

# Hasbro, Inc.

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**BUY**

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**Please read the disclaimer at the end of this report for important information**

**Hasbro is likely to hold stronger revenue growth compared to competitors due to high percentage of revenue stemming from movies and entertainment, alongside a renewed pick-up in Hasbro's stock to re-track recent upswing.**

## Key Investment Considerations

- Despite the challenging economic situation, the toy industry has the ability to overcome dampened retailer and consumer sentiment, and Hasbro in particular is likely to grow revenue more than its peers.
- Successful movie releases in 2011 has increased Hasbro's profile, and will sustain strong revenue performance through to 2012 when more Hasbro-licensed movies will be released.
- As compared to its other competitors, Hasbro has been trading at a lower price to equity ratio, and is in an attractive position for investors to capitalize on its misplaced market pricing, as compared to peers.
- Despite increased COGS pressures, management has historically managed to keep margins constant through pricing pass-through.

## Vital Statistics

**Our Forecast: Undervalued by 19.8%**

**Current Price: \$36.03 (of 11/18/2011)**

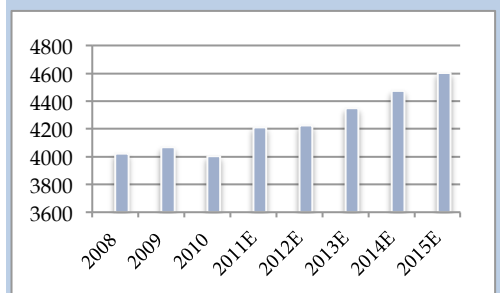
**52-Week Range: \$31.36 - \$50.17**

**Market Capitalization: \$4.65 billion**

**P/E Ratio: 12.4**

**EPS: 2.91**

**Exhibit 1: Company Revenue (in millions)**



**Source: Historical Data Capital IQ, Chaner Capital Estimates**

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## 1.1 Company Overview

**Hasbro, Inc. (Public, NASDAQ: HAS)** is one of the world's largest toy companies. It designs, manufactures, and markets a broad variety of toy products worldwide directly to consumers, and through discount stores like **Wal-Mart Stores, Inc. (Public, NYSE: WMT)**, **Target Corporation (Public, NYSE: TGT)**, and **Sears Holdings Corporation (Public, NASDAQ: SHLD)**, toy chains like **Toys 'R' Us/Babies 'R' US (Private)**, department stores like **MACY'S, Inc. (Public, NYSE: M)**, online retailers like **AMAZON.COM, Inc. (Public, NASDAQ: AMZN)**, and small hobby and craft stores in local precincts.

Founded in 1945, the company is currently headquartered in Pawtucket, Rhode Island, and competes with listed companies **Mattel, Inc. (Public, NASDAQ: MAT)**, **JAKKS Pacific, Inc. (Public, NASDAQ: JAKK)**, **Leapfrog Enterprises, Inc. (Public, NYSE: LF)** and **Kid Brands, Inc. (Public, NASDAQ: KID)**, and other private companies like **SPIN MASTER (Private)** and **THE LEGO GROUP (Private)**. In international markets, Hasbro also competes with foreign competitors that are often strong in a particular toy line or geographic region, such as **Namco Bandai Holdings (Public, Tokyo SE: 7832JP)**, but who may not necessarily compete with Hasbro worldwide. Competition among these companies is increasing, given shorter product life cycles for individual toy products, and the growing use of technology and digital media. Retailers also account for a significant proportion of toy sales, and have an influential role not only in allocating shelf space for one toy line but also in promoting one company over another.

Exhibit 2: Comparison of Hasbro with major competitors



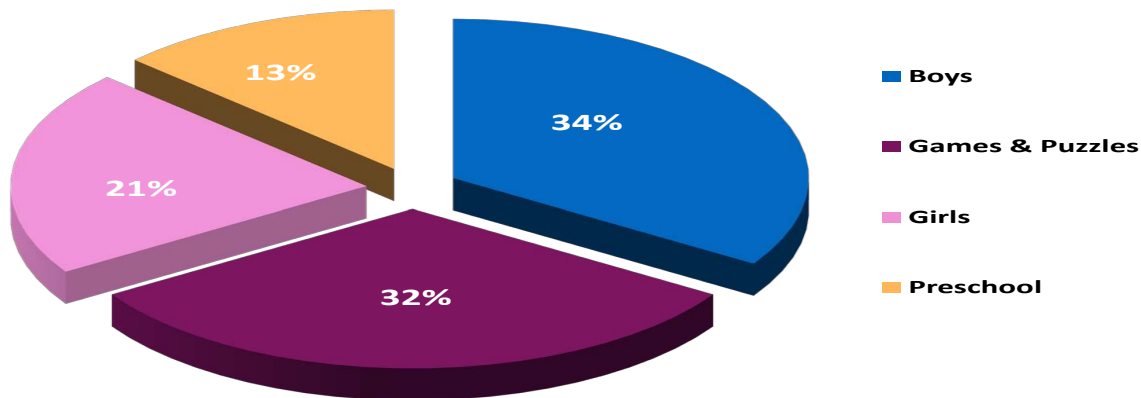
Source: Yahoo Finance

**Exhibit 2: Comparison of Hasbro with major indices**


Source: Capital IQ; Individual Company SEC 10-Ks; Yahoo Finance

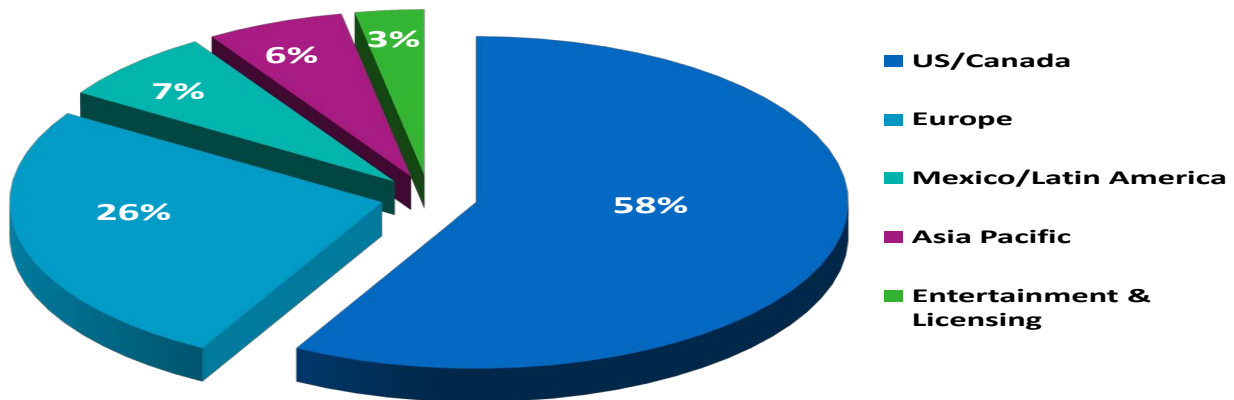
It is also worth noting that since 2007 Hasbro has historically done better than its peers and major indices, like the S&P 500 (which Hasbro is a part of), and the PowerShares Dynamic Consumer Disc. ETF (PEZ) but in recent months has seen a downturn. Its portfolio of brands and products are grouped into four categories: (1) boys’ toys, including core brand offerings Transformers, G.I. Joe, NERF action products, Stars Wars and Marvel toys and accessories; (2) games and puzzles, including Parker Brothers, Monopoly, Battleship, and Twister; (3) girls’ toys like My Little Pony, Strawberry Shortcake and Furreal Friends; and (4) preschool toys which include Playskool, Sesame Street and Play-Doh. The company also launched a family entertainment channel called The Hub in October 2010, and is also developing a wholly-owned studio called Hasbro Studios to produced television programs based on its brands.

**Exhibit 3: Hasbro’s 2011 Net Revenue by Category**



Source: Hasbro Investor Presentation, October 2011.

The company has a global reach, and international sales account for 42% of consolidated sales in 2010. Europe remains the key overseas region, accounting for 26% of consolidated sales in 2010, with Latin America and Asia Pacific accounting for 7% and 6% of total sales respectively.

**Exhibit 4: Hasbro's 2011 Net Revenue by Region**


Source: Hasbro Investor Presentation, October 2011.

Hasbro, and the larger toy industry, has been significantly challenged by the increased popularity of digital devices. Traditional toy sales, like board games and puzzles, have suffered due to the appeal of computer and video games, and personal handheld consoles like the Nintendo DS, PlayStation Portable, and the iPad. Hasbro has successfully countered this trend by translating certain product lines onto digital form, with the company launching iPad programs for Monopoly and Transformers, and establishing a licensing agreement with Electronic Arts.

More generally, toys suffer from seasonality, and their appeal rarely lasts a long time, forcing companies to constantly innovate and create new product lines to capture the zeitgeist. These changing consumer preferences reduce the product life cycle, and cause companies to incur product development costs.

## 2.1 Model Drivers

We will now walk through our model step by step:

### Discounted Cash Flow Analysis for Hasbro

Dollars in millions, except per share

	FY Ending			FY Ending				
	2008	2009	2010	2011	2012	2013	2014	2015
x Sales	\$4,021.5	\$4,067.9	\$4,002.2	\$4,211.1	\$4,225.8	\$4,347.2	\$4,472.0	\$4,600.5
EBITDA	660.4	769.6	734.2	754.8	602.5	613.0	624.7	637.6
Less: D & A	166.1	181.0	168.4	163.0	157.9	153.5	149.9	147.1
EBIT	494.3	588.6	587.9	591.8	444.7	459.5	474.8	490.5
Less: Taxes @ 22.0%	(108.7)	(129.5)	(129.3)	(130.2)	(97.8)	(137.8)	(142.4)	(147.1)
x Tax-effected EBIT	385.6	459.1	458.5	461.6	346.8	321.6	332.3	343.3
Plus: Depreciation				163.0	157.9	153.5	149.9	147.1
Less: Capital expenditures				(125.0)	(125.4)	(127.3)	(128.9)	(130.1)
+ / - Changes in working capital				178.1	(62.2)	(2.6)	23.8	21.8
x <b>Unlevered Free Cash Flow</b>				<b>\$677.7</b>	<b>\$317.1</b>	<b>\$345.2</b>	<b>\$377.1</b>	<b>\$382.2</b>
Unlevered Free Cash Flow Growth Rate					(53.2%)	8.9%	9.3%	1.3%
Period				0.5	1.5	2.5	3.5	
Present Value FCF				654	284	288	293	
Terminal Value								\$7,641.2
Present Value Terminal Value								\$5,930.5
Present Value TV after video game discount								\$5,179.6
Total Equity Value	\$6,698.4							
Debt Level (non-adjusted)	\$717.3	\$1,148.8	\$1,412.2	\$1,451.9	\$1,129.9	\$1,477.1	\$1,151.5	\$1,507.5
Tax Shield Value				\$18.5	\$14.4	\$18.9	\$14.7	\$19.2
Present Value Tax Shield (coc = cost of debt)				\$18.0	\$13.3	\$16.4	\$12.1	
Terminal Value Tax Shield								\$584.2
Present Value Terminal Value								\$479.5
Present Value TV after video game discount								\$418.8
Total Debt Value	\$478.5							
Pro forma Enterprise Value	\$7,176.9							
- Fair Value Current Outstanding Debt 9/30	1,538							
+ Current Outstanding Cash 9/30	187							
Pro-Forma Equity Value	\$5,825.8							
Diluted Shares 9/30	134.9							
Share Price a/o 11/18/11	\$36.03							
Target Share Price (long term)	\$43.17							
Under/Overvalued								<b>19.83%</b>

