Mattel, Inc.

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

While we expect the company to do moderately well in 2011 and 2012, we believe that the current stock price assumes a revenue growth rate that is significantly higher than expected holiday performance.

Key Investment Considerations

- Despite upside to revenue growth in 2011 and 2012, we believe that the challenging economic situation has dampened retailer and consumer sentiment, limiting Mattel's growth potential.
- Mattel has historically done better than its peers, and sizeable advertising expenditure will allow it to perform well in 2011 and 2012, but not enough to boost stock prices.
- We expect the holiday 2011 season to experience moderate sales figures, less than what current market price are reflecting
- The impact of rising labor and product costs will continue to increase the cost of goods sold, and affect total gross margins
- The looming \$310 million copyright settlement with MGA Entertainment, Inc. may be under accounted by the market
- Mattel continues to face industry competition from electronic products and digital media

Vital Statistics

Our Forecast: Over-valued by 13.8%

Conservative Forecast: Overvalued by 5.5% (higher margins with lower COGS)

Current Price: \$28.80 (of 11/4/2011)

52-Week Range: \$22.70 - \$29.40

Market Capitalization: \$9.75 billion

P/E Ratio: 14.25

EPS: 2.02

Exhibit 1: Company Revenue (in millions)



Source: Historical Data Capital IQ, Chaner Capital Estimates

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1.1 Company Overview

Mattel, Inc. (Public, NASDAQ: MAT) is the world's largest toy company based on revenue. 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 El Segundo, California, and competes with listed companies Hasbro, Inc. (Public, NASDAQ: HAS), 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, Mattel 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 Mattel 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 promote one company over another.



Exhibit 2: Comparison of Mattel with major competitors

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





It is also worth nothing that Mattel has historically done better than major indices, like the S&P 500 (which Mattel is a part of), and the PowerShares Dynamic Consumer Disc. ETF (PEZ). Its portfolio of brands and products are grouped in the following categories: (1) *Mattel Girls & Boys Brands*, which are aimed at children aged 5-14, includes Barbie fashion dolls and accessories, Hot Wheels cars, WWE Wrestling figurines, Monster High, CARS, Batman, and traditional games, and accounts for 57% of 2010 consolidated sales; (2) *Fisher-Price Brands*, which are suited for infants aged 0-5, include Fisher-Price, Baby Gear, Dora the Explorer, and Thomas and Friends, and consists of infant apparel, furniture and toys, accounting for 35% of 2010 total sales; (3) *American Girl Brands*, which are targeted at girls aged 0-14, include My American Girl and Bitty Baby, and consist of dolls, clothing, and children's periodicals, accounting for 8% of 2010 total sales.

The company has a global reach, and international sales account for 46% of consolidated sales in 2010. Europe and Latin America remain key regions, accounting for 24% and 14% of consolidated sales in 2010, with Asia Pacific accounting for 5%. No individual country within the international segment exceeded 6% of consolidated gross sales in 2010.



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





Mattel, 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. Toy companies have tried to counter this trend by translating certain product lines onto digital form, with Mattel launching iPad programs for Barbie, Monster High and popular card games.

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.

While we recognize the increasing competition from outside the industry, we believe that it will have marginal impact on growth rates moving forward. Digital devices and video games have been in the market for a while, and we hold that current industry patterns already take this competition into account. Furthermore, given that video games are only suitable for a certain age, we believe that the demand for infant and children toys will still continue.



2.1 Model Drivers

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We will now be walking through our model step by step:

