiba is guiding to 300bn of book equity and ~500bn of net debt. The book equity number looks a lot lower than I was expecting (450-500bn) for a couple of reasons:

- the Toshiba Medical sale (688bn gross proceeds) ended up generating 210bn in tax bills, while book value of the sold business was ~76bn. Thus, only 380bn in net book equity was generated by this sale;

- the Home Appliance business sale, generating ~55bn in cash and ~90bn in net book equity, will not close until next quarter;

- and - most importantly - I think pension shortfall will increase by more like ~180-200bn QoQ (more than the 130bn guided by the company a couple months ago)

On the other hand, net debt looks considerably lower than I had estimated (closer to 800bn), but the proximate cause is - I think -Toshiba not paying the 210bn tax bill due on the Medical unit sale until next year. Thus, this net debt 'benefit' is also temporary. Tosh did not make it clear, but I also feel there may be a seasonal 50-100bn working cap pickup in 4Q, again, likely a temporary effect.

In any case - even at Toshiba's numbers, **equity ratio falls to 5.5%** - an all-time low an well below where I thought the company would end the fiscal year (~9-10%). **Adjusted net debt/equity (including ballooning pension) is around 450%** - again, all-time

lows. I think it is feasible Tosh will get further downgraded into junk territory in the coming quarters if they cannot recapitalize. Book value per share will be just ~76/JPY, putting the equity at current (~242) at **3.2x book value**. Compare this vs any other Japanese industrial conglomerate (Hitachi, Mitsubishi Heavy, Mitsubishi Elec, Sumitomo Elec, IHI, etc), or memory name, which all trade around book, or well below it, with nowhere near the leverage nor terrible business mix. And don't forget Toshiba's book value is still 304% intangibles...

Frankly I am having trouble reconciling the recent stock price with the realities of Toshiba's situation. I tend to think the market is just too short the name (this is the case globally with well-shorted, junky stocks); on the other hand I do think there is a ton of lethargic, complacent long-only money (Capital, for example is a very large holder and has been since the stock was 400+) that simply assumes there will always be a market for Toshiba to sell assets into without large dilution.

But at this point, it is quite unclear what Toshiba could sell that would help them recapitalize. They could sell stockholdings (~120bn), but this would only generate cash and not generate equity (as they are held at market value). They could try to sell down a piece of Westinghouse - now that the valuation has been written down - but again, there are likely no buyers and frankly I think this would generate further writedowns. They could try to sell other non-core affiliates (such as Toshiba TEC) but again - the size would be small and, again, they would generate only cash, and not the needed equity cushion.

Thus, I continue to feel a very large, dilutive equity offering (at least 300bn, probably more) will occur sometime in the next few quarters.

I would really appreciate if anyone had any comments on the technicals/potential bull case here as I really feel this is mispriced by too wide a margin given its liquidity/size/well-covered nature by the street.

SubjectRe: 260bn Westinghouse impairment taken, equity ratio down to 5.5%Entry04/26/2016 09:10 AMMemberpuppyehI forgot the link to the updated FY15 forecast, here it is:

https://www.toshiba.co.jp/about/ir/en/pr/pr2015fy\_rev.htm

SubjectFY15 earnings and FY16 guidanceEntry05/12/2016 11:07 PMMemberpuppyeh

Tosh reported FY15 earnings yesterday at the close. Basically in line with pre-announcement, and there were no changes to operating earnings forecasts for FY16 (OP of 120bn) though net forecasts were raised on asset sales (no surprise though). Equity ratio came in at 5.8% and Tosh is hoping to get to 8% organically by Mar'17. This is still stupidly under-capitalized and I think they will raise very dilutive equity for sure sometime in the next 12 months (if they can).

Guidance for FY16 remains barely fathomable. Most all segments are guided to significant double-digit sales declines but massive margin expansion. The explanation is the removal of fixed costs through restructuring but in many segments the targets seem far too optimistic. To take a couple of examples:

- Landis & Gyr, the smart metering subsegment, will apparently see sales -10% but operating income flat (and this was a business that was NOT restructured at all);

- HDDs will see sales -10% (385bn -> 350bn) but a 42bn improvement in operating profits (from -40bn to +2bn) even though only 25bn of the 40bn losses last yr were 'one-timers'

- Other semis (mostly consumer-elec related LSI/Discrete) will see sales -5% but operating profits move to the black (even though non-restructuring operating losses were still -50bn last yr on a 345bn sales base)

The company also mentioned that 3D NAND ramp is pretty slow: <10% of all production in the next 6mos and only 'double digits' % in 2H of FY16. This is well behind the pace of Samsung/Hynix and more akin to MU's pace (where NAND operating margins are negative). As such even Toshiba's low NAND forecast (just ~3% operating profits in FY16) look at risk to me.

There are a whole host of other issues (unrealistic cash flow forecasts, the issue of canceling bonuses and medium-term brain drain) but given the lack of interest in this thread I will refrain from ranting until there are some further questions on this name.

Subject	Re: FY15 earnings and FY16 guidance	
Entry	05/21/2016 08:21 PM	
Member	MiamiJoe78	
great write up and thoughtful analysis of earnings - thanks for the idea and appreciate the running commentary		

SubjectRe: FY15 earnings and FY16 guidanceEntry05/26/2016 08:32 PMMemberMiamiJoe78Puppyeh - curious if you had a chance to read the JPM report ?

Subject	Re: Re: FY15 earnings and FY16 guidance
Entry	05/26/2016 09:56 PM
Member	puppyeh

Hi MiamiJoe - thanks for your kind comments earlier.

Unfortunately I do not have access to JPM research, though I am curious as to how they get to their new px target of 330/share. If I can find the note, I will give it a good read and come back with some feedback. I imagine JPM is angling for lead on a large equity deal...

As an aside - the recent squeeze here has been quite frustrating but nothing fundamentally has changed. Excluding one-time asset sales, the stock trades at ~25x P/E and ~9x adjusted EBITDA, versus its closest comp, Hitachi, at ~6.5x EBITDA and ~9x P/E. The discrepancy on price/book valuation is even more egregious, and this doesn't take into account dilution which management has clearly signposted is coming.

I understand the technical picture supporting the stock at the moment, but any earnings recovery in the out-years - which I still believe is likely far more muted than management postulates - is very much priced in at this point.

Subject JPM report rebuttal

Entry 05/27/2016 01:45 AM

### Member puppyeh

MiamiJoe - I got a hold of the JPM piece. It is possibly one of the worst bits of 'research' I have ever read (more a fluff piece pumping the stock to win an equity IB deal). A few issues:

- the SoTP completely **ignores pension under-funding** (630bn as of Mar'16). Since this is ~2.2 turns of EBITDA on his FY16 numbers, at his target EBITDA multiple (6.7x), capitalizing pension obligation as debt would imply a stock px of ~**180** (versus his target of **330**). No wonder he left it out...Of course that doesn't include off-balance sheet debt-like liabilities either (like 3rd party guarantees, etc), which add another ~100bn to the debt stack. Keep in mind also there is no discussion of the discount rate (1.1%) Toshiba uses which looks very high versus other Japanese comps (Hitachi is <0.5% for example) and this would add another 100bn+ to the underfunding

- the comps he uses to derive EBITDA multiples for the industrial businesses are mostly offshore names (GE, Siemens, Areva) that trade at insane multiples. As you know, GE has a huge financials biz embedded clouding the consolidated EBITDA multiple so you can't just use that; also Areva is being heavily restructured and current EBITDA is extremely low making the multiple look high. Siemens is really the only comp that trades at 9x forward EBITDA - the much more appropriate Japanese comps (in terms of markets, profitability, earnings power, etc) are Hitachi and Mit Heavy and these trade at 4-6x EBITDA. Yet somehow he decides **15x** FY16 EBITDA, and **9x** FY17 EBITDA, are the right multiples for the industrial businesses...