APV & Cost of Capital Data	
Amount of Debt (unadjusted) \$mm	1,538
MV of Equity	4,650
Current BV Equity	1,469
Effective Tax Rate %	22.0%
Return on Debt	5.8%
Return on Equity	8.9%
Unlevered Cost of Equity (rA)	7.5%
TV Growth Rate	2.5%
Return on [ ]	rd = rfr+B(Mrp)
Credit Rating	BBB/BBB+
Actual Average Yield	6.3%
Ave Total Return Corporates	5.8%
RFR	2.5%
Market Risk Premium	7.6%
Debt Beta	0.44
Equity Beta	0.85
Unlevered Asset Beta	0.67
Market Risk Premium:	
Consumer stock annual yield	4.6%
S&P Consumer 5-year return	5.5%
Total Equity Return	10.0%

#### Sources

9/30 release

Standard & Poor's Rating Service

Capital IQ

Federal Reserve Economic Data - Total return analysis 0.75 weighting "BBB" and 0.25 weighting "A"

Federal Reserve Economic Data 10-year treasury constant maturity

5-year historical average return for Powershares Consumer Discretionary ETF including the distribution yield

## Valuation Overview

We value Hasbro at ~20% undervalued based on a discounted cash flow incorporating the APV method. As of 11/18/11, Hasbro was trading at 12.4x P/E while its two largest competitors traded at 14.1x P/E and 15.5x P/E. While last month's stock performance has been similar for the major toy industry companies, YTD Hasbro has traded down 24% compared to Mattel which is up 12% and Jakks Pacific which is up around 6%. In July 2011, management reaffirmed fiscal year 2011 guidance and over the subsequent three months, the stock has been trading down around 20%.

We think Hasbro has a significant advantage coming into an increasingly unsure 2011 holiday season due Hasbro's strong (25%) revenue coming from entertainment related toys such as Transformers and Marvel Comics movies which had strong launches in 2011 as compared to 2010. Similarly in 2012, Hasbro will benefit from five big movie releases compared to only one in 2010.

Exhibit 5: Hasbro P/E Ratio Compared to Peers

As of 11/18/11		P/E	1-mo Perform.	YTD Perform.
	Hasbro	12.4x	3.68%	-23.63%
	Mattel	14.1x	4.03%	11.64%
	Jakks	15.5x	5.23%	5.93%
	Leapfrog	28.8x	40.00%	-7.93%

Source: Google Finance

As a point of note, our scenario analysis shows that if the competitive-based terminal value discount (please see terminal value section for reference of the following terms) were maintained at 13% but Hasbro's terminal value growth rate were to decline to 2%, we would recommend a hold on the company. If the terminal value growth rate were to decline to 1%, we would recommend a sell, but it is unlikely that Hasbro would grow in perpetuity below inflation given the historical stability of the toy industry's revenues compared to other consumer products. If one removes all revenue growth and decline years of greater than 10%, Hasbro's average revenue growth over the last twenty years has been 2.36%. In scenarios where the competitive-based discount was reduced (when Hasbro is able to respond to competition from video games expediently), our recommendation would remain a buy even if the terminal value growth rate were to decline to 2% per year.

Exhibit 6: Sensitivity Analysis

	1.0%	1.5%	2.0%	2.5%	3.0%	TV Growth Rate
3.0%	-2%	7%	16%	28%	42%	
6.0%	-4%	3%	13%	24%	38%	
10.0%	-8%	-1%	8%	19%	32%	
13.0%	-11%	-4%	5%	15%	28%	
Entertainment Competition Discount						



## 1. Sales

- **2011 sales: \$4,211 mm**
- **2012 sales: \$4,225 mm**

We ran revenue growth correlations and regressions against our industry-reliant factors (global disposable income growth, US disposable income growth, global GDP growth, population growth, etc) but the results were unable to project revenues forward. In our most recent Mattel valuation (11/4/11), we used advertising projections to project growth in revenues. With Hasbro, the significant weight of media/entertainment related revenues meant that in recent years, advertising expenditure has declined while revenues have increased due to strong entertainment-related growth (such as Transformers, Star Wars, GI Joe and Marvel Comics movies). Advertising per unit of sales in these divisions costs less than classic toys and games, and therefore correlations between advertising and revenues were not as good a predictor of sales for Hasbro as they were for Mattel.

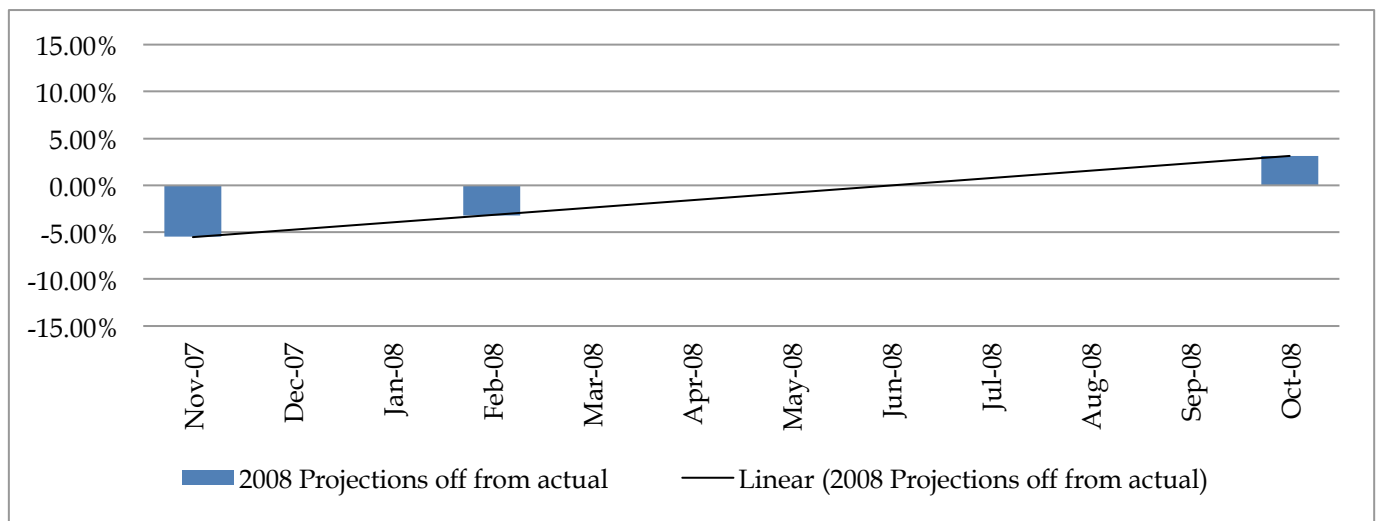
Due to the difficulty in predicting the entertainment portion of Hasbro's revenues we turned to another source that could better interpret Hasbro's management's indicators of their entertainment relationships. This is important because Hasbro's entertainment-related revenue accounted for over 25% of total revenues in 2010. As illustrated in the following graph (Exhibit 9), Hasbro held major toy licenses for 13 major motion pictures and 7 animated series in the 2007-2010 period (average of 3+ movies per year), and will hold 12 current major toy licenses for major motion pictures (average of 4 per year) in the 2011-2013 period. While it is possible to project the popularity/revenue potential of these movies, it is difficult to prove its actual relationship to toy sales, as it depends on the movie characters, type of toys made, movie release date, and target age and gender demographic.

We found that most analysts do not bother projecting sales for specific movie-related toys, given the difficulty in projecting sales figures for individual lines due to the sizeable amount of information needed to make these calculations. Even among analysts that do, most are often off by a significant margin. In particular, we studied the reports of one analyst, Timothy Conder of Wells Fargo, whom we believe is one of the more capable observers of the industry, focusing on his predictions of revenues, and found that his forecasts of major entertainment toy sales lines were of varying accuracies over time.

However, we believe that this analyst's predictions for Hasbro's revenue are better than any other forecasts we have come across or would be able to devise given our findings of low correlations to all of our factor-model factors. This analyst has been able to better synthesize the outlook of Hasbro's "new" CEO since 2008 into projections than we would be able to do.

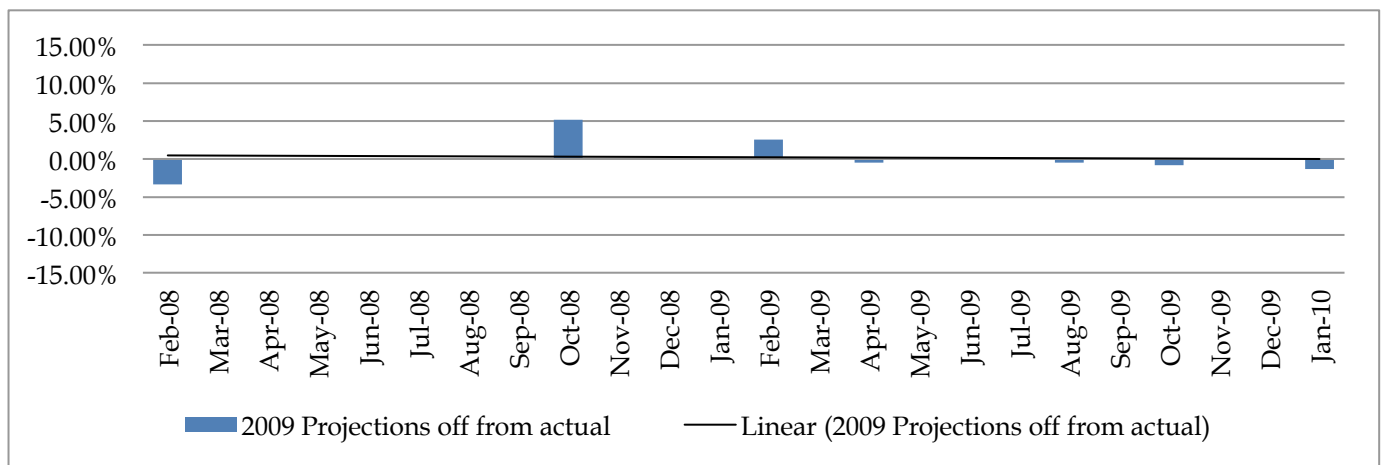
As we illustrate in the following charts, this analyst’s annual revenue predictions have historically been approximately 5% off the final outcome for two years, and 1% off for one year when predictions for the following year were made in October one-year out. At a maximum of only 5% off of revenue, we feel that this analyst is able to issue very realistic forecasts. As the year progresses and forecasts are updated, this analyst’s forecasts come closer and closer to the correct final number reported. While this seems intuitive, forecasting correct revenue 6 months out within an error of 3%, 2% or 1% should be considered extremely successful. These charts depict the analyst’s projections for 2008, 2009 and 2010 over time prior to actual numbers being officially released by Hasbro. Based on the trend lines, one notes that around 1 year out, revenue predictions have been about 5% off target and also trend downwards closer to the official figure, even though these figures are forecasted several months prior to official release.