0.025

0.076

0.44

0.83

Discounted Cash Flow Analysis for Mattel

Dollars in millions, except per share

RFR

Debt Beta

Equity Beta

Market Risk Premium

	For the	e Fiscal Period En	cal Period Ending For the Fiscal Period Ending					
	2008	2009	2010	2011	2012	2013	2014	2015
x Sales	\$5,918.0	\$5,430.8	\$5,856.2	\$5,936.1	\$6,233.1	\$6,544.9	\$6,639.5	\$6,735.5
EBITDA	763.5	963.9	1.075.2	687.3	667.1	707.8	720.2	732.7
Less: D & A	(172.0)	(169.8)	(165.8)	147.1	147.1	147.2	147.2	147.2
EBIT	591.5	794.1	909.4	834.4	814.3	855.0	867.3	879.9
Less: Taxes @ 17.8%	(105.5)	(141.7)	(162.2)	(148.9)	(145.3)	(152.5)	(154.7)	(157.0)
x Tax-effected EBIT	486.0	652.4	747.1	685.6	669.0	702.5	712.6	722.9
Plus: Depreciation				147.1	147.1	147.2	147.2	147.2
Less: Capital expenditures				(147.2)	(147.2)	(147.2)	(147.2)	(147.2)
+ / - Changes in working capital				(146.5)	(16.5)	(482.9)	(35.0)	(41.4)
x Unlevered Free Cash Flow Unlevered Free Cash Flow Growth Rate			7	\$538.9 🗖	\$652.3 21.0%	\$219.5 Г (66.4%)	\$677.5 7 208.7%	\$681.5 0.6%
Period				10	2.0	3.0	4.0	50
Present Value FCF				499	560	175	500	
Terminal Value								\$10.565.3
Present Value Terminal Value								\$7 795 7
Enterprise Value	\$9.530.2							.,
- Current Outstanding Debt 9/30	(1.197)							
+ Current Outstanding Cash 9/30	254.5							
Pro-Forma Equity Value	\$8,587,7							
Legal Fee for potential MGA settlement	\$182.2							
Pro-Forma Equity Value 2	\$8,405.5							
Equity Market Value a/o 11/04/11	9,750							
Under/Overvalued	-13.79%							
Diluted Shares	346.8							
Share Price Target	\$24.76							
WACC Data		Sources						
Amount of Debt (unadjusted) \$mm 1,197 Effective Tax Rate % 0 17839345	5	9/30 release						
Return on Debt 0.058	3	.,						
Amount of Equity 9.750								
Return on Equity 0.087	7							
Return on [] rd = rfr+B(Mrp)								
Credit Rating BBB/BBB+		Standard & Poo	r's Rating Servi	ice				
Actual Average Yield 0.063		Capital IQ						
Ave Total Return Corporates 0.058		Federal Reserve	Economic Dat	a - Total return a	nalysis 0.75 wei	ghting "BBB" an	d 0.25 weightir	וg "A"

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

Perpetuity Growth Method					
Weighted average cost of capital:		7.9%			
Growth rate of FCF after 2015E	₹	1.4%			

Terminal growth rate is the global disposable income percentage growth rate

Consumer stock annual yield	4.55%
S&P Consumer 5-year return	5.48%
Total Equity Return	10.03%



1. Sales

- 2011 sales: \$5,936 mm
- 2012 sales: \$6,233 mm

In order to determine revenue we looked at Mattel's breakdown of revenue by geography as well as by worldwide division (Mattel/Fisher Price/American Girl). Given our past experience in projecting industry revenues with a combination of global disposable income growth and global GDP growth due to those metrics having high correlations with industry performance, we were hoping to achieve similar results by projecting geographical revenue using region specific growth metrics. We also attempted to project revenues using agebased population growth in comparison to Mattel's age-based divisions, and global toy expenditure.

Unfortunately, after running several correlations we discovered that these growth metrics were not always good indicators of Mattel's sales growth rates. We discovered that Mattel's historical advertising expense growth was a very strong predictor of sales growth rates, with the two metrics showing a 0.90 correlation since 1991. More recently, correlations have dropped slightly, but are still strong. Since 2003 (reason for 2003 discussed shortly) the correlation has been 0.68 and over the last 5 years the correlation has been 0.88. We are comfortable with this 5-years correlation and do not feel that high correlations during the economic downturn could be mistakenly propping up correlations. In fact, the correlation of Mattel's advertising expense growth and sales growth has been very low during crises periods. From 1998-2001 (Asian crisis and tech bubble burst) and 2008-2009 (financial crisis) the correlation of Mattel's advertising expense growth to sales growth has been a lowly 0.16 owing to the toy industry's relative strength during other consumer discretionary downturns. This means that if we predict the 2011, 2012 or 2013 market to be in crisis, we would have then to find a new metric other than advertising growth to predict sales growth. Otherwise, Mattel's advertising growth appears to be a good predictor for the company's sales growth. Moreover, the company sets its advertisement budget prior to knowing the year's growth rate, alloying concerns that advertisement expenditure is solely contingent on sales figures. In using advertising growth to project revenue growth, we must predict both advertising as a percent of sales, and the actual dollar value of advertising.

1a. Advertising as a Percentage of Sales

• 2011, 2012 pro forma advertising as a % of sales: 11.8%



2003 was an outlier year for Mattel's advertising expense. Advertising expense was 12.8% of sales in compared to 11.3% in 2002. Mattel notes in the relevant 10-K that the increase was largely due to support the launch of several new product lines and Mattel's attempt to rebuild volume momentum in core brands. Mattel felt that their advertising programs were not that successful and set forth a review of their advertising policy. Mattel's advertising policy has also been set to be between 11% and 13% of sales. Management has hit this target exactly: over the last 10 years the maximum advertising expense as a percent of sales was 12.8% and the minimum was 11.1%, with a tight range of 1.7%. Given the large jump in advertising expense in 2003, management would be hesitant to jump between their 11% and 13% range, and it would be more likely that advertising expense as a percent of sales would flow up or down slowly. Furthermore, we expect that management would be more comfortable with the lower end of the 11%-13% range, and indeed 4 of the past 5 years have been in the "11" range.



Additionally, in 2008, management indicated that their 12.2% advertising expense to sales was a result of lower than expected sales – an indication that the target was more towards the 11% range. Therefore, in assessing what will be next for Mattel, we expect the percent of advertising to sales to rescale towards 12% and maintain an average around that number. The average number over the past 10 years is 11.8%, and we feel that this is an appropriate level going forward for 2011 and 2012. In conjunction, we have seen during the first 3 quarters of 2011 that the percent of advertising expense to sales has increased slightly.

