## Hardlines Retail/Discounters

Big Box Retail: The Reports of Its Death Are Greatly Exaggerated; Retail Can Thrive in an AMZN World

We believe the "death of the big box due to AMZN" thesis is strongly reminiscent of the bear thesis that also once dominated the conversation: the first all-in-one, price-focused, commoditizer Walmart. In our view, the simplistic AMZN view looks past this analogy, product cycles, omni-channel, the sport of shopping, the value of immediacy, and retailers' ability to adapt while sourcing margin to invest in price. Walmart has crushed many, but big box specialty/direct competitors have thrived (or survived) despite inexorable "rollbacks." We believe this will hold true for AMZN (and view its specialty effort e.g., Casa.com, as an acknowledgement that being the Walmart of online has limitations). Retailers need to act faster, source margin, and the war for the last mile is on. But many are moving forward, so incremental share will be more difficult for AMZN to take than it has been. We believe we are in the early stages of a positive shift in the market's perception of the AMZN threat.

- Bears overlook significant product issues. We believe specialty retail generally wins during periods of high innovation and share threats rise during commoditization. The poster children of encroachment had significant product issues that opened the door for AMZN. For books/packaged media, consumption went digital, thereby eliminating the need for many stores. For electronics, the basis of our Jan '08 BBY downgrade (OW to UW) was the crescendo of a once-in-a-generation product cycle that rapidly turned negative as replacement periods lengthened (e.g., TVs) and product proliferation turned to convergence (i.e., smart phone adoption). In office, paper consumption declines accelerated with mobility. Finally, the recession exacerbated the impact. Currently, we view sporting goods, nutrition and pet as having the best product backdrops for maintaining market share. See figures 9-11.
- Retailers were ill-prepared. We believe the rapid adoption of e-commerce caught retailers by surprise - they didn't have the systems, charged for shipping, faced a sales tax disadvantage, and had limited SKUs online. At their heart, big box retailers offer price/assortment leadership and convenience. AMZN had lower prices, more SKUs, free shipping, a $5-10 \%$ tax advantage, and customers didn't have to leave their couch. In the case of BBY, the combined price advantage may have been as high as $20-25 \%$ on key items. AMZN was able to attack the big box tablestakes when the product cycle turned. See figure 13 \& 17-19.
- Who's at risk. From a risk perspective, we view office and electronics retailers as most at risk, followed by BBBY. HD/LOW/WMT have the widest moat, while PETM, GNC, and PETM are middle of the road. See figures 20-21.


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- Retailers investing to catch up; question is at what margin. The bears often presume AMZN wins in every case, but so long as retailers protect the tablestakes, and the category isn't struck by major product issues, we disagree. It requires investment, but in the past four years, $17 / 18$ retailers we examined significantly added SKUs online, $16 / 18$ free shipping options, 9/18 in-store pick up, 3/18 ship from store, and $4 / 18$ now price match AMZN. In 2013, DKS is rolling out buy online/pick up in store, while TGT is testing ship from/pick up in-store. Retailers are all generally better e-commerce marketers today, with $9 / 18$ following up with on-line browsers (Figure 15). Ranking capabilities, we think WMT, LOW, and HD lead the way; DKS and TGT are closing the gap the fastest, and BBBY just embarked on its journey. See figure 14.
- Omni-channel > online only. Retailers offer the added value of immediacy, touch/feel, exclusives, and 12/18 retailers had significant product/sector research online (e.g., DKS shoe fit or club guide). 40\% of BBY's online sales are picked up in stores, and it's $\mathbf{5 0 \%}$ + for HD and LOW. And, DKS (a favorite target of the bears) rolled out ship from store in 2012 and is testing in-store pick-up in 2013 while offering free shipping and returns (and return to store) on all footwear with better brands (so Zappos-plus!). BBY, COST, DKS, HD, LOW, and WMT also have significant in-store services (e.g., Geek Squad, pharmacy, swing analysis, kitchen design - figure 16.).
- Sales tax disadvantage whittling away. Two years ago, $4 \%$ of BBY's stores were in states where online sales tax was collected; by the end of $2013,50 \%$ will and this is going higher. Tax rates range from 5-10\%. See figures 17-18.
- Branded, durable products most at risk; home furnishings under pressure. The threat seems to be largest in widely distributed, higher ticket, branded durables - a black rectangular Sony that will last a decade; and is there anything but a Kitchenaid mixer? These categories necessitate retailers offer more private brands. WSM leads the way with $85 \%$ own brand, followed by $57 \%$ at GNC vs. most hovering around $20 \%$ (figures $19-20 \& 24$ ).
- Brands need to be supportive; furnishings tough; NKE/UA get it. Sony's learning curve was steep, as the allure of capacity utilization led to expanded online distribution. However, it came at a cost, and finally in 2012, it rolled out more stern pricing mechanisms that now account for $\sim 25 \%$ of BBY's TV sales. Since 2011, some big home furnishings brands have seen MAP price violations. Samsung is now opening shops in BBY, while the likes of NKE and UA get it, with restrictive distribution and shop in shops in DKS stores.
- The war for the last mile. With AMZN building more DCs, partnering for lock boxes with SPLS, RD, 7-eleven, and others, and testing same-day delivery, the war for the last mile to the consumer is on. However, $3 / 18$ retailers we examined offer ship from store (more to come over time, including TGT in '13), and WMT and TGT are testing same-day delivery while GNC, PETM, and RSH partner with ShopRunner for free 2-day delivery. This is critical, in our view, as more categories will move online over time and supply chain innovation makes shipping large cube and/or perishable products easier (e.g., pet food). This makes real estate management critical for retailers. More to come on this war for the last mile...
- The Bs close the pricing gap; AMZN trying to have it both ways. BBY/BBBY have closed the gap to AMZN (even without a coupon), while most still price at a premium. Interestingly, Casa and Wag.com both price above AMZN in certain SKUs. See figures 25-31.