**Exhibit 7: Analysis of 2008 Projections**



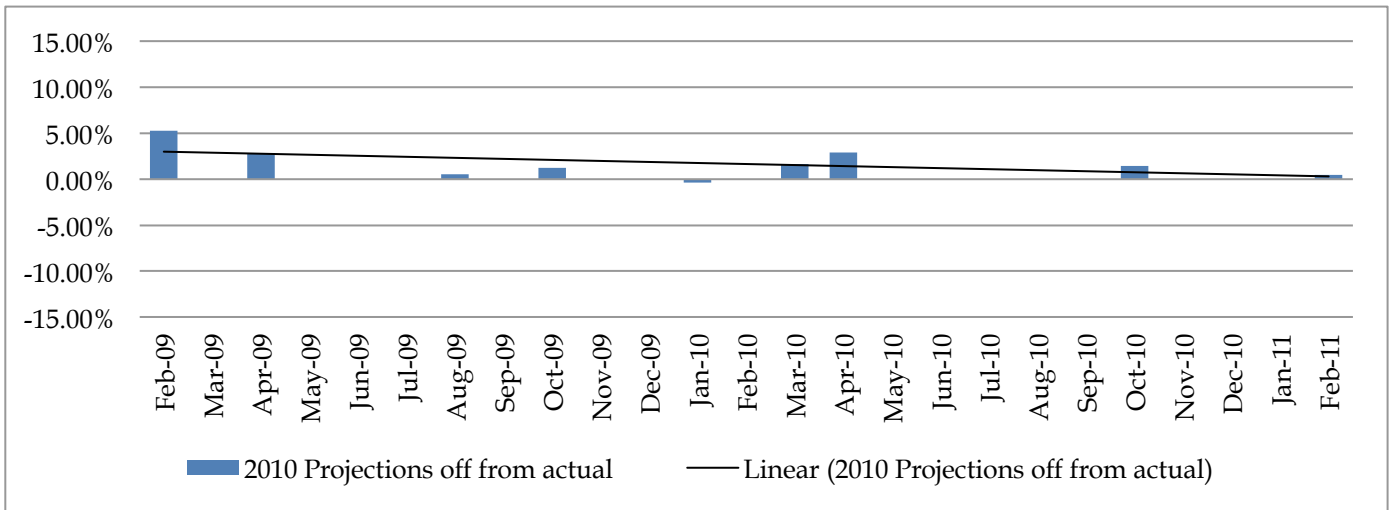
Source: Wachovia and subsequently Wells Fargo forecasts, reports by Timothy Conder 2007-2011, and Hasbro 10-k’s. Sourced from Thomson One Banker database October/November 2011.

**Exhibit 8: Analysis of 2009 Projections**



Source: Wachovia and subsequently Wells Fargo forecasts, reports by Timothy Conder 2007-2011, and Hasbro 10-k’s. Sourced from Thomson One Banker database October/November 2011.



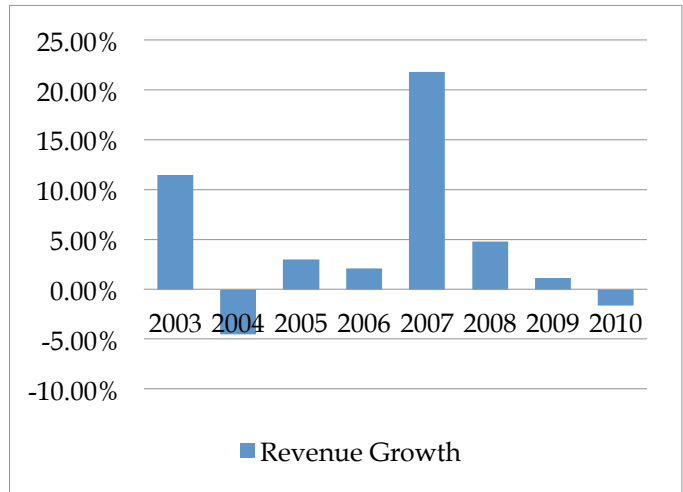
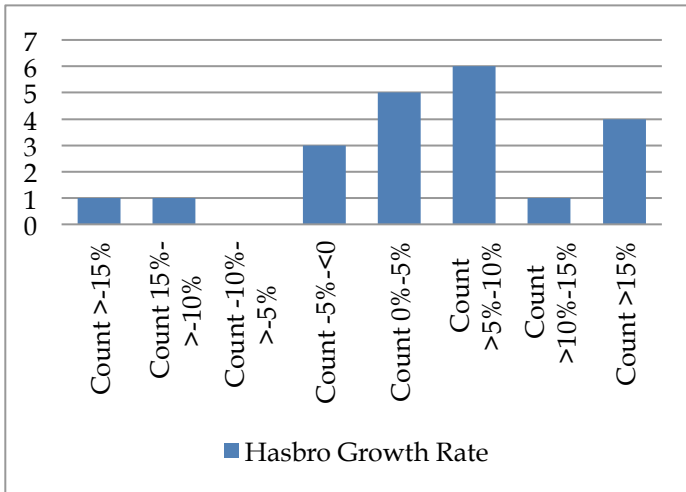
**Exhibit 8: Analysis of 2010 Projections**


Source: Wachovia and subsequently Wells Fargo forecasts, reports by Timothy Conder 2007-2011, and Hasbro 10-k's. Sourced from Thomson One Banker database October/November 2011.

Based on this information, we turn to this analyst's projections for 2011 and 2012 revenues. For 2012, the analyst forecasts \$4,573mm, which we discount by 3.96%, the "off-target-one-year-out-premium" that is the average amount revenue forecasts are off target when made in October one-year out. This leaves us with 2012 revenue of \$4,392mm. For 2011 revenue, we used the analyst's most recent forecast of \$4,437mm, which was indicated to be unchanged as of October 2011, and discount it by 1.83%, which is the average amount the analyst has over predicted the final fiscal year revenue by October of that same year, leaving 2011 revenue at \$4,356mm.

We then subtracted \$65mm for increases in the USD against international currencies. The appreciation of USD has cost Hasbro \$65mm in 2010, but the continued crises in Europe throughout 2011 suggests that the continued appreciation of the USD against EUR of about 5% in the past year will have a small effect on Hasbro's revenue. China's Premier Wen Jiabao also released a statement in early November noting China's intention of allowing the Yuan to appreciate at a faster rate, but we do not believe it will counteract our European currency deflation in 2011. Finally, we subtracted a 2% absolute value off revenue growth for 2011 and 2012, as these forecasts were made when pricing pass-through was 6-8%, and in September 2011, prices have fallen about 2% due to pre-holiday liquidation of remaining high levels of inventory, leaving estimated 2011 revenue growth at \$4,211 mm.

After 2 years of relatively flat revenue growth, 2011 revenue growth of 5% seems high. However, from a very high level, a growth rate of 5% is certainly within the normal range for Hasbro. Since 1990, the number of years revenue growth has fallen in the 5% to 10% range is greater than the amount of years that revenue growth falls in any other 5% range. The standard normal curve below has a mean of 5.82% and a standard deviation of 14% (n=20).



Source: Chaner Capital Estimates from Hasbro 10-Ks.

Furthermore, Hasbro’s 2010 revenue fell from 2009 revenue not due to an absolute lack of sales, but a relative lower sales year compared to strong 2009 entertainment related sales. As Hasbro’s latest 10K notes, “the decrease in net revenues in 2010 was primarily due to decreased revenues in the boys’ toys category, primarily as a result of decreased sales of TRANSFORMERS and G.I. JOE products. The 2009 sales of these lines benefited from the theatrical releases of TRANSFORMERS: REVENGE OF THE FALLEN in June 2009 and G.I. JOE: THE RISE OF COBRA in August 2009.”

This illustrates the strong effect these items had on 2009 sales. In 2011, we believe Hasbro will perform better than 2010 due to the release of the third Transformers movie, and three strong Marvel movies compared to only one theatre release in 2010. In 2012 Hasbro will also benefit from five blockbuster movies, which it is producing in partnership with Paramount Studios. As a point of information, Viacom International, which owns Paramount, has traded up after earnings release on November 11, 2011.

In 2009 the industry saw sales decline between 7-9%: Hasbro’s largest competitor and peer, Mattel, saw revenues decline by 8%. On the other hand, Hasbro saw revenues increase by 1.15% - a spread differential of 8-10% in favor of Hasbro. As we predicted in our 11/04/11 valuation of Mattel a revenue growth for Mattel of only 1.4%, it would be very possible for Hasbro to experience a differential of 4% in favor of Hasbro due to strong entertainment-based toy revenue.

We do not believe that a 5% 2011 revenue growth represents a real 5% growth in toy sales or an increase in Hasbro’s market share over Mattel. We believe that around 1-2% of that increase will come from increased spending on entertainment-related toy sales. We arrived at this figure by looking at the increased population rates in the US of the 0-14 age group by 3.16% per year.

The same age group internationally is growing at 0.48%. If we weight these growth rates by Hasbro's 2010 US/International sales splits, we achieve a 2% growth rate globally of the 0-14 age group. Hasbro's management has also commented that they expect a different US/International mix for 2011 entertainment revenue than in 2009. They are anticipating stronger sales rates internationally than in the US in 2011 as compared to 2009 for entertainment revenue streams like their Transformers toy line, due to Hasbro's international expansion efforts and new Transformers products releases overseas, which leads us to the 1-2% increase. This projection is also supported by our previous prediction of 2011 global disposable income growth of 1.65% (see Chaner Capital's Toy Industry report). The remainder of revenue increases comes from 2011 price increases of ~6% throughout the year, offset by a recent September toy price decline of around 2% (to counter a ~4% price increase in cost of goods sold)<sup>1</sup>. For our view on how video games and social media competition might affect future toy industry revenues, please see the "terminal value" section.