- his memory forecasts for the full year come in at 60bn vs the company guidancw at 24bn, and is mostly predicated on a 2H recovery. Of course that is up for debate, but I highly doubt they see a return to double digit operating margins in NAND in 2H when they will be trying to ramp to 3D and new capacity continues to come online...

- finally this is not explicitly discussed but he is treating the ~20bn quarterly savings from bonus cuts (Tosh paid no bonuses in 3Q and 4Q) as essentially permanent saves. Adding even half those back in the 2H of the current year decreases OP massively. Even if they only return next year that is still a huge headwind to his forecasts and basically suggests annual OP will ballpark in the ~140bn range (vs 180bn at his forecast).

If you look at it holistically, he is arguing - at his stock px tgt of 330 - that Tosh should trade at ~13x P/E (on his numbers) on FY2 earnings vs Hitachi at 7x. That is wrong even before you consider that Tosh will definitely be diluted (probably by 30%+) and has a worse biz mix, still more leverage, and still a much worse balance sheet.

Technicals aside - this report is garbage. I am seriously considering sharing my work in a public forum (SA, etc) but it always makes corporate access a bit more difficult in Japan, so haven't fully decided yet.

SubjectDispute w/ CBI over nuclear business acquisition has real capital consequencesEntry08/01/2016 11:04 PM

### Member puppyeh

Clearly this has not worked (yet), mostly due to optimism regarding a bottoming in NAND prices and pre-iPhone 7 demand. I am pretty skeptical this is lasting but let's leave that for now.

What is more interesting to the investment case near-term is the dispute with CBI regarding Tosh's acquisition of CBI's nuclear business (Stone & Webster), which was announced 3Q last yr and closed in December 2015.

At the time CBI was basically looking for an exit from nuclear, given the massive cost overruns at two ongoing projects (VC Summer and Vogtle) and the lower outlook for nuclear in a low oil/gas world. Without rehashing all the terms of the transaction, **CBI effectively sold a business with a tangible book value of \$1.2bn for ~\$150mm** (NPV, most of the cash not due til the projects are done). They also took a decent hit to intangibles (goodwill, etc, as this business was a legacy acquisition).

Why would they do this? Because in so doing they received a full indemnity for all *past, present and future potential liabilities for cost overruns* - these would become the sole responsibility of Westinghouse (ie, Tosh). This is the key, since the ongoing projects are many billions over-budget, cost disputes with the operators have been on and off, and there are still ~\$3bn+ in costs to accrue to bring the projects to completion (per Westinghouse).

Fast forward to a week ago, and CBI filed a legal dispute vs Westinghouse, claiming **~\$430mm in net working capital adjustment in CBI's favor** per the closing 'true-up' provisions of the S&W acquisition (these are standard M&A terms). Westinghouse countered claiming **\$2.1bn in THEIR favor**, disputing, amongst other things, CBI's calculation both of capitalized costs as well as their share of completion costs for the two projects (about \$900mm each).

While it is up to the courts to decide who is right and who is wrong, I feel Tosh may have the short end of the stick here. The only reason CBI agreed to such a discounted price in the first place was to receive an indemnity for all past, present, and future excess costs at Vogtle and VC Summer (this is referenced both in CBI's press release at acquisition time and the recent court filings). Toshiba must have understood this, as they negotiated a ~\$1.5bn+ discount to book value at the time of the acquisition, the only plausible explanation for which is CBI's desire to wash their hands of the obligations and walk away.

Stepping back, the optics for Toshiba are not good. This acquisition originally cost ~\$150mm and now they are trying to **retroactively reduce the price they paid to net -\$2bn**, 6months after closing. This is an insane amount relative to the original transaction and seems highly unusual for working capital adjustments (M&A experts, please feel free to chime in). In addition it is pretty clear Tosh is being quite deceptive with their portrayal since this potential disagreement - massive as it is for Tosh's capital position - has never been mentioned nor was it discussed in the Mar'16 annual results.

It is also worth remembering that Tosh has NOT impaired/provisioned for losses at VC Summer/Vogtle yet - presumably they thought the ~\$1.5bn discount at purchase time for S&W was sufficient to cover overruns. Now it is clear they are at least another \$2bn, perhaps \$2.5bn short. This is **70%+ of book equity and would add ~25% to net debt, if debt funded, and take equity ratio to ~2%**.

I continue to feel Toshiba is wildly undercapitalized and a compelling short.

SubjectThoughts?Entry10/03/2016 08:23 PMMemberNails4Puppyeh,

What do you think of the most recent quarter? Are you surprised by the profitability in NAND and do you have any new thoughts on how this trends in the next couple of years?

# Subject Re: Thoughts? Entry 10/03/2016 09:24 PM

### Member puppyeh

Nails, thanks for the question. Clearly this has not worked out so far. Most all of the beat in 2Q was NAND/HDD outperformance so let's discuss that. I have been surprised at the resilience in NAND prices more generally over the last 6mos or so, clearly, as the iPhone 7 inventory restock cycle combined with some lost capacity (as planar converts to 3D, capacity can drop out intermittently) has really supported prices.

Nevertheless I am still medium-term bearish on the outlook for NAND prices. A majority of industry capacity will have migrated to 3D by early 2017 - while manufacturers will tout the yield advantages, this will necessitate ASP pressure and return some idle capacity to the market. It is still unclear if the iPhone 7 upgrade cycle will be great or not, and so over the next 3-6mos there's a decent chance we could see a NAND inventory overhang in the market. Looking out a bit longer, the capacity expansion plans at Hynix, Intel, Toshiba, and the Chinese all remain in place (and likely Samsung's too, though that has become a bit more cloudy). The leading players (Samsung/Hynix) continue to have structural cost advantages over Toshiba/Micron, while the Chinese are irrational players seeking market share.

It is also important to recall that Toshiba results have been buoyed by idiosyncratic factors. 70bn in bonuses were effectively cut in 1H this year as Toshiba was recovering from near-death - if you add those back to even full-year numbers, Toshiba would miss f'casts quite substantially. No one remembers this - analysts all just assume OP is what it is - but if 'normalized' NAND margins (10% or above) remain in 2H this fiscal, it will be very difficult not to pay back some or all of these bonuses. Of course this affects out-year earnings as well.

Additionally we need to remember the impact of the Yen. Tosh is basically a weak yen beneficiary in NAND since all production is in Japan and most all sales (external sales that is) are in USD. Thus the strengthening Yen will be an increasing headwind to NAND profitability, specifically going forward as there is a lag in inventory costing (Toshiba uses the average cost method).

In terms of technicals, I think I read those quite poorly initially, but at this point basically the whole street (ex GS) has flipped max bullish and is back on the bandwagon, pumping the stock (clearly hoping for a piece of the equity deal). This makes risk/reward at this point much better, too.

The company is still walking a leverage tight-rope - equity ratio is a measly 7%, and will be <10% at end of fiscal - and is quite complacent with the capital markets since the stock is going up. This often happens with distressed levered companies that get some breathing room - they think their stock will just keep going up so why sell some now? (cf Deutsche Bank). Then something bad happens, the stock falls again, and managers have to dilute into a falling market. I can envisage the same thing happening here.