1b. Advertising Expenditure as Revenue Projector

- 2011 pro forma advertising expense: \$700.5mm
- 2012 pro forma advertising expense: \$735.5mm

Our first step in reviewing upward or downward forces on advertising was to review Mattel's *Global Cost Leadership Program*, which has focused on reducing expenses in the wake of the financial crisis.

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



Management's expectation in 2009 and 2010 for cost cuts was \$90-\$100mm per year. Once again management was right on in reaching their target (total of \$200mm) and achieved \$225mm net cost savings in those two years. The effect of this cost savings program on advertising expense was a mere \$14mm reduction in each year, which was only 2.3% of the total advertising budget. In 2011 and 2012, Mattel has continued an expense reduction program but has stated that the focus is on a reduction of legal costs and items other than advertising. Given their history of achieving their targets, we believe management's estimates, and do no believe that advertising expense going forward will experience an expense reduction of more than \$6mm per year (not meaningful).

In order to predict a dollar value for 2011 advertising expense we only needed to predict what to expect for advertising expense in the 4th quarter 2011 based on the timing of the report. Since we know advertising expense for the first 9 months of 2011, we wanted to see how the expense over the first 9 months of this year compared to the expense during the first 9 months of last year, and if this year over year growth or decline would be a good indicator of a similar trend for the 4th quarter. Hence, we looked at year over year growth of advertising expense over the first 9 months from 2000 to 2010 and compared those growth rates to the advertising expense growth rates of the year over year 4th quarters during that same time period. The correlation was just above 0.60, which meant that year over year growth of advertising for the first 9 months is a decent indicator of year over year growth rate of the advertising expense for the 4th quarter. This is seen in the chart below highlighting year over year percent change differences over year over year advertising expense growth between the first 9 months and the 4th quarter. Despite one outlier in 2003—as we previously discussed that management recognizes this year as an advertising expense anomaly-the average difference in advertising expense growth year over year of the first 9 months and the 4th quarter is 5.0%; not too large of a figure.

Difference between 1 st -3rd quarter	% changes and 4th quarter % changes
YEAR	DIFFERENCE
2000	2.6%
2001	6.2%
2002	5.8%
2003	Outlier
2004	0.7%
2005	10.3%
2006	6.6%
2007	4.2%
2008	7.9%
2009	3.0%
2010	2.7%
Largest Difference	10.3%
Average Diff	5.0%

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



The first 9 months of Mattel's 2011 advertising expense increased year over year by 10.1%. By reviewing similar periods we see that on average for Mattel when the first 9 months increased by approximately that amount, the 4th quarter advertising expense increased year over year on average by 5.19%. This would mean that there is an approximate difference of year over year advertising expense growth from the first 9 months of 2011 and the 4th quarter of 2011 of 5%, which coincides exactly with what we expected the average difference to be in the analysis above. Historically, 35-50% of advertising and revenues for large toy companies come across the first three quarters, and the remaining 50-65% comes in the fourth quarter. We thus see an even split between the first three quarters and the last quarter, and in years with strong movie licensing revenues, such as 2009, 2010 and 2011, the breakdown between the first three quarters and the fourth quarter is closer to 50%- 50%. Therefore, this gives us the confidence to use the first three quarters to predict the fourth quarter.

Years where 3Q advertising expense was up ~10%						
Year	First Three	4th Quarter	YoY Annu	al		
	Quarters		Revenue			
2006	6.14%	-0.43%	9.10%			
2007	7.22%	11.46%	5.66%			
2010	7.19%	4.52%	7.83%			
2011	10.12%	5.19%				
		Average of similar				
		periods				

With an increase of Mattel's fourth quarter advertising expense being 5% than the first nine months of 2011, the year over year growth figures derived above imply that for 2011 the total advertising expense will be approximately \$700.5 million, or an 8.2% total year over year growth rate. Shortly we will use this number to derive pro forma sales figures for 2011.

To forecast advertising expense for 2012 and 2013 we turn to trends in global GDP. Global GDP growth rates have a 0.90 correlation with Mattel's advertising expense growth rates from 2004 through 2010. We begin with 2004 due to the change in management advertising expense policy after 2003 as previously discussed. World Bank's 2011, 2012 and 2013 projections for global GDP are 3.2%, 3.6% and 3.6%, respectively. We find comfort in using the World Bank GDP projections because of World Bank's past success in GDP projections. In early 2009 the World Bank predicted 2009 and 2010 GDP correctly within a 0.1% difference. In order to forecast 2012 and 2013 advertising expense we looked at what Mattel's historical year over year advertising expense growth rates were at times when global GDP was around 3.6%. The results show that during similar periods to 2012 and 2013, Mattel's advertising expense grew around 5%.