**Exhibit 9: List of Toy Industry Entertainment Properties**

<u>Film/Character Title</u>	<u>Film Format</u>	<u>Release Date</u>	<u>Studio</u>	<u>IP Owner</u>	<u>Major Toy Licensee</u>
<b>2007</b>					
Ghost Rider	Live Action	2.16.07	Marvel	Marvel	Hasbro
Spiderman 3	Live Action	5.04.07	Sony	Marvel	Hasbro
Fantastic Four: Rise of the Silver Surfer	Live Action	6.15.07	Marvel	Marvel	Hasbro
Ratatouille	Animation	6.29.07	Disney/Pixar	Disney/Pixar	Mattel
Transformers	Live Action	7.04.07	Paramount	Hasbro	Hasbro
<b>2008</b>					
Transformers	Animation Series	1.02.08	Cartoon Network	Hasbro	Hasbro
Spiderman	Animation Series	3.01.08	Sony	Marvel	Hasbro
Iron Man	Live Action	5.02.08	Paramount	Marvel	Hasbro
Speed Racer	Live Action	5.09.08	Warner Bros.	Warner Bros.	Mattel
Indiana Jones	Live Action	5.22.08	Paramount	Paramount	Hasbro
Kung Fu Panda	Animation	6.06.08	DreamWorks	DreamWorks	Mattel
The Incredible Hulk	Live Action	6.13.08	Marvel	Marvel	Hasbro
Batman: The Dark Knight	Live Action	7.18.08	Warner Bros.	Warner Bros.	Mattel
STAR WARS: Clone Wars	Cinematation Film	8.15.08	Warner Bros.	Lucas	Hasbro
STAR WARS: Clone Wars (Season 1)	Animation Series	10.03.08	Warner Bros.	Lucas	Hasbro
Batman: The Brave and the Bold	Animation Series	11.14.08	Warner Bros.	Warner Bros.	Mattel
Punisher: War Zone	Live Action	12.05.08	Lionsgate	Marvel	Hasbro
<b>2009</b>					
X-Men Origins: Wolverine	Live Action	5.01.09	Fox	Marvel	Hasbro
Transformers 2	Live Action	6.24.09	Paramount	Hasbro	Hasbro
GI Joe	Live Action	8.07.09	Paramount	Hasbro	Hasbro
STAR WARS: Clone Wars (Season 2)	Animation Series	10.01.09	Warner Bros.	Lucas	Hasbro
Toy Story & Toy Story 2 (3D Re-release)	Animation	10.02.09	Disney/Pixar	Disney/Pixar	Mattel
The Princess and the Frog	Animation	12.25.09	Disney/Pixar	Disney/Pixar	Mattel
<b>2010</b>					
Iron Man 2	Live Action	5.07.10	Paramount	Marvel	Hasbro
Toy Story 3 (3D)	Animation	6.18.10	Disney/Pixar	Disney/Pixar	Mattel
Transformers 2	Animation Series	TBD 2010	?	Hasbro	Hasbro
GI Joe	Animation Series	TBD 2010	?	Hasbro	Hasbro
STAR WARS: Clone Wars (Season 3)	Animation Series	10.01.10	Warner Bros.	Lucas	Hasbro
Rapunzel (3D)	Animation	11.12.10	Disney/Pixar	Disney/Pixar	Mattel
<b>2011</b>					
Thor	Live Action	5.06.11	Paramount	Marvel	Hasbro
Pirates of the Caribbean 4	Live Action	5.20.11	Disney	Disney	Disney
Kung Fu Panda: The Kaboom of Doom	Animation	6.03.11	DreamWorks	DreamWorks	Mattel
Green Lantern	Live Action	6.17.11	Warner Bros.	Warner Bros.	Mattel
Cars 2 (3D)	Animation	6.24.11	Disney/Pixar	Disney/Pixar	Mattel
Transformers 3	Live Action	7.01.11	Paramount	Hasbro	Hasbro
The First Avenger: Captain America	Live Action	7.22.11	Paramount	Marvel	Hasbro
Green Lantern	Animation	Nov 2011	Warner Bros.	Warner Bros.	Mattel
The Bear and the Bow (3D)	Animation	12.25.11	Disney/Pixar	Disney/Pixar	Mattel
<b>2012</b>					
Star Wars: The Phantom Menace (3D Re-release)	Live Action	Feb 2012		Lucas	Hasbro
The Avengers	Live Action	5.04.12	Disney	Marvel	Hasbro
Battleship	Live Action	5.18.12	Universal	Hasbro	Hasbro
Madagascar 3 (3D)	Animation	5.25.12	Paramount		
Star Trek 2	Live Action	6.29.12	Paramount		
Spiderman 4	Live Action	7.03.12	Sony	Marvel	Hasbro
GI Joe 2	Live Action	?	Paramount	Hasbro	Hasbro
Batman: 3	Live Action	7.20.12	Warner Bros.	Warner Bros.	Mattel
Monsters, Inc. 2	Animation	11.16.12	Disney/Pixar	Disney/Pixar	Mattel
<b>2013</b>					
Stretch Armstrong	Live Action	TBD	Universal	Hasbro	Hasbro
Iron Man 3	Live Action	May 2013	Disney	Marvel	Hasbro
X-Men Origins: Magneto	Live Action	TBD		Marvel	Hasbro

Source: Disney/Pixar, Hasbro, Marvel, Mattel, and Wells Fargo Securities, LLC

## 2. Depreciation and Capex

- **2011 Depreciation and Amortization: \$163.0mm**
- **2012 Depreciation and Amortization: \$157.9mm**

Over the past 5 years, D&A as a percent of last year's ending PPE, goodwill and other intangibles has bounced around between 11% and 14%. In order to project forward, we have taken a 5-year historical average of this percentage off of projected prior year ending net PPE, Goodwill and other intangibles (all intangibles held at a management guidance for ~\$50mm amortization/year through 2015) are accounted for at 13.5%.

In order to calculate net PPE, we made an assumption about future capex. Since 2004, management has provided annual projections of next-year's capex, and from 2004 to 2007 the final capex figure has been within management's prior year projections. In 2008 and 2009 management spent around 4% and 2% more than their targets, while in 2010, management spent around 6% less than their target. To project capex in 2011 and beyond, we made the assumption that management will be -0.03% off target-the average hit/miss from 2004 to 2010 - basically just on target. Management provided target guidance for 2011 capex, and for 2012 and beyond we used a 3-year average plus a small growth rate premium of 2.3% (the capex CAGR growth rate 2008-2011) to project capex. We can then project net PPE and calculate our D&A figures.

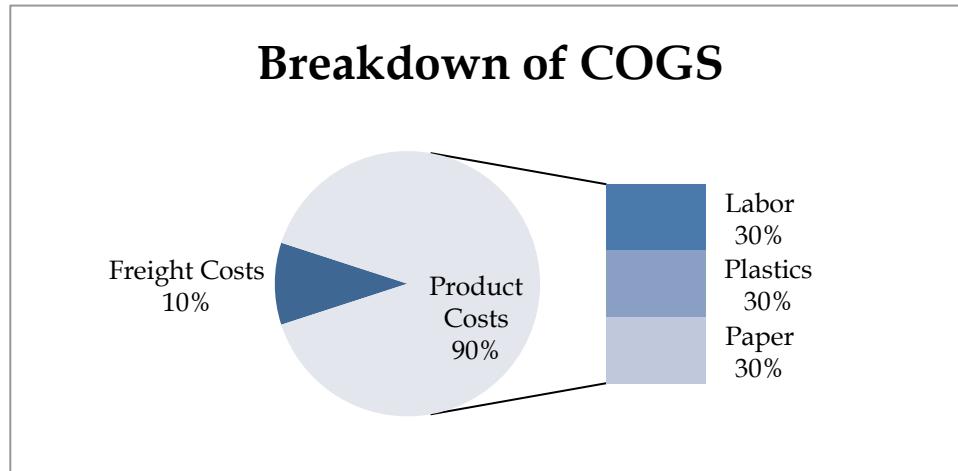
### 3: EBIT (note: EBITDA is backed into by calculating D&A and EBIT)

In order to calculate EBIT we projected cost of goods sold, and other SG&A.

#### 3a. Cost of Goods Sold

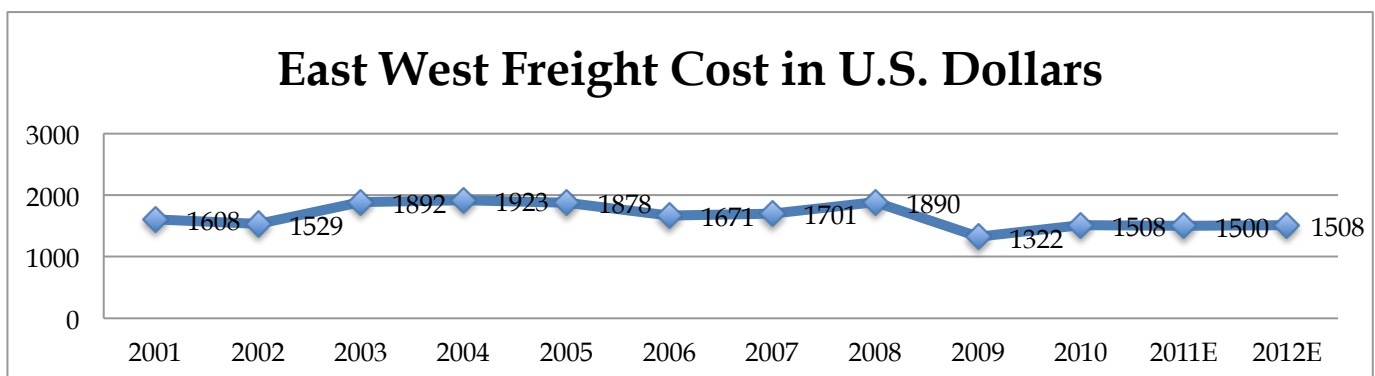
- **2011 effective COGS growth rate: 6.4%**
- **2012 effective COGS growth rate: 4.8%**

To determine cost of goods sold moving forward, we looked two major cost components in toy manufacturing: (a) product costs and (c) freight and logistics Fees. Hasbro has provided some guidance as to their COGS breakdown, and based on a historical assessment of Hasbro's 10-K reports, we understand that freight and logistics expenses generally account for 10% of total COGS. As for product costs, Hasbro has also highlighted that paper, labor, and plastic prices constitute the majority of product costs, at approximately 30% of total COGS each.