## Table of Contents

Online Landscape by Category .....  5
E-commerce Growth Slower but Still Rapid .....  6
Electronics and Apparel Lead Online Sales Share; Sports Tiny .....  6
Online Category Growth Averages 10-20\%; CE Highest .....  7
Office Leads Online Penetration within Category; Home Improvement Lowest .....  8
Growth in Penetration Rising at HSD-LDD Pace, with CE Above .....  9
Retailers Moving Up the Dotcom Ranks ..... 10
Death of the Big Box Greatly Exaggerated ..... 12
Product Issues Were At the Core ..... 12
CE Sweet Spot Peaked in 2008 ..... 13
Retailers Were Ill-Prepared ..... 14
Retailers Catching Up ..... 14
Big Brother Is Watching You: Web Tracking ..... 18
Omni-Channel > Online Only ..... 18
Sales Tax Disadvantage Ending. ..... 19
Online Dislocation: Product Basics ..... 22
Product ..... 24
Experience ..... 25
Most at Risk: Branded, Durable Products. ..... 25
Private Label and Exclusives Offer Differentiation ..... 26
Brands More Aware Sans Furnishings ..... 26
The War for the Last Mile ..... 27
Real Estate Management Critical ..... 27
Pricing Summary ..... 28
Consumer Electronics (BBY, HGG, RSH) ..... 32
Online vs. Retail Penetration ..... 35
BBY Capabilities Improving ..... 36
Electronics Pricing Study: BBY Closing the Gap ..... 37
Discounters (COST, TGT, WMT) ..... 38
Discounters Catching Up ..... 38
COST Web Strategy: Expand Value to the Consumer While Protecting the Store ..... 39
WMT Moving to Head of Pack on Capabilities ..... 39
Home Furnishings (BBBY, WSM) ..... 40
AMZN Pushes in with Casa.com ..... 40
BBBY Racing to Catch Up. ..... 41
BBBY Closes Price Gap; Casa Remains Limited ..... 42
Home Improvement (HD, LOW) ..... 43
A Wide Moat ..... 43
HD/LOW Reinforcing the Moat ..... 44
HD/LOW: Higher Prices Driven by Tools/OPE ..... 44
Nutrition (GNC, VSI) ..... 45
Online and Specialty Gaining Share; Mass Donating ..... 45
Specialty Typically Wins During Innovative Periods ..... 46
Workout Supplements Nutrition: The One Category with National Brands ..... 47
Premium Pricing for GNC; Tough Comparing Online ..... 47
Office Superstores (ODP, OMX, SPLS) ..... 49
This is the Tough One ..... 49
Office Fighting Uphill ..... 51
Office Retailers Investing in Price, But Gap Remains Wide ..... 52
Pet (PETM) ..... 53
Watching Wag Shipping Price: Getting Sharper; High-Teens a Key Level ..... 54
PetSmart Closes Pricing Gap; Wag Taking Margin Too ..... 55
Sporting Goods (DKS) ..... 57
DKS Investing in Capabilities. ..... 57
Top Reasons Why DKS Isn't BBY and Why There Is a Moat ..... 58
DKS 8\% Premium Pricing with Wide Dispersion ..... 59


## Online Landscape by Category

## E-commerce Growth Slower but Still Rapid

E-commerce growth flourished from 2001-2007, and while growth greatly decelerated during the recession, e-commerce still managed to grow LSD in 20072008 (while retail sales shrank). Strong DD growth has resumed in recent years, but in the mid-teens pace vs. the mid-20s pace set before 2007. Online sales reached $5.2 \%$ of total sales in the U.S. for 2012 on a $15.9 \%$ growth rate, a slight acceleration from the $15.1 \%$ growth rate seen in 2011.