	1997	2005	2006	2007	2010
Global GDP	3.20%	3.50%	3.90%	3.90%	3.80%
Advertising Expense	8.67%	-2.16%	3.48%	8.88%	6.15%
YoY % Change					
Average Ad Percent	5.00%				
Change					

Growing advertising expense in 2012 and 2013 at this figure results in a 2012 advertising expense of \$735.5mm and a 2013 expense of \$773mm. Beyond that, Mattel's advertising expense is grown at a terminal rate of 1.4%. This number is reflective of the average advertising expense growth rate across two up/down market cycles 2001-2010.

With advertising as a percent of sales at 11.8%, and 2011-2015 advertising figures, we can project sales (in \$mm), 2011: 5,936; 2012: 6,233; 2013: 6,545, and beyond. This is an implied sales growth rate of: 2011: 1.4%, 2012: 5%, 2013: 5%. Thereafter sales grows at 1.4% in perpetuity, which is lower than the 2.6% average sales growth rate over the past 10 years. Even if we were to grow revenue at the terminal rate of the 2.6% average referenced above, we would still have a HOLD on Mattel at 3.5% undervalued.

2. Depreciation and Amortization

• 2011 and 2012 Depreciation and Amortization : \$147.1mm

Since 2003, Mattel's management has targeted \$180mm-\$200mm per year of capital expenditures. Depreciation as a percent of net PPE (affected by capital expenditures) has been 30.3% since 2003 with a standard deviation of only 0.91%. Due to the low volatility of this figure we are comfortable using the average to calculate depreciation as a percent of net PPE (see below).

2a: Net PPE and Capex

Since 2003 Mattel's management has targeted \$180mm-\$200mm per year of capital expenditures. Mattel has been slightly under this target consistently, between \$30-\$60mm, or an average of 18.2% under their Capex target. This means that on average, Mattel is spending around \$147mm on capital expenditures. In 2011, beginning net PPE was \$484.7mm which leads to a depreciation number of \$147mm. By adding beginning net PPE and capital expenditures and subtracting depreciation, we can get ending net PPE which will help continue this calculation into 2012 and beyond.



		For the Fiscal Period Ending			For the Fiscal Period Ending				
		<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Sales Capital expenditures Capital expenditures as % of sales	,	\$5,918.0 198.8 3.4%	\$5,430.8 120.5 2.2%	\$5,856.2 136.6 2.3%	\$5,936.1 147.2 2.5%	\$6,233.1 147.2 2.4%	\$6,544.9 147.2 2.2%	\$6,639.5 147.2 2.2%	\$6,735.5 147.2 2.2%
Depreciation expense Depreciation as % of PP&E, net	,	\$172.0 * 32.1%	\$169.8 33.6%	\$165.8 34.2%	\$147.1 30.3%	\$147.1 30.3%	\$147.2 30.3%	\$147.2 30.3%	\$147.2 30.3%
Beginning Net PP&E Capital expenditures (Depreciation expense)					\$484.7 147.2 (147.1)	\$484.9 147.2 (147.1)	\$485.0 147.2 (147.2)	\$485.1 147.2 (147.2)	\$485.1 147.2 (147.2)
Ending Net PP&E		\$536.2	\$504.8	\$484.7	\$484.9	\$485.0	\$485.1	\$485.1	\$485.2

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

In order to calculate EBIT we projected cost of goods sold, advertising expense (see previous) and other SG&A.

3a. Cost of Goods Sold

- 2011 effective COGS growth rate: 4.58%
- 2012 effective COGS growth rate: 3.12%

To determine cost of good sold moving forward, we looked two major cost components in toy manufacturing: (a) product costs and (c) freight and logistics Fees. Based on a historical assessment of Mattel's 10-K reports, we understand that freight and logistics expenses generally account for 15-20% of total COGS. We have decided to approximate freight and logistics costs at 20%, which is in line with most of the manufacturing industry, leaving the remaining 80% as product costs.



While Mattel does not provide guidance on specific product cost breakdowns, we have discovered after reviewing industry reports, that labor costs usually account for 20% of total product costs, with the remaining 80% owing to the cost of raw materials. Our analysis also indicates that the bulk of raw material costs is spent on polypropylene plastics, and we have thus decided to use plastics as a proxy for raw materials expenditure.

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 Mattel 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. Even if freight prices were to fall by 10%, our analysis indicates that Mattel remains overvalued by 5.5%. Furthermore, in an extreme distressed situation where freight rates decrease by 20% from current levels, our model indicates the company is undervalued by only 2.9%.



Source: Capital IQ; Individual Company SEC 10-Ks, Mattel Quarterly Transcripts, UNCTAD, Review of Maritime Transport 2011, http://www.unctad.org/templates/webflyer.asp?docid=14218&intItemID=2068&lang=1, First Research Industry Profile (Manufacturing), http://www.firstresearch.com/industry-research/Manufacturing-Sector.html, Soyoung Kim, 'Weak Freight Rates Spur More Shipping Deals' http://www.reuters.com/article/2011/10/14/us-dealtalk-evercore-bankers-idUSTRF79D3TD20111014 Reuters_Oct 14_2011

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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 Mattel 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.