In summary, I am still short. Clearly this has been painful but I do feel most all the good catalysts are out and any number of things could derail this story: CBI dispute resolution (with cash consequences), NAND correction, large dilution, the bonuses issue, further intangible impairments, etc

SubjectThe blow-up is happening, finallyEntry12/28/2016 09:24 AMMemberpuppyeh

Thought I would update the board - Tosh stock has fallen 30% or so the last two sessions, to 310, and will open lower again tomorrow after the co disclosed it would likely post 'several billion USD' in impairments related to the acquisition of S&W. Apparently cost overruns were much much larger than anticipated, though really this should not be hugely surprising to observers (see my comments on that transaction in earlier posts).

The size of the cost overruns (several billion) vis-a-vis the acquisition price (a couple hundred mm) suggests to me that Tosh is using the S&W acquisition accounting to 'catch up' on provisioning for losses on the US nuclear projects they avoided taking for years (it is no secret that the two projects, Vogtle and VC Summer, have been way over-budget and behind schedule for years and Tosh has never fully provisioned for them).

Tosh now has a real problem given they only have ~360bn in book equity and they could take a 400bn+ hit here, ie going negative equity (this is a big deal in Japan). Since leverage is still so high (net D/E before pensions is 180% BEFORE these writedowns) and since they are still unable to raise public equity (on the TSE watchlist), there is a good chance they are forced to sell more assets or even do a debt-equity swap with the banks.

While the recovery in memory pricing clearly was a major misstep in the short thesis, the nuclear meltdown alone and resultant need for dilutive equity capital of some form should still see this trade lower. I estimate at least 600bn in equity capital is needed near-term, meaning 50% dilution from here on current market cap and potentially more if the stock keeps heading lower.

I still think fair value is closer to 150 than 300 on a fully diluted pro forma basis.

Subject Entry	Re: The blow-up is happening, finally 12/28/2016 11:00 AM
Member	jgalt
Well done	- I'm curious if you think CB&I is also a good short. Thanks.
Subject	Re: The blow-up is happening, finally
Entry	12/28/2016 02:04 PM
Member	sugar
Great call	
Subject	Re: Re: The blow-up is happening, finally
Entry	12/28/2016 08:55 PM
Member	Nails4
Another -1	9%. Wow.
Subject	Aftermath??
-	

Entry 12/29/2016 12:00 PM Member Condor First off, great write-up and great call. I disagree on some of the memory-related stuff (I'm bullish on NAND; see other comments I've made on it elsewhere), but that isn't all that integral to the thesis/write-up.

Given that I don't have great insight/knowledge regarding either the innerworkings of Toshiba nor Japanese business practices (particularly in distressed/bankruptcy situations), I'm curious to hear your thoughts on what the possible aftermath here is. Is this a situation where Toshiba would realistically end up in a 363 situation and NAND and/or HDDs are effectively auctioned off by force? Do the Japanese figure out a way to keep them afloat given the massive pension hole and what I'm sure would be an aversion to losing a major domestic job-creator? What's the liklihood that the HDD biz, WDC JV, NAND biz, etc. are up for sale / actually get sold?

Would it be correct to think of a sale of the NAND biz (whether to an outside party or to WDC) as effectively selling the company, given the state of the biz and where the profits come from (i.e., if its Energy, Nuclear, and HDDs, that's not much of a sustainable company going forward, and is even more likely to end up in bankruptcy than Toshiba with the memory biz, no?)?

Curious to hear people's thoughts, particulalrly Puppyeh. Thanks.

SubjectRe: Aftermath??Entry12/29/2016 09:38 PMMemberpuppyeh

thanks all for the kind comments, although not sure how deserved they really were given this really didn't work this year until now and the whole memory/NAND component of the thesis was very much wrong....at least the nuclear angle worked out in the end.

Condor - Tosh's inability to raise equity in the public markets at the moment is what makes calling the aftermath a bit thorny. Indeed I think one of the major reasons the street got so bulled up on the stock this year was because, since Tosh was unable to delever due to the TSE watchlist, equity buyers had a free pass to enjoy the leveraged exposure to a recovery in NAND, knowing a dilutive offering was off the table in the near-term. This is something I wasn't quite cognizant of and under-estimated in my initial posting.

Listening to Tosh's conference call on this latest issue, management stressed that the TSE watchlist parameters had 'nothing to do with the current nuclear issue' but this explanation beggars belief. It is hard to see how TSE would rubber stamp Tosh's supposed governance improvements when this kind of unheralded impairment at a subsidiary (itself the product of bad due diligence and governance practices) is still going on. So, I anticipate Tosh will remain on the watchlist and be unable to raise public equity for the forseeable future (next two quarters? maybe longer?)

Of course since Tosh will likely go negative equity or come close, pre fiscal year end, the situation is much more dire now than in early 2016. Japanese banks generally will not tolerate negative equity at the consolidated level for extremely indebted companies, but even if they do I have never seen a situation where it happened for more than a quarter and NEVER over fiscal year end (because it would force banks to take very large write-downs on their loan portfolios to such clients as under Japanese bank methodology negative equity companies are treated as in default). This effectively forces Tosh to do something or a combination of things: sell off more assets, piece-meal (some non-core semiconductor segments; other industrial assets like Toshiba Machine, etc); a minority sale of a piece of the NAND business; or even (worst case) a partial debt-for-equity swap on bank debt (not bond debt) - this has actually already been mooted in the Japanese press.

The only real 'needle-moving' transactions of these would be a NAND sell-down or a debt/equity swap. It would seem like a good time to sell a piece of the NAND business, though really there is only one buyer (WDC, they should have a right of first refusal as per SNDK for the old JV) and they have already levered up to buy SNDK. Of course they could try to spin off a minority stake (10%? 20%?) to the public, though this would take much longer and frankly is not doable while the parent is unable to raise equity! (I doubt Tosh is even capable of producing reliable deconsolidated accounts for the NAND business). In any case they need not just cash but equity capital, meaning they need to sell something at a large premium to book value, and it is unclear if selling down a small stake in NAND would really move the equity needle in that sense.

This is all a long way of saying a debt-for-equity swap is probably more likely than you first might think. Here it gets tricky since we do not know if the banks play hardball, or are coerced to provide some kind of support (probably by the government). It is no coincidence that this latest scandal was NOT reported on the front page of the Nikkei when it broke (kind of crazy, if you think about it given it was global news the last few days), and I am pretty sure the government had a hand in that. You may recall also that the Tosh Medical sale occurred at an absolutely crazy multiple (25x EBITDA) to another Japanese champion (Canon) who had no synergies related to the acquired business. Ie, if banks do an equity swap on irrational terms, it could really harm the short case as ultimate valuation depends a lot on where dilutive new equity is issued.

At the moment I think Toshiba would need a minimum of 600bn (up from 350-400bn a year ago) but in reality to 'clear the deck' in case they have even more impairments (Landis & Gyr, and more in nuclear, I imagine) you would think they would try to kitchen sink capital raise and so 1000bn is really the number I think they should aim at. Assuming a 250/shr strike price would be 4bn shares, effectively doubling the share-count...hence my bearishness given Hitachi et al trade at 10x EPS and pro-forma EPS would fall to 15-20 JPY, even with the NAND recovery. And this assumes they hang on to all their NAND earnings...

To answer some of your questions more directly - there is NO way Toshiba is allowed to file formally for B/K, any kind of restructuring would be out-of-court and preserving the vast majority of liabilities (as per above the banks will take a bit of pain but no one else). I would actually want to be long Tosh credit if/when a debt/equity swap is about to be consummated (look at how Sharp public bonds did despite the multiple restructurings there).