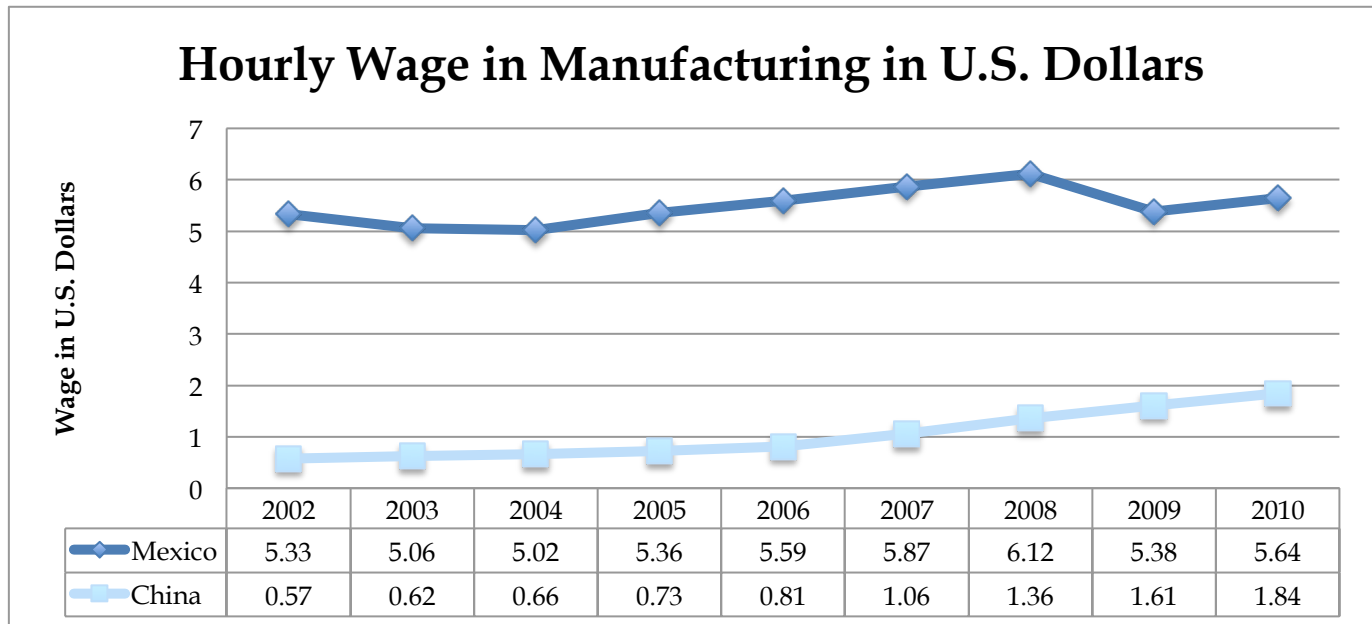
Source: Hasbro Investor Presentation, October 2011, Chaner Capital Estimates.

To calculate freight costs, we looked at the historical data provided by the United Nations Conference on Trade and Development (UNCTAD)'s Review of Maritime Transport annual reports from 2001. Given that Hasbro has significant manufacturing facilities in China, we decided to focus on container freight rates for the East West Route, based on a standard Forty-Foot Equivalent Unit (FEU), and found a 0.7 correlation with COGS increase. 2011 data already has indicated flat growth from 2010 as overall freight traffic has declined, and we expect this to continue in 2012 for a number of reasons: the slowing of global economy has dampened consumer sentiment, and moderately reduced the demand for international trade. More significantly, the shipping and freight industry had increased capacity from 2009 to 2010 in anticipation of a global recovery after the 2008 financial crisis, but this has yet to materialized as the threat of a double dip recession continues to loom. Our analysis also highlights that freight companies are considering lowering freight and logistics prices in 2012 to spur demand for transportation services. We do not believe that prices will dip significantly given that the industry has already suffered from distressed freight rates for a number of years since 2008, but rather will stay flat in 2011, 2012.



Source: UNCTAD Review of Maritime Transport 2001-2011

For labor costs, we used data from the U.S. Bureau of Labor Statistics, which monitors changes in international wages in the manufacturing sector. Given that Hasbro manufactures its products primarily in China and in Mexico, we decided to focus on these two countries, and looked at changes in hourly wage rates since 2002.

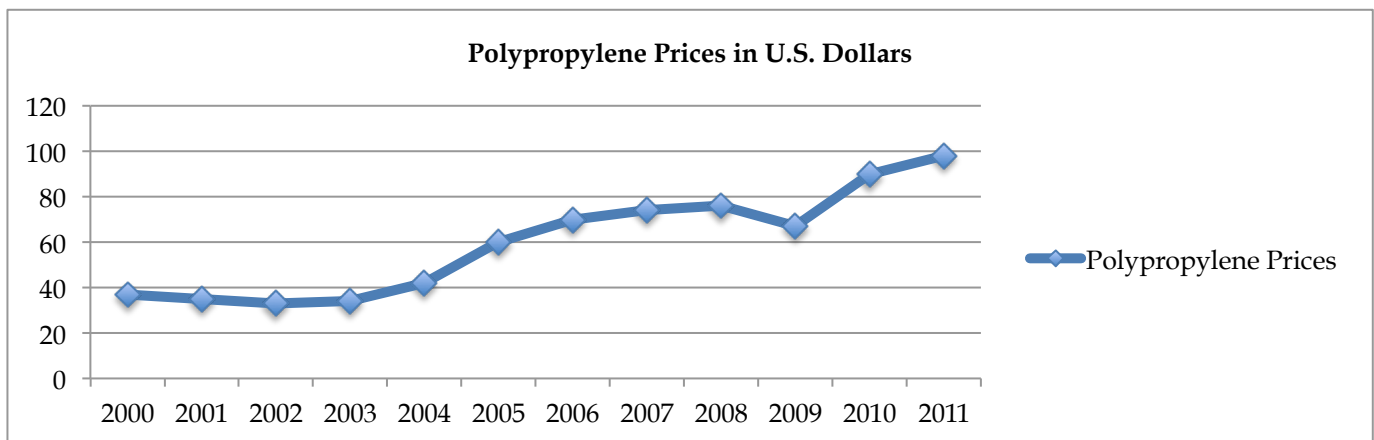


Source: U.S. Bureau of Labor Statistics, <http://www.bls.gov/fls/home.htm>.

With the exception of 2008, we found that Mexican labor has been averaging a 5% wage increase since 2004, while China has been averaging a 15% wage increase over the same period. We believe that this trend is likely to continue for the following reasons: the Chinese government has just mandated a 22.8% increase in the minimum wage, and has signaled its intention to grow wages at this figure over the near term to bring wages in line with inflation rates. Like its competitors, Hasbro is concerned about this trend, and management has indicated that this increase in labor costs over the coming years will be a significant pressure on COGS. Nonetheless, we do not think that labor costs will increase by that much as Hasbro is able to redistribute production fairly easily to other production centers in Mexico and Vietnam. Moreover, labor increases have historically not flown completely through. By combining the average increases in Mexican and Chinese labor, we project wages to rise by approximately 9% in 2011, 9% in 2012 given the relatively constant rate of increases due to active government policy on wage rates in both these countries.

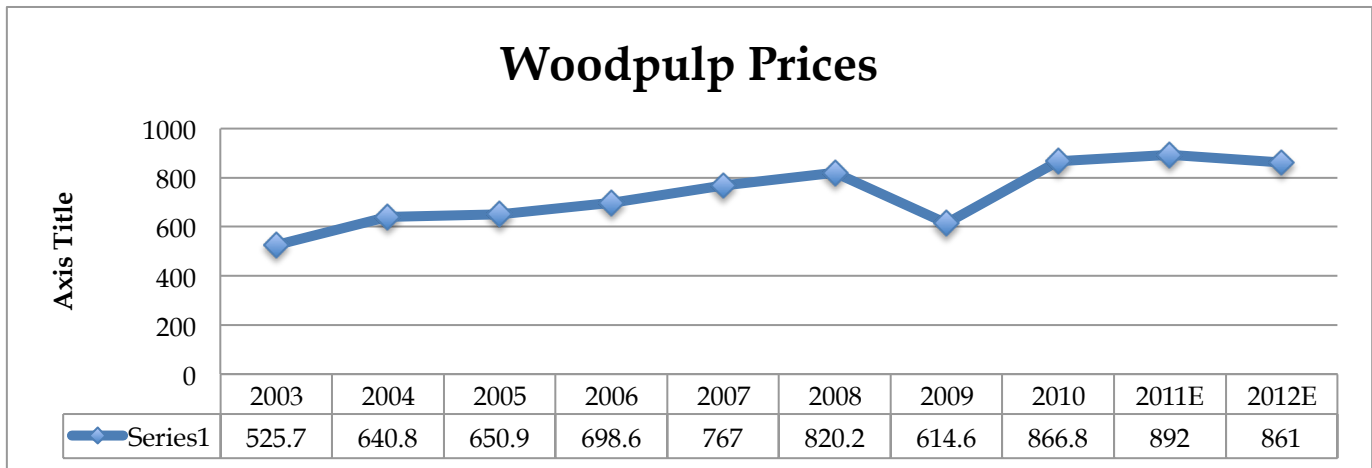


For plastics, we looked how polypropylene prices have changed from 2000 to 2011, and found that there is a moderately strong correlation of 0.8 with change in COGS. On average polypropylene prices have increased by 10.5% over the past ten years, and in 2011, prices have increased by 9% year-to-date, allowing us to believe that the total 2011 polypropylene prices will increase by the same amount. To project plastic prices in 2012, we looked at the relationship between polypropylene prices and changes in global GDP, given how often commodity prices move in tandem with changes in global output. From 2000-2011, increases in plastic prices have also shown a strong correlation of 0.75 with global GDP, and we therefore used projected 2012 GDP estimates provided by the World Bank (as explained above) to forecast polypropylene prices, according it a figure of 10%, which is also in line with the 10 year price increases in this market. Growth in polypropylene prices have also been fairly consistent with this 10% figure during similar GDP periods, giving us the confidence to use projected GDP as a predictor.



Source: PlasticsNews, [www.plasticsnews.com](http://www.plasticsnews.com)

For paper, we researched the type of paper cardboard commonly used by toy manufacturing companies, and discovered that they tend to purchase wood-pulp. We then looked at how wood-pulp prices have changed from 2003 to 2011, and used data from the World Bank’s Commodity Price Data. We found that prices have increased at around 8% per year on average, but were skeptical about this figure for 2011 and 2012. We then turned to the CME Group’s projections for wood-pulp prices, as the CME Group is one of the largest trading hubs for wood pulp. Given increased global demand in the first two quarters of 2011, commodity prices had increased, but have now tapered by the slowdown in the global economy. Based on the CME data, we found that wood-pulp prices have increased by 3.0% year-to-date as a result, and we are comfortable using this figure to project wood-pulp prices for 2011. As for 2012, the CME Group predicts that the uncertain global economy will depress demand for wood pulp, leading to a -3.5% drop in prices as manufacturers cut back on production. Given the CME Group’s accuracy in predicting previous wood-pulp price movements, we have decided to use this number for 2012.



Source: World Bank Commodity Price Data 2003-2011, CME Group Projections

Based on these assumptions, we projected a 6.4% COGS increase in 2011, and a 4.8% increase in 2012.