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. Mattel is clearly concerned about this trend, and in their recent Q3 earnings call, management 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 Mattel is able to redistribute production fairly easily to other production centers in Mexico and Indonesia. Moreover, labor increases have historically not flown completely through. After combining increases in Mexican wages with Chinese labor (30% for Mexican labor and 70% Chinese labor based on Mattel's location outputs), that the correlation with COGS stands at a relatively moderate 0.4. Hence, 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.

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For plastics, we looked how polypropylene prices have changed from 2000 to 2011, and found that there is a moderately strong correlation of 0.7 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. If there is no increase in polypropylene prices, which we do not believe this to be reasonable as plastic prices have generally increased in similar GDP periods, Mattel would be undervalued by 9.8%.



Based on these assumptions, we projected a 7.17% COGS increase in 2011, and a 8.14% increase in 2012. However, Mattel's management has indicated that it will be pursuing a second round of the *Global Cost Leadership Program* on a smaller scale, and have pledged to cut costs by \$150 million over 2011-2012, with \$75 million from legal fees, and the remainder from product costs streamlining. Given their track record in the previous iteration of the program from 2009-2010 where they effective beat their target of \$200 million and achieved \$225 million in cost savings bringing COGS to 50% of Sales, we



Source: Capital IQ; Individual Company SEC 10-Ks, Mattel Quarterly Transcripts, www.plasticsnews.com, World Bank Global Economic Outlook 2011, http://web.worldbank.org/WBSITE/EXTERNAL/ EXTDEC/EXTDECPROSPECTS/EXTGBLPROSPECTSAPRIL



believe that they will be able to reach their new targets again, giving an effective COGS growth rate of 4.58% in 2011 and 3.12% in 2012.

3b. Other SG&A

- 2011 SG&A: \$1,271mm
- 2012 SG&A: \$1,305mm

We believe that Mattel's SGA will grow by the growth rate of sales, but will also be affected by the *Global Cost Leadership Program* as previously discussed. SG&A was \$1,405mm in 2010, which when grown at the sales growth rate of 1.4% would indicate a 2011 SG&A figure of \$1,425mm. We believe that as the headcount reduction of the *Program* has ended, severance costs will no longer be incurred. From the 2010 figure, that would indicate a reduction in future SG&A costs of \$78.9mm – the total severance costs over 2008, 2009 and 2010. Management has also indicated that additional cost reduction programs in 2011 and 2012 will likely yield a reduction in SG&A of \$75mm of legal costs and \$30mm of other expenses. We are inclined to believe management's predictions in this case due to their previously discussed success in matching their 2009 and 2010 *Program* targets. The result of these calculations is a 2011 SG&A figure of \$1,271mm and 2012 SG&A percent of sales of 20.9%. For 2013 and beyond SG&A is continually grown at the percent of sales growth.

In fact, we believe that SG&A will fall in 2011 and 2012 by the amount of the several costs over the past two years, as well as by the expected reduction in legal and other costs from the cost reduction program. From that dollar figure, SGA will be represented as a % of sales at the time and will be locked in at that number and grow according to sales again.

4. Effective Tax Rate

• 2011/2012 Effective Tax Rate: 17.8%

Mattel's most recent effective tax rate was 19.1%. As of Jan 1, 2011, Mattel still had \$230mm of unrecognized tax benefits which may be implemented over time. Over the past 5 years we reviewed Mattel's tax payments against what we feel they might have paid had they been taxed at a 35% rate. The difference implies that Mattel has used on average \$117.6mm in tax benefits per year. It is worth noting that with \$230mm in tax benefits currently, these benefits may only last two years. Over the last 5 years that Mattel has used tax benefits, the average effective tax rate has been 17.8%. We are hence applying this effective tax rate over the two years—2011 and 2012—the years in which the remaining benefits are available. In 2013 and beyond, we have applied the historical average effective tax rate since 1990 which has been 28.1%.

5. Changes in Working Capital

• 2011: \$146.5mm / 2012: \$16.5mm

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 \$146.5mm, and 2012 increase in working capital of \$16.5mm.

5a. Accounts Receivable

In order to calculate pro-forma A/R, we looked at historical AR collection days. We note a trend between post-crisis in 2002 to post crisis in 2009. Based on historical patterns we expect an increase in AR collection days in a similar fashion. During the post crises in 2002, Mattel experienced a 66% increase in the amount of collection days. By comparison, during the recent post-crisis period, Mattel experienced a 42% increase in the number of collection days. As we believe both of the post-crises periods are similar, we believe that currently AR collection days could continue to increase by a further 24% to match the post-crisis period 2001-2006. Therefore, at its peaks we believe it could reach 88 collection days. As of the date of this report the collection days was just below 72, and we think that in 2011 Mattel could realize around half of the potential increase in collection days, bringing the 2011 figure to 80. Based on our projections for sales growth stability we believe that AR collection days will actually fall in 2012 going forward rather than continue to increase towards its max level. We therefore project that AR collection days will fall back down to 75 in 2010.