Longer term, you are right, a Toshiba denuded of NAND (with this much debt + pension) is basically another Areva in the making and a terminal restructuring waiting to happen.

SubjectRe: Re: The blow-up is happening, finallyEntry12/29/2016 10:15 PMManual AReserved

### Member puppyeh

thanks jgalt- sorry to say since CBI divested S&W I haven't kept up on it. As regards the S&W dispute, there is some potential oneoff downside (perhaps \$1bn) if they lose the arbitration to Tosh but given the latest Tosh revelations and my (admittedly non expert) review of the S&W sale agreement I think CBI is more likely to win that case.

SubjectMore fun and gamesEntry02/14/2017 04:03 AMMemberpuppyeh

Tosh continues to find ways to surprise. They delayed reporting earnings today because they couldnt get auditors to sign off on the amount of writedown related to WH/CBI. Additionally the Nikkei reported the co would put a 'going concern' note in the accounts. Post Japan close, they further announced the amount of the writedown (provisionally) at 712bn, suggested they could be negative equity at year end, and admitted they would consider selling a majority stake in the NAND business. 1y CDS blew out as wide as 900bps today (too wide imho, I would be a seller).

A lot now depends on the sale price for the NAND asset (if indeed they sell half, which seems likely). This would be a huge strategic mistake for the long term future of the co (and the market should recognize as such), but there could be some irrationally high bidder/combination of bidders interested in a majority stake in this asset. Of course Tosh also needs to conduct the sales process very quickly (likely before end-March) meaning there should be at least some liquidity discount (and this is after all likely to be a \$10bn transaction).

My SoTP is still in the 150-200 range, though I acknowledge risk to the upper end of that range depending on what sales price is achieved. Given the depth of uncertainty around the accounts, the extent of capital needed (a minimum of \$11bn, over time, in my mind), and the short timeline for achieving asset sales, I am maintaining my short for now.

Subject Author Exit Recommendation

Entry02/21/2017 07:53 AMMemberpuppyehThe author has recommended exiting the position

SubjectExit rationaleEntry02/21/2017 08:02 AMMemberpuppyeh

I am closing this on VIC - at ~183 JPY/shr last, I believe the degree of difficulty on the short side has meaningfully increased. I am increasingly wary of the company running a sales process for the NAND asset at the height of the current semi capex boom, especially with the spectre of artificial/irrational bidders (Chinese govt, Japanese govt entities, etc).

While I believe fundamental fair value on the fully-diluted shares is still around 150, there is a huge amount of sensitivity around final NAND sale multiples and at this point, with delisting risk mostly in the share price and banks apparently willing to let the co run an extended (rather than fire sale) process, I am less comfortable being short now. On my numbers Tosh trades around 9% FCF yield, fully diluted and assuming a 51% sale of the NAND business at reasonably generous terms. This is not a level I think that compensates for further risks in the industrial parts of the business, but again - the NAND multiple could surprise to the upside meaningfully.

In retrospect, the Sharpe ratio on this trade was unacceptably low, despite the profitable outcome and good relative performance (Tosh is -23% vs NKY + 15%, in JPY, since I posted). The main problem with the short thesis was an under-appreciation of the extent of recovery in NAND prices + supply/demand near-term and too bearish an assessment of the company's near-term capital needs (they basically stayed far more levered, for longer than I expected). Against this, my skepticism of underlying profitability and prospects in the nuclear business proved correct, though here even my bearish view was wildly eclipsed by the scope of losses, essentially saving what otherwise would have been quite a painful trade.

I will update the board further if/when I re-enter/reconsider the trade, from either the long or short side.

Subject	Re: Exit rationale
Entry	02/21/2017 08:39 AM
Member	Shooter McGavin
Great call. Thanks for the initial idea as well as timely and thoughtful updates.	

SubjectRe: Re: Exit rationaleEntry03/17/2017 05:10 AMMemberpuppyeh

For anyone interested - I actually re-entered this short at 200 this week. While I am guilty of flip-flopping, my rationale is as follows:

- the latest recovery plan seems (to me) to suggest a 100% sale of NAND/memory is highly likely. this is bad for long-term equity value for Toshiba, clearly, and removes any and all reason to own the stock for long-only investors

- management clearly has no handle on limiting nuclear losses at Westinghouse, and the likelihood of WH filing for bankruptcy - and creating an additional 300-500bn loss to the parent - seems pretty high. They also clarified that the cash out component of the ~700bn impairment is likely to be quite high (410bn+ over 3yrs)

- management guided to much higher capex needs at the residual business (130bn/yr, versus 80-90bn I was expecting) and insane margin targets they have no hope of reaching

- on a pro-forma basis, removing all of NAND (and Landis & Gyr, another asset that seems likely to get sold), you have a collection of businesses that looks very much like Hitachi, just lower quality and with a huge nuclear tail risk

- Hitachi trades at 9.5% FCF yield and 10-11x earnings; I have Toshiba pro-forma for the above at 5% FCF yield and 12x earnings. There is no reason why the new Toshiba should even sniff Hitachi's valuation - even assuming there was no more nuclear risk.

- my new price target is 120-130/share, with some variability for final NAND sales price

Subject	Westinghouse bankruptcy filing
Entry	03/29/2017 12:12 PM
Member	puppyeh

Westinghouse (WH) filed for B/K, a result of the massive cost overruns at two of its troubled nuclear plants. The impact on Toshiba, even on preliminary investigation, is severe: 563bn impairment of WH equity, some or all impairment of 176bn in loans extended to WH (though there should be some recovery on this amount), 18bn loss on paying out IHI (a 3% shareholder with a put option), another 63bn loss on paying out Kazatomprom (a 10% shareholder with a put option, though this won't crystallize until October), and - the kicker - a 650bn equity hit from bringing WH's contingent liabilities onto Tosh's balance sheet.

Effectively Tosh is saying to the capital markets, we will swap a 712bn open-ended impairment on the current nuclear plants, with uncertainty for 3yrs on future cost overruns, for a **~1.3tn (\$13bn!)** loss today, deconsolidation of WH, some recovery when the good bits of WH are sold, and no more risk of losses.

The issue of course is I STILL don't think this insulates them from overruns, due to the live nature of the guarantee - unaffected by a WH filing, and only changed by a Toshiba filing. There is of course the positive risk that the nature of the guarantee is changed through negotiation with the utilities - but I dont see why they would do this (Toshiba credit is still unthreatened, even now, by these losses and the utilities need to look out for themselves).

The first day motions also made quite clear that WH may actually stop building the nuclear plants (there is a 30day discussion period). If that happens, the cost to Toshiba is highly likely to escalate, as they would be on the hook for project abandonment penalties (which per the filing run 20-40% of reactor construction cost, clearly another multi-billion \$ number), as well as turning all the guarantee liabilities into cash, near-term.

Irrespective of further penalties, the size of the losses are very large, even to my pessimistic bent (about 300bn more than I expected), though I acknowledge Tosh will see some recovery on their loan receivable. Tosh will likely end the year with 650bn in negative equity, and require a full sale of the memory business to get equity back to nominal (but still low) levels (around 500-700bn) - meaning on pro-forma EPS (removing NAND, WH, and a couple of other for-sale items) the stock trades at 20-23x EPS (again without adding back bonus cuts).

I think fair value is more like 100 JPY/share today.