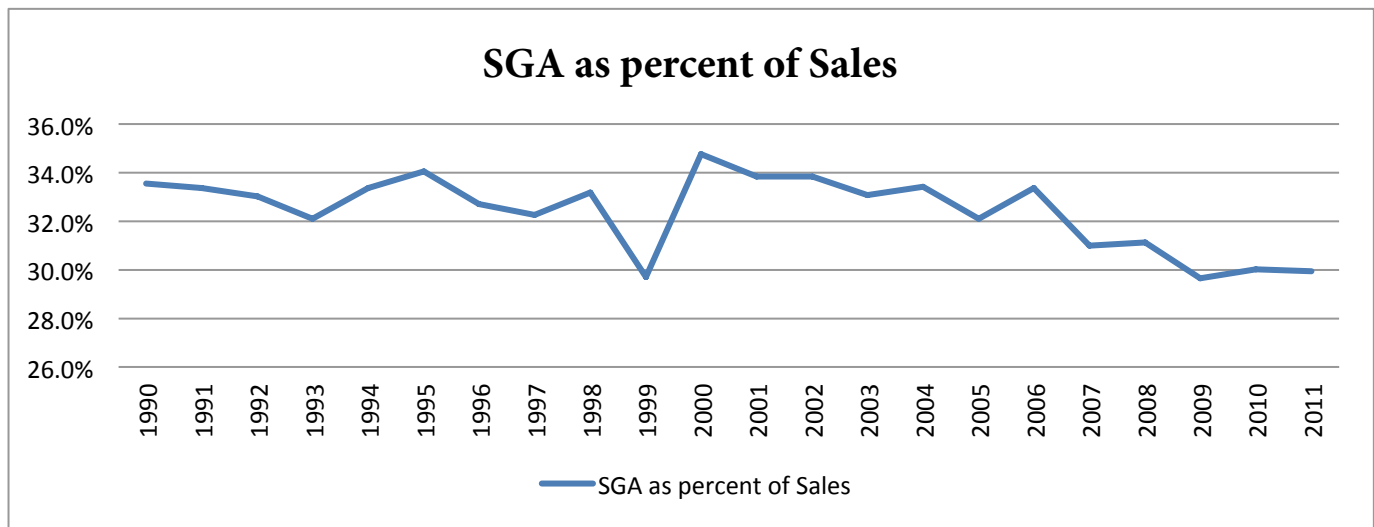
Income Statement Inputs	<u>2011</u>	<u>2012</u>
Sales growth rate	5.2%	0.4%
Gross margin (2011, 2012)		
Cost of Good Sold growth rate	6.4%	4.8%
Labor Cost growth rate	9.2%	9.2%
Plastic Price growth rate	9.0%	10.0%
Paper Price growth rate	3.0%	(3.5%)
Chinese Yuan appreciation rate	3.5%	3.5%
Freight Cost growth rate	0.0%	0.0%
SG&A expenses (as a % of COGs)	60.0%	60.0%
Effective tax rate 2011-2012 (Step is 2013 ->)	22.0%	30.0% <sup>↑</sup> (2013)
<b>DCF Inputs</b>		
Market Value as of 11/18/11	\$4,650.0	

### 3b. Other SG&A

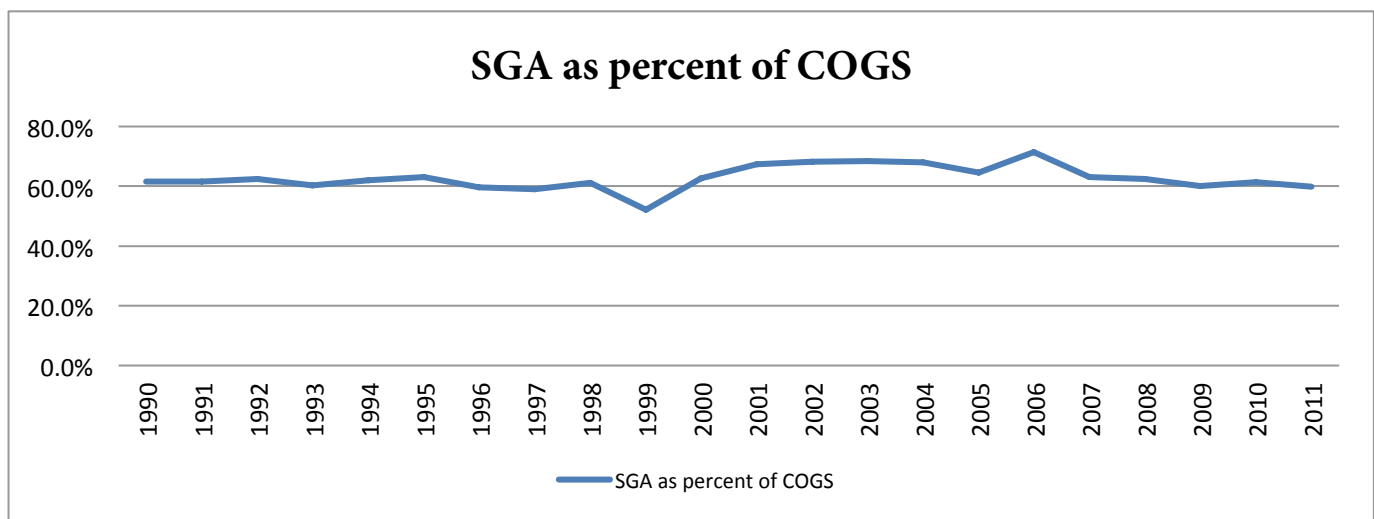
- **2011 SG&A: 60% of COGS**
- **2012 SG&A: 60% of COGS**

SGA as a percent of sales has generally been decreasing since the tech bubble burst at the beginning of the decade from ~35% of sales to ~30% of sales. The cause is due to Hasbro's cost reduction platforms over time. Most recently, cost reduction has continued as a result of decreased shipping and distribution costs as well as lower advertising and marketing costs. Lower advertising and marketing costs are a result of Hasbro's strong media-toy (movie licensing and television HUB station) reliance that requires less direct advertising than boys and girls toy and gaming.

Although management has previously mentioned cost cutting schemes, they do not provide continuous guidance on target program cuts, target costs as a percentage of sales, or other metrics that might help us determine whether SG&A would continue to decline slowly or whether 30% of sales is a floor figure. Therefore, we have coupled SG&A to COGs in an attempt to make a more accurate projection. SG&A as a percent of COGs appears to trend around 60%, and there is a larger peak to trough range of lower 50% to 70%. However, prior to and after those periods, 60% acted as a strong reversion to the mean, encouraging us to peg SG&A at 60% of COGs.



Source: Capital IQ; Individual Company SEC 10-Ks, Hasbro Quarterly Transcripts



Source: Capital IQ; Individual Company SEC 10-Ks, Hasbro Quarterly Transcripts

#### 4. Effective Tax Rate

- **2011/12 Effective Tax Rate: 22.0%**
- **2013 Effective Tax Rate: 30.0%**

At the end of 2010, Hasbro continued to have claim to \$91mm of unrecognized tax benefits, of which \$77mm would decrease the effective tax rate to slightly lower than at the end of 2009. In 2010, Hasbro took advantage of \$22.3mm in tax benefits and recognized an effective tax rate of ~22%. If Hasbro continues to recognize tax benefits at a similar rate, the company would likely be able to maintain a 22% effective tax rate for another two years. At that point we make an assumption that the effective tax rate would increase to 30%; the average of the 2009 and 2008 period.

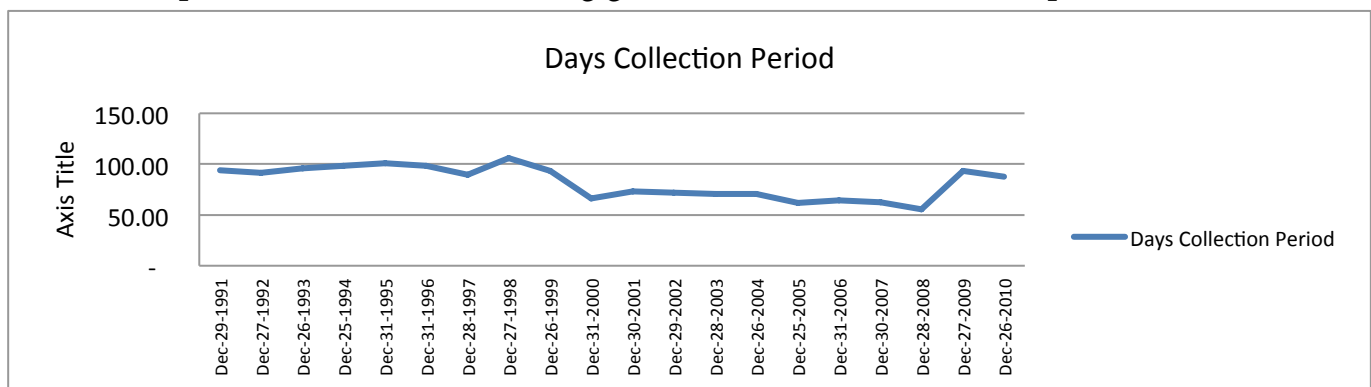
#### 5. Changes in Working Capital

- **2011: \$178.1mm / 2012: -\$62.2mm**

The following sections walk through the current assets and current liabilities used to generate the 2011 and beyond changes in working capital. The result is a 2011 increase in working capital of \$178.1mm, and 2012 decrease in working capital of \$62.2mm.

#### 5a. Accounts Receivable

Hasbro's accounts receivable days to collection period declined from 2000 to 2008 from 72 days to 55 days, peak to trough. This decline was likely due to Hasbro's growing strength as a toy manufacturer, and the strengthening economic conditions of large retailers toy purchasers. In 2009, day's collection period spiked up 93 days but has since begun to decline again. We believe that days collection period will continue to decline slowly as the economy stabilizes over time. Therefore we project forward the days collection period at a similar declining growth rate to the 2001-2008 periods.