5b. Inventories

• 2011: \$414mm / 2012: \$ 440mm



Inventories spiked up slightly in 2008 due to an accelerated drop in demand as market uncertainty unfolded. As a result, Mattel spent down the excess inventory in 2009. 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 going into 2011. 2011 was another year of spending down inventory for Mattel 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. We thus took an average of inventories from 2003 through 2008, which we believe represents a lower inventory period, to forecast 2011, resulting in a 2011 inventory level of \$414mm. In 2012, we believe inventories will increase again due to a more stable market environment, and thus project 2012 inventories by calculating the average of the 2006-2008 and 2010 periods, resulting in a 2012 forecast of \$440mm.



5c. Other Current Assets

Given the volatile nature of other current assets for Mattel, we took a rolling 10-year historical average in order to forecast 2011 numbers and beyond. This resulted in the following figures:

Other Current	Rolling Average
201	1 314.1
201	2 316.4
201	3 318.7
201	4 319.6
201	5 321.3

5d. Accounts Payable

Accounts Payable collection days have been fairly consistent between 40 and 50 days, and with lower volatility, we feel comfortable making these forecasts for accounts payable off of Mattel's 10 year rolling average of historical accounts payable.





5e. Accrued Liabilities

In 2003, Mattel's management devised clear targets for the company, which included paying down debt and maintaining balanced asset/liability ratios. These targets are discussed further in the subsequent section covering our weighted average cost of capital calculation. From 2003, accrued liabilities generally began a downward trajectory. However, we realize moving into 2011, that the level of debt pay-down has declined since management has done a good job over the past 8 years paying down debt. In line with this slowdown of debt pay-down, we believe that accrued liabilities will also continue to decline at a slower pace, about half of the pace of the decline over the past 8 years. This yields a 1.5% decline moving forward.



5f. Other Current Liabilities

Other Current Liabilities is carried forward at \$51.8mm. Given the low dollar amount of these liabilities compared to the size of Mattel, their variation is not meaningful.

6. Unlevered Free Cash Flow

• 2011: \$539mm / 2012: \$ 652mm

Adding tax-effected EBIT and D&A and subtracting Capex and increases in working capital, we derived 2011 FCF \$539mm and 2012 FCF of \$652mm. This represents a growth rate of 21%. In 2013 the FCF growth rate declines heavily due to balance sheet effects of changes in working capital.

7. Discount Rate Used to Calculate Present Values

The amount of debt from Mattel's 9/30 quarterly release is \$1,197mm, while the market value of equity is \$9,750mm. As previously discussed, the effective tax rate is 17.8%, and the returns on debt and equity (as explained below) are 5.8% and 8.7%. Using the WACC formula, this results in a discount rate for Mattel of 7.9%.

7a. Using WACC instead of the APV Method

In determining to use WACC we looked at the D/E ratio over time. Historically, Mattel has high levels of debt due to a grow-by acquisition strategy. In 2001, Mattel's management composed a debt reduction plan by paying down debt with FCF and reducing the dividend payment to increase FCF available. In 2003, management made a definitive plan named as their capital deployment plan listed in their 10-K. This included a plan to maintain a debt to capital ratio of 25% with target to achieve a single A debt rating. Management has met this target of a debt to capital ratio since 2003 with an average ratio of 26.3%. The debt to equity ratio has followed a very similar path of stability (see charts below) as the debt to capital ratio has, with a correlation between the two of 0.98. The average D/E ratio has also been 36.2% during this period.

In order to determine if the D/E ratio will remain constant into the future, we looked at management's plan for both the levels of debt and levels of equity. With regards to debt, management has indicated they would like to target an A debt rating. As mentioned in previous sections, management has hit nearly every target they have put forward thus far, increasing our confidence about their ability to deliver on targets.

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Therefore, we act under the assumption that management will continue to pay down debt with the intention of strengthening the company's debt profile. Recently, the ratings on debt were upgraded from BBB to BBB+, and based on current EBITDA, the current off-balance sheet adjusted debt/EBITDA multiple would be 2.08x (see graph below for off-balance sheet levels of debt). Standard & Poor's, in calculating suggested structure of corporate credit ratings also grades business and financial profiles, and listed Mattel's business profile as "satisfactory" and financial profile as "modest." This "satisfactory" business rating (which S&P converts into quantitative metrics), implies that Mattel would have to lower its debt/EBITDA leverage target to around 1.5x to reach an A debt rating. From current levels, this implies a debt reduction of 27-28%, which we believe represents what will happen to debt over the coming years.





We then reviewed what we believe will happen with the level of Mattel's equity in order to determine whether the D/E ratio would maintain stable or not. Management has indicated that over the long term they expect to use FCF to invest in strategic acquisitions and to return funds to shareholders, which that have similarly performed. In October 2011 Mattel announced the intended acquisition of HIT Entertainment for \$680mm (paid for with mostly cash) and Mattel's management has also consistently returned funds to shareholders through share buy-backs. Below is a chart that represents how frequently management has been buying back shares.