## Subject out again Entry 04/07/2017 05:53 AM

### Member puppyeh

for full disclosure, i covered my (new) short at 215, for a 10% loss. all the comments re WH filing per below remain true - the only issue now being that it appears the likelihood of some idiotic irrational buyer (ie, Hon Hai) paying an insane multiple for the NAND business appears much higher. Overnight it was reported HH bid near 3tn - this is ~30x P/E and 10x EBITDA - basically 50% higher than other bidders. While there is considerable execution risk, the asymmetry to the upside is much too high to maintain a short even at a low probability outcome (I see fair value well north of 300 in that case).

This was one of my original reasons for covering my short the first time, and I should have in retrospect stuck to that view. Oh well...

As a final thought (for now), this may actually turn out to be an interesting long, if/when there is more clarity around the Hon Hai bid (and if you can get your head around the delisting risk). Having been so bearish for so long I am not sure I would have a clear enough head to consider an outright bull case on the stock, but I will update the board if/when I can get there.

Subject	Short again - and why I think Einhorn is wrong
Entry	07/24/2017 01:22 PM
Member	puppyeh

Thought it worthwhile to update this board given the Einhorn letter comments, and a pretty active bull/bear debate on this stock (one I have been having offline with a few people - though not Greenlight). I won't debate some of the bull points (Westinghouse recoveries; memory asset valuation; other business recovery potential) even though today I think Tosh on a SoTP basis if everything goes right is still only worth 350 jpy/share or so (as otherwise this comment will quickly get almost as long as the original writeup). I am happy to address those based on specific questions in the follow on comments.

Basically we think the market is massively underpricing the delisting risk, because it misunderstands the nature of the WDC/Tosh relationship today and the event path from here (see WDC comment thread for more detail). Suffice to say we doubt Tosh could close any transaction with WDC - even if it was inclined to come to terms (which it doesn't seem they are willing/able to do anyway) - because of anti-trust issues that push closing date well beyond next March. Clearly this would be a trigger for automatic delisting.

However we also feel it could get delisted much sooner due to the accounting issues, which will not go away but no one seems to be talking about - most US investors seem to dismiss these as 'noise' that will be resolved but we think they could be quite serious. For example, there is a report in Japanese only today suggesting PwC will give an 'adverse opinion' on FY16 earnings (much more serious than a 'disclaimer of opinion', ie they would suggest that past numbers are erroneous and cannot be relied upon which could be a snap delisting trigger at this point).

Thus, even if you accept that Tosh is worth 400/shr on a SoTP basis, post-recapitalization, you have to wonder how much of the share register could handle a 'going dark' process, where you don't know how long the stock will be delisted for (the last blue chip firm delisted arbitrarily, Seibu, took **seven years** to come public again).

Furthermore, there is no active OTC market in Japan - and certainly not one for retail shareholders (who we believe comprise at least 30-40% of the float today). This effectively means there will be a wave of price-insensitive sellers if/when a delisting is announced, such that any distressed fund looking to build a position would need much more substantial discounts (in excess of 50%, we believe), to justify owning a meaningful position through a delisting event. This is magnified in the case of Toshiba, which has a history of finding additional black holes to lose capital, and is likely to be the subject of further large (\$1bn+) lawsuits if/when they get dinged for shoddy accounting, again.

Looking at the share price chart for **Seibu Rail, 9002 JP**, in late 2004 is instructive. Despite no capital/financial implications at all (ie the stock was delisted purely for arbitrary reasons related to punishing then-management for misreporting their own shareholdings in the co), the stock fell from 1100 to 300 in a month once delisting was announced. It subsequently recovered a little, and basically fell **50% peak to trough** post delisting announcement as distressed funds came in to buy.

If we accepted Einhorn's valuation, that would still imply a stock price lower than 200 at delisting date (nearly 50% downside from where we re-entered the short, around 300). Personally though I expect Toshiba stock to revisit 150 JPY/share, if or when this is announced, given the technicals here; and the higher likelihood of value leakage due to lawsuits, etc.

Of course, there is also a chance Tosh files for snap bankruptcy (again, discussed on the last WDC thread). We do not accord this a high likelihood (maybe 10% chance), but it is meaningful given the dynamics of the WDC relationship. Clearly in that situation the equity value would be much lower still (as we think it would produce a huge amount of litigation from WDC re fraudulent conveyance, etc).

SubjectRe: Short again - and why I think Einhorn is wrongEntry07/24/2017 03:01 PMMemberazia1621

Interesting comment at the end of this article effectively making a too-big-to-delist argument. What do you make of the potential for TSE "subjectivity" in this case to get in the way of what would otherwise be an easy decision to delist a company?

http://www.japantimes.co.jp/news/2017/06/08/business/corporate-business/fate-toshiba-hangs-balance-tse-delisting-threat-looms/#.WXY7VOvythE

Best,

Azia

SubjectRe: Re: Short again - and why I think Einhorn is wrongEntry07/24/2017 04:39 PMMemberpuppyehhey Azia, i have three thoughts:

1) there has already been plenty of subjectivity involved as tosh would have been delisted long ago for any one of numerous violations if it weren't tosh (ie a Japan Inc bellwether). Of course you could argue this will just continue, but I believe we have reached a tipping point where after so many shenanigans, Japan Inc's reputation is being hurt more by allowing Tosh to hang around listed, than the 'shame' induced by delisting (especially post Takata);

2) there have been other companies as large and prestigious as Toshiba delisted for far less - as per my example, Seibu Rail (that was a \$8bn mkt cap company, and a huge EV as they had a ton of leverage). It also would have been a retail favorite as they offered discounts on rail tickets for shareholders (thus obviating the idea that retail favorite stocks can't be delisted)

3) the Japan Times isn't exactly the 'go-to' for Japanese business opinion (no offence, its just not one of the main dailies)

SubjectWSJ saying bankruptcy is being discussedEntry07/27/2017 09:01 AMMemberpuppyeh

As per my comment 26), while this is still a low-likelihood outcome, I think it is at least very much on the table and goes some way to explaining Tosh's refusal to engage at all with WDC (ie they simply dont want the assets to exit Japan in any way whatsoever). I would think B/K likelihood goes from something like 5-10% to around 20% or so now (at least in my calculus).

As an aside - I think the debt is money good, still (even assuming a step-up in obligations post B/K) but the equity could be severely impaired (though not a zero).

https://www.wsj.com/articles/toshiba-bankruptcy-filing-pushed-by-some-involved-in-workout-1501152999

SubjectThe dispute over Fab 6 with WDCEntry08/04/2017 01:43 PMMemberpuppyeh

For anyone interested - Toshiba seems about ready to go to thermonuclear war w/ WDC at this point. Look at some of the headlines coming out re the Fab 6 investment decisions.

As someone who is long WDC, I hope that this is pure brinkmanship and that a middle ground can be found but it really does sound like whoever is running Toshiba is far more interested in control of the assets than in the stock price. Fundamentally I think that is what the US distressed guys piling into Tosh miss, and that is why this thing is far more likely to be delisted than not at this point (with obvious consequences for the stock price).

SubjectRe: The dispute over Fab 6 with WDCEntry08/06/2017 02:31 AM

### Member Condor

I'm right there with you on every word you said. I too am long WDC (if it wasn't obvious).

This is getting worrisome because Toshiba is, more and more, appearing to be an irrational actor. I can't see any of the moves they've done thus far as being rational. At first, it could get chalked up to bad legal advice, but we are way beyond that now. In a rational situation, WDC should be a clear winner here, but if Toshiba is irrational, they could just blow the entire thing up with a ton of collateral damage, taking WDC down with them.