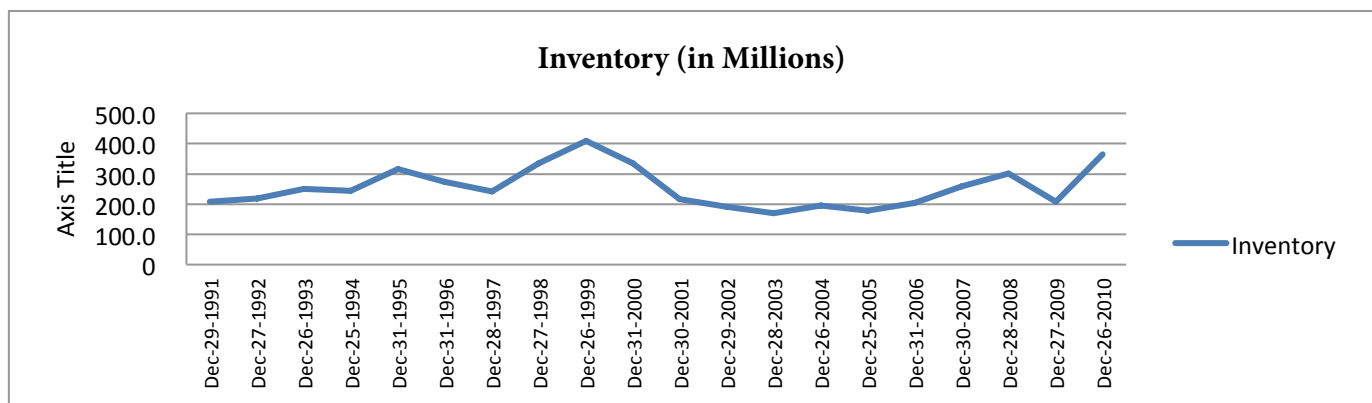


Source: Capital IQ; Individual Company SEC 10-Ks, Hasbro Quarterly Transcripts

## 5b. Inventories

- **2011: \$217.7mm / 2012: \$ 281.8mm**

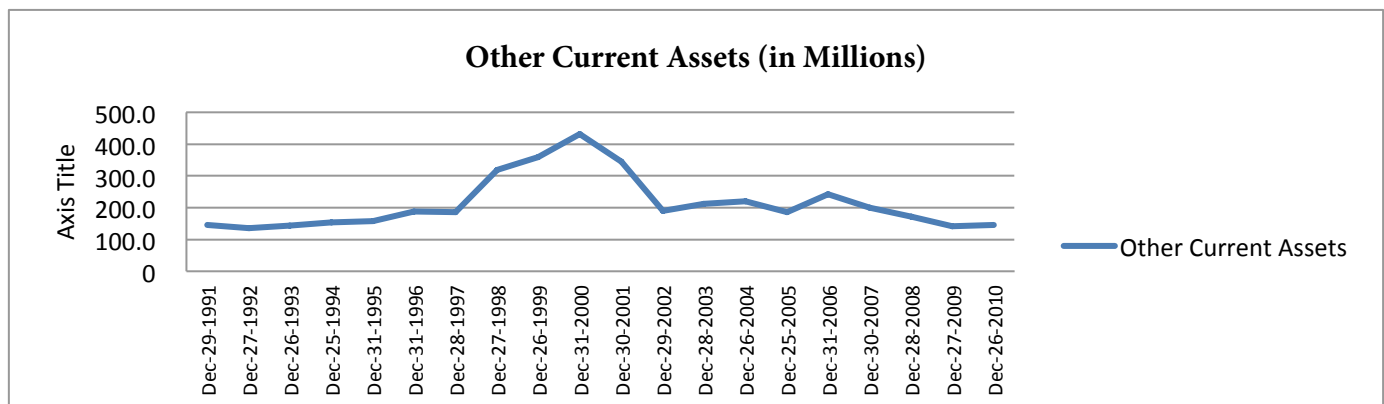
During 2008, inventories spiked up moderately due to an accelerated drop in demand as market uncertainty unfolded, but in 2009, Hasbro made an effort to spend down the inventory. In 2010, inventory was built up again as the market rebounded, but due to a lower than expected holiday season partially affected by poor weather in Europe, inventories ended up being too high. 2011 was another year of spending down inventory, and we believe that retailers will be very cautious moving into the holiday season. As a result, toy manufacturers will likely keep inventory on the lower side to sustain prices and demand. Therefore, we took an average of inventories from 2003 through 2008, which we believe represents a lower inventory period, to forecast 2011. As for 2012, we expect inventory to increase again due to better markets, and have used the average of 2006-2008 and 2010 to forecast 2012.



Source: Capital IQ; Individual Company SEC 10-Ks, Hasbro Quarterly Transcripts

## 5c. Other Current Assets

Other Current Assets is carried forward at a 5-year rolling average.

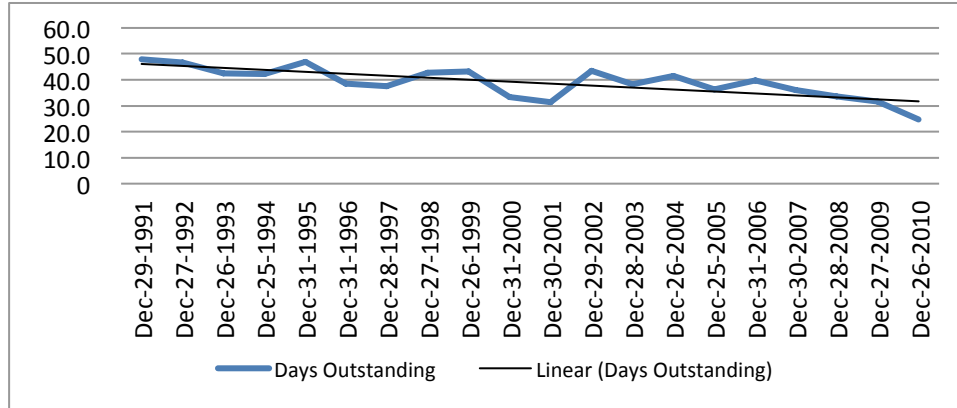


Source: Capital IQ; Individual Company SEC 10-Ks, Hasbro Quarterly Transcripts

## **5d. Accounts Payable**

Accounts payable days outstanding have taken on a linear decreasing trend beginning with 48 days in 1991 (first year of data) to 25 days in 2010. This is an overall decrease of (48.5%) over 20 years, or a CAGR of -1.22% per year. Due to the linearity in the trend line of accounts payable days outstanding, we used this CAGR to project forward accounts payable in 2011-2015.

**Exhibit 10: Days Outstanding**



Source: Capital IQ; Individual Company SEC 10-Ks, Hasbro Quarterly Transcripts

## **5e. Accrued Liabilities**

Accrued liabilities are projected forward using historical averages. 2011 is projected using a 3-year historical average to maintain time-period trends, 2012 is projected using a 5-year historical average to better represent a range of possibilities, and 2013, 2014 and 2015 are projected using 7-, 10- and 20-year historical averages.

## **5f. Other Current Liabilities**

Prior to 2007, our other current liabilities bucket included a cache of warrants held at fair value of a most recent valuation of \$155mm. Post 2007, our other current assets bucket consists of deferred tax liabilities that are de-minimis.

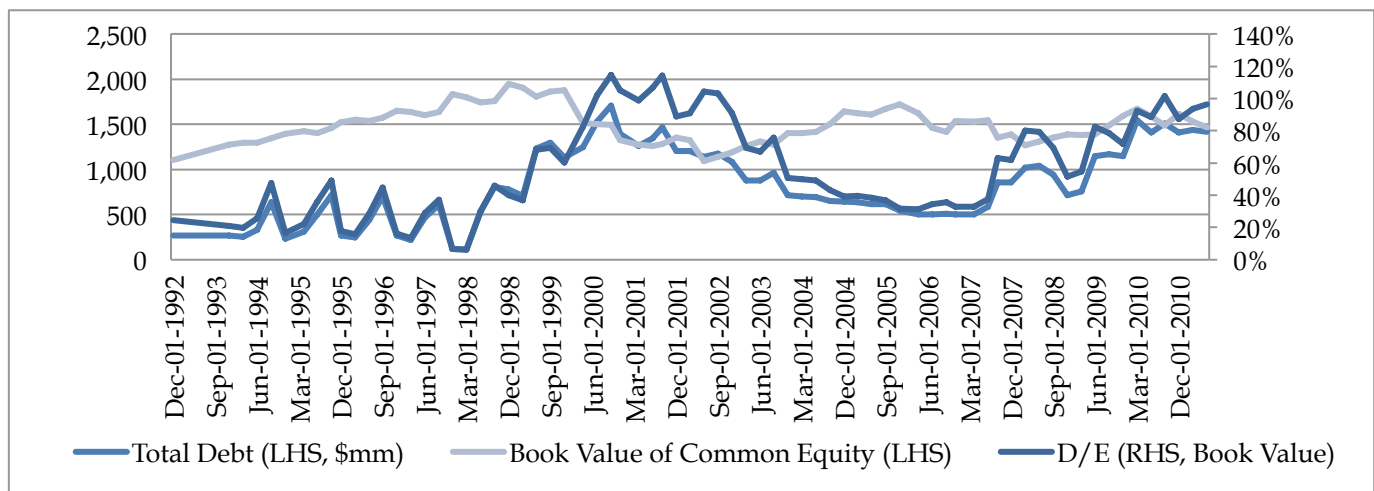
## **6. APV Method**

We used the APV method to calculate present value. Hasbro's total debt peaked in 2000 at around \$1.7bn, but until mid 2007, Hasbro has paid down debt significantly. At that time, management indicated in their 10-K that they would continue to review the amount of long-term debt as part of a capital structure strategy of maintaining a debt/cap ratio between 25% and 30%.

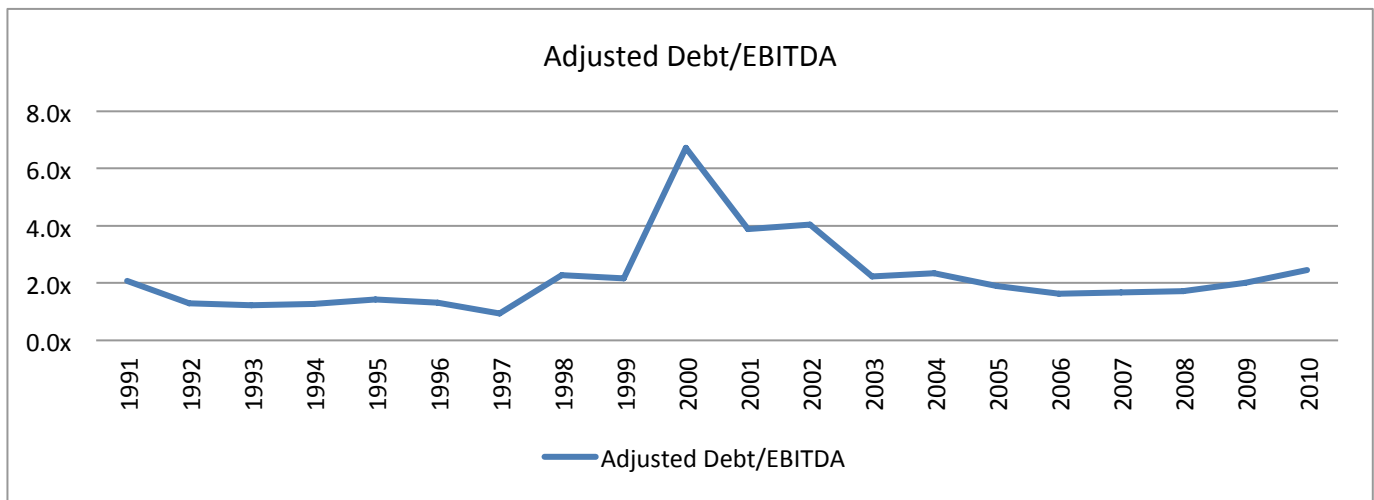


From 2008-2010 the debt/cap ratio has actually been, on average, between 40% and 50% (using book value of debt and equity\*) due to increased levels of long-term debt (\*using book value of debt and market value of equity Hasbro’s ratio would have been around the 20% to 30% range during this period. However, given that market values of equity are a variable that will adjust with our findings; we don’t find it appropriate to use this calculation). We therefore turned to a leverage ratio calculation to grow debt rather than a consistent debt/cap ratio.