	Made Available	Bought Back USD	Bought Back Shares	Remaining USD	
2003	\$500mm	\$244mm	12.7mm		256
2004		\$255mm	14.7mm		1
2005	\$500mm	\$500mm	28.9mm		0
2006	\$250mm	\$193mm	11.8mm		57
2007	\$750mm	\$806mm	35.9mm		1
2008	\$500mm	\$90.6mm	\$4.9mm		410
2009					410
2010	\$500mm	\$447mm	18.6mm		463
2011	\$500mm	\$425mm			538



Mattel's board frequently increases the amount of buy-back available, as management tends to max-out the available buy-back possibilities as seen by the low level under the "remaining USD" column. The one exception was in 2008 when management postponed buy-back due to market fears creating a need to hold cash. However, management resumed its buybacks in 2010 and maxed out the available share repurchases, requiring an additional \$500mm allowance made available later in the year. In 2011, the level of "remaining USD" was actually drawn down to \$38mm prior to board approval for an additional \$500mm. We believe that the 2011 10-K, when available, will reveal that management has continued to buy-back shares at the same pace as we have seen historically, which is nearly maxing-out their available allotment. If they are to do this and buy back the available \$500mm, the book value of equity, which is currently at approximately \$2,467mm, will decline by 22%.



In summary, we predict that equity will decrease about 22% and debt will decrease about 28%, which seem to be remaining in tandem with each other, resulting in the 36% average D/E ratio comfortably stable. We are thus comfortable using the WACC rather than APV discount method due to the consistent D/E ratio of 36%.

7b. Inputs for the WACC and Terminal Growth Rate

Cost of capital, Debt and Equity: The return on debt was found 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 Mattel's debt at this rating at present.

The return comes out as 5.8%, while the listed average yield on Mattel's debt is 6.3%. The return on equity is 8.7% using the cost of capital formula and the inputs described below.

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 \sim 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 \sim 2.01%.

The beta on debt is backed into using the cost of capital formula and is 0.44. The beta of equity is calculated as a 5-year beta and is 0.88. This is slightly lower than the market projects at nearly 1.0. We believe that a 5-year beta is a better indicator of Mattel's returns against the full market index as this is the first year that we feel that the stock's returns began to better reflects managements changes to financial policy which began to be implemented in 2004 and were discovered to be working well in 2005.

The terminal growth rate, as previously described, is Mattel's average advertising expense growth rate through two up/down market cycles 2001-2010: 1.4%.

8. Enterprise Value and Equity Value

Enterprise value of Mattel is \$9,530mm. This is calculated by adding the present value of the pro-forma 2011-2014 cash flows as well as the present value of the terminal value starting in 2015. Using Mattel's 9/30 reported levels of debt and cash, we calculated an equity value for Mattel of \$8,588mm. After potential legal fees, we calculate Mattel's 2nd pro forma equity value as \$8,405mm against a current market value of \$9,750mm, or ~14% overvalued.

9. Additional Legal Fees

Mattel is currently entangled in a legal battle with rivals MGA Entertainment, Inc. over copyright issues regarding the latter's 'Bratz' dolls. In August 2011, the federal district court overturned a previous ruling and ordered Mattel to pay a \$310 million settlement to MGA, but Mattel is re-appealing this verdict. Using a probability weighted expected return methodology that is common to the toy industry, we believe that Mattel is unlikely to pay the full \$310mm or absolutely nothing, and some sort of payment or compensation will be necessary. Our task was to find out the likely equilibrium point that Mattel had to spend on this case, which need not necessarily be the middle-point between 0 and 310.



While it is difficult to ascertain the specific liability Mattel has to pay, we know that Mattel will very likely be charged with paying MGA's legal costs which are \$140mm. On the assumption that this legal decision stands (which appears to be a likely outcome given that this would be a second appeal), we sought to find out how much Mattel had to pay out MGA. We thus looked at a variety of insurance premium policies, and specifically, Mattel's past insurance policies. One example we reviewed was a product recall case in 2009 where Mattel had to incur settlement fees of \$27mm. This number was revised downward to \$19mm in 2010, and of this amount, Mattel received \$6mm in insurance money, representing an approximate 30% insurance payout. Using this metric, we believe that Mattel will have to spend \$212mm, 70% of the total \$310mm settlement. We also predict that this payout is likely to occur in two years, given the average duration of the appeals process, and the previous length of this trial. We thus discounted this amount by Mattel's weighted average cost of capital, indicating that Mattel will be liable "today" for \$182mm.

10. HIT Entertainment Acquisition:

In October 2011, Mattel announced an acquisition of HIT Entertainment for \$680 million in debt and cash (mostly cash). This acquisition will only add or detract value from the firm if Mattel significantly over or under pays for the company. As HIT was previously private, there are no available financials for the company. According to our analysis, the market is valuing Mattel at an enterprise value of \$10.7bn (different than the equity value previously discussed). Indicating that Mattel's purchase of HIT is around 6% of Mattel's value, implying that it will not alter Mattel's business model. Mattel stated in the announcement that revenues from the acquisition target were \$180mm in 2010, as compared to Mattel's 2010 revenue of over \$5.8bn. Therefore, we do not believe this acquisition will affect revenues to alter our model significantly. Mattel also stated that their expectation for earnings accretion from the acquisition is not likely to be material. As a point of information, Mattel's stock was up 2% while the market was up 1% on the day of the announcement.