Output from Fab 6 shouldn't be material to WDC output until 2019 (maybe late 2018). That said, plain and simple, if WDC's supply gets disrupted (or - almost as bad - the perception from the mkt is that it will more likely than not be disrupted), its game over. The memory mkt moves too fast to come back from that in a reasonable amount of time. The JV fabs are all on Toshiba land and effectively under Toshiba's control; WDC can't start building fabs from scratch and seamlessly transition at this point, its way too late for that.

This is where the poker skills really come in to play. If Toshiba is bluffing, this is the best move they've made thus far - if they can convince WDC that they're willing to go down and take out everyone else with them, WDC may blink first. On the other hand, if it is a bluff, then its an act of desperation, and if WDC reads it right, then victory is close at hand. Of course it might not be a bluff and Toshiba's mgmt (or whichever genius is really pulling the strings there) may have totally lost it. Either way, my hope is that the Japanese govt deliberately steps in soon and takes over the situation, which I think is almost definitely a situation that favors WDC.

Subjectcovered short (again)Entry11/20/2017 03:28 AM

### Member puppyeh

covered today at 275-280. the offering clearly removes delisting risk, and - while I think the core business is still terrible and wildly overvalued - there is now very significant risk that Tosh ends up owning either all the memory business or a much bigger chunk of it (as i still dont think they can sell it by Mar31 and now they have been significantly recapitalized). I simply dont want to be short any semi businesses in this cycle, so moving on for now

SubjectRe: covered short (again)Entry12/12/2017 02:07 PMMemberbdad

any updated thoughts here? with delisting off the table and WDC resolution in sight, can you make a case to actually own this here? especially (and granted this is a hypothetical) if you get a mgmt team in there looking to set an example for corp governance? even nothwithstanding that, seems like you can paint a material upside picture here.

SubjectRe: Re: covered short (again)Entry12/13/2017 02:17 PMMemberpuppyeh

you can certainly make a case for owning it (just ask Third Point, Greenlight, etc etc). However this is a company that has lied repeatedly to the markets, regulators, and their own auditors; which effectively coerced their new auditors/Japan Inc into getting a passable audit statement purely so they could get an equity offering away to remain listed; and whose entire valuation is predicated on them maintaining ownership of an asset they may still end up selling for a below-market price. you also have the ticking time bomb of the LNG tolling agreement, which is likely to run through the PnL at some point in the next couple years. ANd I would not underwrite any improvement in management behavior - simply no reason to expect that to change.

Yes, memory has done way better than expected and likely is firmer for longer. As I mentioned a few times, the ex-memory portion left of the empire I think is extremely low quality, or highly cyclical, or both. There is 'theoretical' value based on where memory could get to, I suppose, but given the governance issues ongoing and plethora of other risks, why wouldn't you just buy MU/WDC/Samsung/etc at 3-4x EV/EBITDA rather than chase this now its become a hedge fund hotel?

# Subjectfinally i am long!Entry04/06/2018 09:40 AMMamberpuppysh

### Member puppyeh

clearly I can't stop myself taking another bite of the cherry here. This is much more of a trading call. Right now the market is telling you that the agreed sale to the Bain consortium - at 2tn JPY valuation - will simply close as planned (even though it didnt close by the end of March as was expected). Note that China anti-trust approval is still pending, and we do not know how long that will take (if it comes).

The key point though is that post end-March (ie, now), Tosh is free and clear to recut the deal with Bain (or just not sell, or IPO, etc) - with no penalties. This would clearly be hugely accretive as when the sales price was agreed, Tosh was in desperate straits; people assumed WDC would have a say over the sale; and Memory earnings (EBIT) were just 150bn JPY. Today none of that is true and memory EBIT is 450bn JPY and unlikely to crater this year meaning Bain is getting a \$10-15bn (yes, bn) windfall (assuming 100% ownership, I know thats not the deal structure but just to illustrate value here) simply because of the delay.

Under any rational economic decision, it is absolutely insane to not renegotiate the deal or pull out (in fact you could argue that Tosh management has a fiduciary responsibility to do so) - but it appears they do not care. The new CEO has said they will only pull out if a 'material adverse change' occurs (ie if China kills the deal).

I am not sure that is completely true - there is already activisit pressure building and, while the deal has already been approved by shareholders, we know two things: 1) if the ball was on the other foot, Bain would definitely have renegotiated;

2) Bain has publically committed to IPO'ing in 2yrs anyway so why allow them the value transfer, the company could easily just IPO Toshiba memory now;

3) Toshiba no longer needs Bain (they recapitalized through the market and delisting risk is gone).

I am not saying the deal gets recut - but if it does, there is \$10bn+ of extra value (pre-tax) likely coming to Tosh in one way or another (against a \$18bn market cap today). And if it doesnt- I think pro-forma for the existing deal, Toshiba stock is at 9x P/E, which is basically in line with Hitachi for - probably - a better business (still memory dependent, of course). Ie I don't really think it falls much more than 10% if the deal stays as is, but if it gets recut the stock could easily go up 50%+.

Seems pretty asymmetric to me and there are tons of US HFs who took part in the cap raising at 256/shr who are still motivated to extract the value that is there. There is simply too much excess value here to let is go to PE without a fight.

 Subject
 Re: finally i am long!

 Entry
 04/06/2018 03:44 PM

Member RSJ Interesting. Few qs:

1) Is there a modified break-fee to recut the deal or is Tosh absolutely free to renegotiate? If so, why do you think the market is assuming the status quo?

2) Memory is a cyclical business - is the 450BN EBIT a mid-cycle or peakish number? don't you think the 2TN price accounted for the improvement in earnings from the 150BN? not sure where the comps trade but that would be but multiple range of ~4.5x (2TN/450BN) to 13.3x (2TN/150BN)...so what is the appropriate multiple on 450BN?

3) Westinghouse - free and clear of all contingent liabilities?

Thanks.

SubjectRe: Re: finally i am long!Entry04/07/2018 09:45 AMMemberpuppyeh

1) No break fee at all, they can walk away right now if they want. Market is assuming status quo because the new CEO has publically stated they will not exercise their right to break, only if a MAC occurs (if if China blocks the deal outright). My view is the CEO may be forced to eat his words

2) The 2tn price accounted for some improvement but not much. The price was essentially in the public domain from May last year (even though the deal only got signed in October). You may recall that last year - like this year - the street assumed memory prices would tail off badly in 2H and so conensus EBIT for the business was around 150-170bn a year or so ago today. Now this number is 450bn. I'm sure Bain had a bullish view on the business but the entire market was nowhere near this bullish so most of it is windfall value.

The appropriate multiple is a matter for debate, but it is certainly not <3x EV/EBITDA (EBITDA is around 700bn now, I think), which is essentially below public-market multiples of MU/WDC/STX, even though Toshiba is giving up control. Even if you think they just extract one more turn of 2yr average EBITDA, that is still ~600bn of value...but it should be much more.

3) Yes - they effectively sold their claims, after fulfilling all the guarantee liabilities on their own balance sheet. They may actually get some small residual cash inflow from the sale, when it settles (I dont believe it has settled yet)

 Subject
 Re: Re: Re: finally i am long!

 Entry
 04/07/2018 11:34 AM

 Member
 RSJ

 Got it, very helpful. What % of Tosh EV is the 2TN? Is the 2TN net proceeds? What does the company look like pro forma for the sale? Thanks.

SubjectRe: Re: Re: Re: finally i am long!Entry04/08/2018 09:24 PMMemberbdadOut of curiosity-do you're hedge this w a memory short?

 Subject
 Re: Re: Re: Re: finally i am long!