In 2001, Hasbro was rated a BB+, one grade below an investment grade rating, and Hasbro’s leverage (debt/EBITDA) was around 4.0x. In 2008, the company was rated BBB while in 2011, S&P upgraded Hasbro’s corporate rating to BBB+. S&P rates Hasbro’s business risk as satisfactory, a common rating, which means that in order for Hasbro to be upgraded to an A- category, leverage would likely have to be sustained below 1.5x. While this is possible for Hasbro, it does not seem likely at the moment, or even a specified target. The adjusted debt/equity ratio Hasbro has maintained has not been sustained at the 1.5x level since the early 1990’s, and more recently, Hasbro’s management seem quite content with maintaining a leverage ratio around 2.0x, which is certainly acceptable given the company’s investment-grade rating. Given no indication of debt plans in recent transcripts or filing, we have no reason to believe that management would do anything but continue to maintain a stable leverage ratio given the recent upgrade to BBB+. In fact, should Hasbro maintain a leverage ratio sustained above 2.5x or more towards 3.0x, they might even risk a downgrade. As a result, we assume a constant off-balance sheet percent adjustment and grow long-term debt levels consistent with the growth in Hasbro’s EBITDA in order to maintain a leverage ratio of 2.0x. We acknowledge that if we are correct that Hasbro will grow debt as EBITDA grows, then the company’s tax shield will have a beta to the market, and should therefore be discounted at a higher discount rate than our current discount rate. However, given the small value of our tax shield, this would not have an effect on our valuation of Hasbro.



Source: Capital IQ; Individual Company SEC 10-Ks, Hasbro Quarterly Transcripts



Source: Capital IQ; Individual Company SEC 10-Ks, Hasbro Quarterly Transcripts

## **6b. Inputs for the Discount Rate and Terminal Growth Rate**

**Cost of Debt:** The return on debt was calculated by identifying the average total return on a blend of BBB and A rated corporate debt from the BofA Merrill Lynch Total Return Indices, weighted at 75% and 25% to estimate a BBB/BBB+ rating return to project a return on Hasbro’s debt at this rating at present. The return comes out as 5.8%, while the listed average yield on Hasbro’s debt is 6.3%.

The risk free rate is the 10-year US treasury rate average of the forecast for 2011-2015. The forecast for 2011-2015 are calculated as 5-year averages of slow growth periods with yields rising slowly over this period back to ~3.5%. The average yield we used for analysis is 2.47%, which is higher than the 2011 current yield at the time of the report of ~2.01%.

The beta of debt is backed into using the cost of capital formula and is 0.44.

**Equity beta:** Hasbro’s historical equity beta is 0.85. This is the beta since 2005, which we used in order to maintain consistency with the beta we used in our Mattel report. In that report, we used a beta since 2005 as we felt the stock was beginning to price in effective management changes during that time. We feel that as Mattel’s largest competitor, Hasbro’s stock most likely responds to changes in Mattel’s strategy. In fact, we do find a slightly higher correlation with Hasbro and Mattel stock since 2005 than over a longer timeframe since 1995. Hasbro’s beta in longer time frames was not very different than since 2005 – at 0.87. Although the equity beta since Hasbro’s CEO change in 2008 has been 0.75, we do not believe this beta is the most appropriate due to the circumstances of the market over this period of time. Our levered equity beta is then unlevered to find an unlevered return on assets to discount our unlevered FCF, giving us the unlevered beta of 0.67.

Return on equity (unlevered return on assets): Using the cost of capital and unlevered beta, we calculated our unlevered cost of equity to be 7.5%. This differs from a levered return on equity which would be 8.9% using a levered beta. Our free cash flows are then discounted using 7.5%.

Terminal Value & Future Competition: The terminal value should take into consideration Hasbro's future market positioning. At present, Hasbro is likely to gain slight market share within the toy industry due to its heavy reliance on media, entertainment and licensing, as board games and conventional toys begin to face real competition from video games and social media. Hasbro has been able to take advantage of the digital trend in order to keep their business innovative. In 2008, Hasbro signed a 5-year agreement (with a 4-year extension) with Electronic Arts for digital (video) games, which has allowed the company to adapt to the growing video game industry. This contract covers cell phone games (including digital versions of traditional board games), portable Nintendo, and other handheld games, internet games, and home-based console games. While it is not clear how much Hasbro earns in royalties from the EA relationship, some analysts believe it to be in the range of 15%-20% of EA's revenues on Hasbro's products. Hasbro also earns royalties on Activision-made video game products. These relationships help Hasbro maintain a stake in the video games and social media market within the toy and gaming industry. In fact, Hasbro's traditional board games are top selling applications on iTunes and Pogo.com<sup>1</sup>.

While it is a positive sign that Hasbro is able to adapt to the changing environment, digital gaming brings in 4x-5x less revenue than sales of the same games in traditional format<sup>1</sup>. Alternatively, numeric sales of these games are typically higher due to the ease of purchase. We believe that over the course of "perpetuity" it is probable that the traditional toy industry could shrink in relation to digital gaming and therefore the revenue growth average since 1994 of 2.87% (which represents the time period post settling into a more steady state growth period and does not include the early 90's revenue growth periods of ~40% and ~20%) should be discounted for declining overall sales as digital sales become a larger percentage of overall revenues. We cannot predict at what point video game and other digital industries will have a detrimental effect on the toy industry, but we agree that at some point during perpetuity the replacement of video games for some conventional toys will be evident. Given that this is not likely in the next few years, we have decided to discount the terminal value to represent a percentage of sales that will instead go towards video games in the future.

At present, given the cost of one video game on average being \$50, and assuming that this trend is really only prevalent in non-Asian countries where toy spend per child is already above the cost of video games, we use our analysis of a weighted North America, Europe and Australia toy spend per child of \$296 annually (excluding Asia) to determine that ~17% of the toy expenditure per child will be used eventually to purchase video games. However, we believe that Hasbro will clearly counter this trend by creating more digital media and game partnerships, and we thus apply this discount to what we estimate is revenue generated from conventional toys (75% of revenues). We then discount our terminal value perpetuity by that amount (~12-13%) to arrive at our true competitive enterprise value. This results in a terminal value of 2.5%. If we were to assume that Hasbro's steady state growth rate would not include any similarities to the historical revenue growth rates above 10%, and subsequent revenue declines of less than 10%, the average growth rate in perpetuity would be 2.36%, and 2.1% if the 13% video game discount is applied.

## **8. Enterprise Value and Equity Value**

Enterprise value of Hasbro is \$7,177mm. This is calculated by adding the present value of the pro-forma 2011-2014 cash flows and terminal value of cash flows, as well as the present and terminal values of the tax shield. Using Hasbro's 9/30 reported levels of debt and cash, we calculated an equity value for Hasbro of \$5,826mm. Using the diluted average number of shares found in Hasbro's most recent 10-Q release, we thus calculated Hasbro's target share price of: \$43.17, or ~20% undervalued.

## 3.1 Appendix

### Discounted Cash Flow Analysis for Hasbro

Dollars in millions, except per share

	FY Ending			FY Ending				
	2008	2009	2010	2011	2012	2013	2014	2015
x Sales	\$4,021.5	\$4,067.9	\$4,002.2	\$4,211.1	\$4,225.8	\$4,347.2	\$4,472.0	\$4,600.5
EBITDA	660.4	769.6	734.2	754.8	602.5	613.0	624.7	637.6
Less: D & A	166.1	181.0	168.4	163.0	157.9	153.5	149.9	147.1
EBIT	494.3	588.6	587.9	591.8	444.7	459.5	474.8	490.5
Less: Taxes @ 22.0%	(108.7)	(129.5)	(129.3)	(130.2)	(97.8)	(137.8)	(142.4)	(147.1)
x Tax-effected EBIT	385.6	459.1	458.5	461.6	346.8	321.6	332.3	343.3
Plus: Depreciation				163.0	157.9	153.5	149.9	147.1
Less: Capital expenditures				(125.0)	(125.4)	(127.3)	(128.9)	(130.1)
+/- Changes in working capital				178.1	(62.2)	(2.6)	23.8	21.8
x <b>Unlevered Free Cash Flow</b>				<b>\$677.7</b>	<b>\$317.1</b>	<b>\$345.2</b>	<b>\$377.1</b>	<b>\$382.2</b>
Unlevered Free Cash Flow Growth Rate					(53.2%)	8.9%	9.3%	1.3%
Period				0.5	1.5	2.5	3.5	
Present Value FCF				654	284	288	293	
Terminal Value								\$7,641.2
Present Value Terminal Value								\$5,930.5
Present Value TV after video game discount								\$5,179.6
Total Equity Value	\$6,698.4							
Debt Level (non-adjusted)	\$717.3	\$1,148.8	\$1,412.2	\$1,451.9	\$1,129.9	\$1,477.1	\$1,151.5	\$1,507.5
Tax Shield Value				\$18.5	\$14.4	\$18.9	\$14.7	\$19.2
Present Value Tax Shield (coc = cost of debt)				\$18.0	\$13.3	\$16.4	\$12.1	
Terminal Value Tax Shield								\$584.2
Present Value Terminal Value								\$479.5
Present Value TV after video game discount								\$418.8
Total Debt Value	\$478.5							
Pro forma Enterprise Value	\$7,176.9							
- Fair Value Current Outstanding Debt 9/30	1,538							
+ Current Outstanding Cash 9/30	187							
Pro-Forma Equity Value	\$5,825.8							
Diluted Shares 9/30	134.9							
Share Price a/o 11/18/11	\$36.03							
Target Share Price (long term)	\$43.17							
Under/Overvalued								<b>19.83%</b>

APV & Cost of Capital Data	
Amount of Debt (unadjusted) \$mm	1,538
MV of Equity	4,650
Current BV Equity	1,469
Effective Tax Rate %	22.0%
Return on Debt	5.8%
Return on Equity	8.9%
Unlevered Cost of Equity (rA)	7.5%
TV Growth Rate	2.5%
Return on [ ]	$rd = rfr + B(Mrp)$
Credit Rating	BBB/BBB+
Actual Average Yield	6.3%
Ave Total Return Corporates	5.8%
RFR	2.5%
Market Risk Premium	7.6%
Debt Beta	0.44
Equity Beta	0.85
Unlevered Asset Beta	0.67
Market Risk Premium:	
Consumer stock annual yield	4.6%
S&P Consumer 5-year return	5.5%
Total Equity Return	10.0%

#### Sources

9/30 release

Standard & Poor's Rating Service

Capital IQ

Federal Reserve Economic Data - Total return analysis 0.75 weighting "BBB" and 0.25 weighting "A"

Federal Reserve Economic Data 10-year treasury constant maturity

5-year historical average return for Powershares Consumer Discretionary ETF including the distribution yield

<b>Income Statement Inputs</b>	<b><u>2011</u></b>	<b><u>2012</u></b>
Sales growth rate	5.2%	0.4%
Gross margin (2011, 2012)		
Cost of Good Sold growth rate	6.4%	4.8%
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SG&A expenses (as a % of COGs)	60.0%	60.0%
Effective tax rate 2011-2012 (Step is 2013 ->)	22.0%	30.0% <sup>F</sup> (2013)
<b>DCF Inputs</b>		
Market Value as of 11/18/11	\$4,650.0	



## 4.1 Disclaimer

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### Important Disclaimer

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