3.1 Appendix

Discounted Cash Flow Analysis for Mattel

Dollars in millions, except per share

	For th	ne Fiscal Period Er	nding		For the F	iscal Period End	ng	
	2008	2009	2010	2011	2012	2013	2014	2015
x Sales	\$5,918.0	\$5,430.8	\$5,856.2	\$5,936.1	\$6,233.1	\$6,544.9	\$6,639.5	\$6,735.5
EBITDA Less: D & A EBIT Less: Taxes @ 17.8%	763.5 (172.0) 591.5 (105.5)	963.9 (169.8) 794.1 (141.7) 652.4	1,075.2 (165.8) 909.4 (162.2) 747.1	687.3 147.1 834.4 (148.9) 685.6	667.1 147.1 814.3 (145.3)	707.8 147.2 855.0 (152.5) 702.5	720.2 147.2 867.3 (154.7) 712.6	732.7 147.2 879.9 (157.0) 722.9
Plus: Depreciation Less: Capital expenditures + / - Changes in working capital X Unlevered Free Cash Flow Unlevered Free Cash Flow Growth Rate	10.0	002.4	1 - 1 . 1	147.1 (147.2) (146.5)	147.1 (147.2) (16.5) \$652.3 [™] 21.0%	147.2 (147.2) (482.9) \$219.5 F (66.4%)	147.2 (147.2) (35.0) \$677.5 * 208.7%	147.2 (147.2) (41.4) \$681.5 0.6%
Period Present Value FCF Terminal Value Present Value Terminal Value Enterprise Value - Current Outstanding Debt 9/30 + Current Outstanding Cash 9/30 Pro-Forma Equity Value Legal Fee for potential MGA settlement Pro-Forma Equity Value 2 Equity Market Value a/o 11/04/11	\$9,530.2 (1,197) 254.5 \$8,587.7 \$182.2 \$8,405.5 9,750			1.0 499	2.0 560	3.0 175	4.0 500	5.0 \$10,565.3 \$7,795.7
Diluted Shares Share Price Target	-13.79% 346.8 \$24.76	_						
WACC Data Amount of Debt (unadjusted) \$mm Effective Tax Rate % 0.178: Return on Debt Amount of Equity Return on Equity	1,197 39345 0.058 9,750 0.087	Sources 9/30 release	-					
Return on [] rd = rfr+B(Mrp)		Chandard & Daa	de Detine Com					

Amount of Equity		9,750		
Return on Equity		0.087		
Return on []	rd = rfr+B(Mrp)		7	
Credit Rating	BBB/BBB+		Standard & Poor's Rating Service	
Actual Average Yield	0.063		Capital IQ	
Ave Total Return Corporates	0.058		Federal Reserve Economic Data - Total return an	nalysis 0.75 weighting "BBB" and 0.25 weighting "A"
RFR	0.025		Federal Reserve Economic Data 10-year treasury	y constant maturity
Market Risk Premium	0.076		5-year historical average return for Powershares	s Consumer Discretionary ETF including the distribution yield
Debt Beta	0.44			
Equity Beta	0.83			
		F	Perpetuity Growth Method	
			· ·	

Weighted average cost of capital:	7.9%
Growth rate of FCF after 2015E	 1.4%

Terminal growth rate is the global disposable income percentage growth rate

Consumer stock annual yield	4.55%
S&P Consumer 5-year return	5.48%
Total Equity Return	10.03%

Income Statement Inputs	<u>2011</u>	<u>Step</u>
Sales growth rate	1.4%	Calculated off of Advertising
Chinese Yuan appreciation rate	3.5%	0.0%
Gross margin (2011, 2012)	47.3%	45.8%
Cost of Good Sold growth rate	4.6%	3.1%
Labor Cost growth rate	9.2%	9.2%
Commodity Price growth rate	8.9%	10.4%
Chinese Yuan appreciation rate	3.5%	3.5%
Freight Cost growth rate	0.0%	
SG&A expenses (as a % of sales)	21.4%	(0.5%)
Advertising (as a % of sales)	11.8%	0.0%
2011 Advertising Expense (\$mm)	700	
Other operating (income) / expense (amount)	\$2.5	0.0
Effective tax rate 2011-2012 (Step is 2013 ->)	17.8%	28.1%
Balance Sheet Inputs		
Accounts receivables, net (collection period in days)	80.0	
Inventories	413.7	
Cash Flow Inputs		
Capital expenditures	\$147.2	
Capital expenditures as % of sales in year 2011	2.5%	
Depreciation expense	\$147.1	
Depreciation as % of Net PPE in year 2011	30.3%	1.0%
DCF Inputs		
Market Value as of 10/30/11	\$9,750.0	



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