 Entry
 04/09/2018 07:18 AM

 Member
 puppyeh

The original deal was incredibly complex and figuring out what Tosh will net from it (after they reinvest in the business) is not easy. Moreover Tosh stand-alone EV (taking into account all their debt-like obligations) is also not easy to discern.

However, if Tosh sells the memory business at 2tn, they should clear around 1.1tn in profits on the sale (maybe a bit lower as book value is increasing rapidly); this would imply around 340bn or so of taxes at statutory rates. however, most all of this should be offset by tax benefits (loss carryforwards, essentially), from the Westinghouse fiasco. So net proceeds are likely to be close to gross proceeds, before reinvestment (351bn according to the current plan) into the memory business.

Pro-forma for everything (including the NAND sale at announced terms), I think EV for Tosh is around 1.1-1.2tn for an entity that will likely do 200bn of EBITDA (completely excluding NAND), so optically around 6x EV/EBITDA - not cheap, you say? But they also would have 40% of the NAND business - ie 280bn of 'look-through' EBITDA at current run rates which reduces the all-in multiple to ~2.4x (if you look at it on this basis).

I think they would also have close to 1tn of net cash, and so would institute a massive capital return program.

So not exactly a bad situation if the status quo prevails.

Subject	Re: Re: Re: Re: finally i am long!
Entry	04/09/2018 07:18 AM
Member	puppyeh
No, I am not	hedging the memory component. I think all memory stocks are criminally under-valued and want exposure to the
multiple re-r	ating as people realize this is not as deeply cyclical as it used to be.

 Subject
 Re: Re: Re: Re: Re: finally i am long!

 Entry
 04/09/2018 08:44 AM

 Member
 RSJ

Thanks puppyeh. So what do you think the market is missing here? Even assuming the deal isn't recut, at 2tn for the nand business the stock still appears absurdly cheap on a look-through basis plus the potential to return cash.

SubjectRe: Re: Re: Re: Re: Re: finally i am long!Entry04/09/2018 09:16 AMMemberpuppyehves -that is why in a nutshell i am long, but remember

yes -that is why, in a nutshell, i am long. but remember most memory names only trade at 3x EV/EBITDA now (and many are returning capital) so this isn't that much cheaper on a relative basis for still a very complex entity, with sub-standard governance, history, potentially more skeletons in the closet, etc etc.

also recall i used to be quite bearish this name - as indeed many were - and so the name certainly suffers from its legacy issues and is under-owned/under-followed today. all part of what creates the opportunity.

Subject	Re: Re: Re: Re: Re: Re: finally i am long!
Entry	04/09/2018 10:01 AM
Member	RSJ
Got it. So	t seems like Tosh is more of a fundamental bet on the underlying business than a special situation/deal recut
thesisyo	u agree? As you point out it is modestly cheaper than the comps due to the legacy taint but ultimately you have to take
a view on	the nand/memory cycleand you appear pretty bullish given your decision not to hedgeso I guess what makes your
bullish tha	n the market/consensus?

 Subject
 Re: Re: Re: Re: Re: Re: Re: finally i am long!

 Entry
 04/09/2018 11:39 AM

### Member puppyeh

no, i dont agree - it is entirely a bet on the deal recut/special sit. if i wanted to bet just on memory i would pay 3x ebitda for micron.

but if tosh gets recut or they pull out, they could likely IPO a minority stake at a much higher multiple than that (domestic japanese retail buyers, scarcity value), so there is much more deep upside if that happens.

if it doesn't happen, i dont expect to lose much/any money from here (as i outlined), but i would prob rotate into micron once it becomes clear that the deal as stated will close (if this doesnt happen in the next 3-6mos i believe it will be unilaterally canceled meaning I would win that way)

Subject	Re: Re: Re: Re: Re: Re: Re: Re: finally i am long!	
Entry	04/09/2018 12:53 PM	
Member	RSJ	
Interesting. While I agree that it seems irrational not to recut, it does appear that the company is going to pursue the original		
dealdidn't they extend the deal out and stock dropped $\sim$ 5% as a result? Given the issues with Westinghouse, I would assume		
that the bank group is also pushing for a sale here. I don't doubt tension may be brewing between the company/creditors and		
shareholders		

right - my view is different than what is in the market and (presumably) in the price. that's why i think there's an opportunity. of course the co/banks are on the same (stupid) side, but all it takes is one more large activist (eg Third Point, Oasis, etc) to create a lot of annoying noise to catalyze a ton of value. and even if that doesn't happen I think there is a decent, non-zero chance (5-10%) that China just blocks the deal as constructed outright.

i guess you could play this through OTM calls as well, but you'd need to get a dealer to make you an OTC price as these don't trade on exchange.

Subject	farallon discloses 5.3% stake
Entry	04/23/2018 01:20 PM
Member	puppyeh

this is a \$1bn position so unusual for a distressed debt fund to take such a large position in an equity security, and a Japanese household name at that. I would expect some kind of semi-activist approach (likely in concert with other US/distressed investors on the register already) and still think there is massive latent value on the table here.

independently, there have been articles suggesting Toshiba will move to cancel the deal if it can't close by end-May, ie not very long. I think they would need to receive Chinese approval in <3 weeks to close by end May. So the odds here are improving that you see a windfall value creation event of some kind.

SubjectRe: farallon discloses 5.3% stakeEntry04/23/2018 01:34 PM

Member trev62

Thanks for the continued updates puppyeh. A Japanese activist called Effissimo owns 11% of it so there is surely some work being done behind the scenes by shareholders on this one. FWIW they have a great track record and it's a \$2 billion bet for them (their 2nd largest)

Subject Re: Re: farallon discloses 5.3% stake

#### Entry 04/23/2018 04:02 PM

#### Member puppyeh

i am familiar with Effissimo - i can't speak to their track record as i have never read one of their letters. but if you simply look at their public holdings, outside of Toshiba (which they only made money on after tripling down), they have a pretty poor record (Japan Display, Kawasaki Kisen Kaisha, Ricoh, etc). I have been on the short side profitably on three of their positions in the past (Toshiba, Japan Display, KKK) and think they are less relevant in this situation, to be frank. if they were going to say anything publically they would have been vocal before now.

would think we need to rely on US guys to drive the action here.

Subject	Re: Re: farallon discloses 5.3% stake
Entry	04/23/2018 04:18 PM
Member	trev62

They've compounded in the mid teens for over a decade net of very high fees, so they've had a lot of winners in addition to the ones you mention that haven't done as well - to be fair a lot of that was at a smaller asset base which than ballooned after they performed well (no surprise there!) In my opinion local funds in Japan have had much better luck with an activist approach than US/UK based funds have historically, and often working behind the scenes, but in this case we're got both so we'll see!

Subject	Re: Re: Re: farallon discloses 5.3% stake
Entry	04/23/2018 06:19 PM
Member	puppyeh
fair enough, they may be excellent investors, i can only speak from my personal experience in some of their names. with regard to	
Tosh - just keep in mind they have been significant investors all the way down - and through the initial negotiations w/ Bain, by the	

way - and didn't say boo.

anyway lets hope management wises up one way or another and picks up the \$10bn sitting in front of them ;)

Subject update Entry 05/15/2018 12:01 PM Member puppyeh

Value Investors Club

Toshiba earnings were pretty positive. The overwhelming impression to me is 'heads I win medium, tails I win big':

It is patently clear there is no need to sell memory at all. Net debt fell to ~190bn as of Mar18, helped by 600bn in equity proceeds, 300bn improvement in working capital, and around 150bn in 'found' cash from the sale of WEC claims/shares post B/K. On a fully adjusted basis, assuming no memory sale, I think pro-forma EV is ~2.6tn (1.95tn market cap ref 299, 190bn net debt, 280bn minorities, 150bn affiliate debt guarantees) against an entity that did – again including all of Memory – 530bn in EBIT (465bn of which from Memory) – and I think around 750bn in EBITDA, ie this trades at 5x EV/EBIT and 3.5x EV/EBITDA with almost no net debt any more (0.3x on a fully consolidated basis).

The company still claimed they want to sell Memory and that the sale is 'on track.' Of course this is disappointing given recent events, though I still think there is some potential upside if we get through May and China has still not approved the transaction. Nevertheless the co did state they would likely do a buy-back if or when the memory transaction closes. If Memory closes on announced terms, they would get 1450bn in cash and the co would have net cash of 1.1tn; even net of reinvestment in the memory business (around 400bn), this would result in a net cash balance of 700bn – enough to buy back 35% of the stock at current prices. I don't think they would announce a buy-back of this magnitude, but they would likely return most of the capital they raised at emergency levels (say 500bn of the 600bn), which would still be a huge buyback (26% of the common at current levels)

Operating results at other segments were actually pretty OK. They posted 65bn in OP for the year where previously they had estimated break-even; they guided to 60bn for FY18 and I think they easily hit 100bn (FX guide was 100, that versus current spot alone is 25bn+). They also gave quite conservative guidance in retail product solutions (POS machines) and other electronic devices (HDDs/discretes/LSI) which seem a low bar. They are not really budgeting much/any improvement in the industrial segments, and meanwhile they will fully exit PCs and Visual Products (loss-making last year so absence of a negative this year). Simply put, if we use 6x EV/EBIT for the non-Memory stuff (ie still a 1x discount to Hitachi) that is 700bn, add that to 1100bn net cash post Memory sale at announced terms, subtract 400bn for reinvestment in Memory, and add 1100bn for the remaining 40% ownership of Memory (using 5.5x EV/EBIT which is where WDC trades), I get to a pro-forma equity value of 2500, or still 30% upside versus today's price...and that is before any value accretion from capital returns/buybacks that would surely follow Memory actually closing.

Clearly the ongoing commitment to closing the memory transaction is disappointing, I will follow up with a couple to see if it is lipservice and if there is any real possibility to move in another direction. But risk/reward on the long side is still compelling, to me.

Subjectupdate on last couple of monthsEntry07/21/2018 05:47 AM

### Member puppyeh

Tosh proceeded to close the existing Memory transaction in what I think history will judge as one of the most egregious breaches of fiduciary duty the capital markets may have ever seen. despite this, the stock has done very well - +20% or so versus the market flat and with many tech names destroyed - on the back of under-ownership, and new management's commitment to buyback 700bn of stock in the 2H of this year. so this has been at least a palatable, if not pleasing, outcome.

at 350, risk reward is much more balanced (with the windfall Memory renegotiation now no longer possible). i still think the stock can test 400, due to technical buying pressure and ongoing low expectations. at the same time there are risks now (the buyback implementation could be done through a tender off-exchange, and not over time in the market; and the new mid-term plan could still disappoint). also, NAND prices are clearly rolling over and it is still unclear exactly how much of the memory business Tosh will own on a go-forward basis.

as a result, i have reduced my long considerably. I still have a small position as i think it is still somewhat underowned/misunderstood, but the valuation support - in the absence of memory deal restrike optionality - is not really there anymore so have taken most of chips off the table. Subjectupdate - King Street goes publically activistEntry10/03/2018 10:43 AM

### Member puppyeh

I am still long. this is heating up a bit as King Street - now a 7% shareholder - disclosed a massive deck trying to argue the stock is worth up to a double from here and that the co should buyback half the market cap (versus the ~33% that management has committed to).

here is the preso: https://www.unlockingtoshibavalue.com/

Full disclosure - I think most all the bull case numbers are wildly optimistic and mostly plucked from thin air for marketing purposes. Nevertheless, this now constitutes the largest, most public Western-style activist approach in Japan since Dan Loeb prodded Sony a few years back. Here, however, disclosed activists own much more of the company (at least 15%, maybe 20%, I think), and even if none of the upside case materializes you are still going to see 1/3 of the company bought back in the next 6-9mos with lots of low hanging fruit from the new business plan and a proper recutting of the TMC valuation. So I still think this has 30-40% upside from current and little downside...making it still a very interesting trade.

Subjectnew biz plan - quite bullishEntry11/08/2018 05:25 AMMemberpuppyeh

Lots of news out as Toshiba released a very comprehensive restructuring plan overnight; a few quick thoughts on why the stock reacted positively (+14%):

Stripping out restructuring costs, they effectively raised CY guidance slightly

Near-term (ie next year) EBIT/EBITDA forecasts are significantly ahead of street (guiding to 220bn of EBITDA vs street at 180bn), based on low-hanging restructuring benefits (procurement, job cuts) that are partially being implemented this year

Longer-term guidance looks surprisingly optimistic (getting to an OPM of 8-10% in <5yrs) and guiding already to 6% OPM in 3yrs (versus ~2% this year)

They announced complete exit from UK nuclear at a low cost (another 5bn of impairment vs previous guidance) as well as exit from LNG off balance sheet risk (though this comes at a much higher cost, around 90bn) – nevertheless removal of key longer-term balloon liability risks

They suggested the 700bn buyback would be conducted at least partially in the market and would run over the next year (midterm support for the stock given it is 30% of the market cap)

I think the analogue to be made is to Hitachi's wholesale restructuring in 2009 and I believe the equity market will look through a lot of the extraordinary costs (and negative FCF this year and next) and at least start to underwrite a path towards say 4% margins over the next couple of years. The strong guidance for FY19 provides a lot of support here.

For now, I think one way to cut the valuation is to consider what it looks like purely on the basis of FY19 numbers – which, given the detail that went into the plan and the multi-year nature of it, to my mind is likely very much a starting point – and on this basis I think the co is now guiding for around 160bn in net income (110bn from core ops based on new guidance, even with 30bn risk buffer, and around 50bn in equity income from their Memory stake). The market cap today is 2460bn, but they have 1440bn of net cash so this puts Tosh on an ex-cash P/E of @6.4x...versus Hitachi at 8x (not net cash), Panasonic at 10x (ditto), etc, and with most of the restructuring benefit still to come. The market has clearly partially appraised this as too cheap already but I think that is likely to continue.

While I need to spend a fair bit of time thinking through the out-year earnings assumptions for each business, looking out just one year and pro-forma for all the new items (incl LNG losses), I think the stock is worth at least 440 today (pre conglomerate discount), so perhaps 400 or so with a conglomerate discount (that may or may not dissipate over time). This is not that attractive relative to the price, now – though I still think downside is quite limited given the technical imbalance (huge amount of stock to buy and large activists who won't see near here) so I don't think it really goes down over the next 6mos or so, and it could really start to price in some of the out-year upside.

So, I'm still long and strong :)

Subjectmassive buyback, very little participation = the stock is going higherEntry11/13/2018 04:37 AMMemberpuppyehvery bullish outcome, they only bought back ~121bn out of the 700bn they wanted to buy. as expected, the majority of holders,

now activists, won't sell back shares at a 25-30% discount to NAV today.

theoretical impact of daily buyback of the remainder (580bn) over the remaining buyback term (11.5 months) would be 30% of daily volume. not sure it plays out like that (they probably do another tender when the stock px goes up 20%) but in any case the direction of travel is pretty clear and performance today shows this will continue to grind higher even in a tough tape