Figure 1: Annual E-commerce Sales as \% of Total, 2000-2012

| Year | Retail Sales <br> (millions of dollars) |  | E-commerce <br> as a Percent | Percent Change <br> From Y Year Ago |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | E-commerce |  | Total | E-commerce |
| 2000 | $2,979,381$ | 27,561 | $0.9 \%$ |  |  |
| 2001 | $3,062,310$ | 34,460 | $1.1 \%$ | $2.8 \%$ | $25.0 \%$ |
| 2002 | $3,129,681$ | 45,041 | $1.4 \%$ | $2.2 \%$ | $30.7 \%$ |
| 2003 | $3,261,942$ | 58,011 | $1.8 \%$ | $4.2 \%$ | $28.8 \%$ |
| 2004 | $3,461,405$ | 73,957 | $2.1 \%$ | $6.1 \%$ | $27.5 \%$ |
| 2005 | $3,687,622$ | 92,627 | $2.5 \%$ | $6.5 \%$ | $25.2 \%$ |
| 2006 | $3,880,256$ | 114,523 | $3.0 \%$ | $5.2 \%$ | $23.6 \%$ |
| 2007 | $4,001,299$ | 137,486 | $3.4 \%$ | $3.1 \%$ | $20.1 \%$ |
| 2008 | $3,938,497$ | 142,498 | $3.6 \%$ | $-1.6 \%$ | $3.6 \%$ |
| 2009 | $3,628,603$ | 144,618 | $4.0 \%$ | $-7.9 \%$ | $1.5 \%$ |
| 2010 | $3,840,262$ | 168,269 | $4.4 \%$ | $5.8 \%$ | $16.4 \%$ |
| 2011 | $4,157,173$ | 193,722 | $4.7 \%$ | $8.3 \%$ | $15.1 \%$ |
| 2012 | $4,355,734$ | 224,606 | $5.2 \%$ | $4.8 \%$ | $15.9 \%$ |

Source: U.S. Census Bureau, J.P. Morgan estimates.

## Electronics and Apparel Lead Online Sales Share; Sports Tiny

- Computers and electronic devices made up the largest share of online spend in 2012, at $25 \%$, with consumer electronics (excluding computers and other devices) making up an additional $10 \%$ of online spend.
- Apparel and accessories were second at $19 \%$ of sales.
- Office supplies made up $6 \%$ of online spend, furniture and appliances made up $5 \%$ of online spend, followed by home \& garden spend, making up $4 \%$ of online sales in 2012.
- Sports and fitness, often cited as an at-risk category, represented only 2\% of online sales.

Figure 2: Mix of Online Sales by Category for 2012


Source: comScore data.

## Online Category Growth Averages 10-20\%; CE Highest

The chart below presents the growth in sales by category according to comScore data only. The pace of expansion largely ranged from $10-20 \%$ in 2012 , in line or slightly above 2011 growth rates.

- Consumer electronics had the highest growth rate at $19 \%$ in 2012, and furniture \& appliances had the lowest growth rate at $10 \%$ in 2012.
- Office supplies and furniture \& appliances categories saw MSD growth in 2010, followed by HSD growth in 2011 and reached DD growth in 2012 (11\% and $10 \%$, respectively).
- Home and garden online sales have been strong the last three years, up $5 \%, 8 \%$, and $10 \%$, respectively, as the housing market slowly recovered.
- Apparel \& accessories has seen the strongest acceleration in online growth, from $7 \%$ in 2010 to $17 \%$ in 2012.
- The sports \& fitness category has also seen a strong acceleration in online growth, from $5 \%$ in 2010 to $11 \%$ in 2012.
- Total online sales grew at a $9 \%, 12 \%$, and $13 \%$ pace in 2010, 2011, and 2012, respectively.

Figure 3: Online Growth in Each Category Registers 10-60\% Growth Pre-recession


Source: comScore data.
Figure 4: Online Growth Converges to 10-20\% Post-recession


[^0]
## Office Leads Online Penetration within Category; Home Improvement Lowest

Using comScore data and the Census groupings, below we estimate the penetration of sales within relevant categories and the growth rate over time. The lag effect of annual Census reporting means 2012 is predicted using monthly data. Final revisions for each month of 2012 are made monthly as retail sales are released each month in 2013.

- The online penetration in most categories is between $5-15 \%$, with the exception of office supplies, which grew to $32 \%$ in 2012, as most BTB orders are placed online and delivered.
- No surprise, consumer electronics is the category with the second largest online penetration at $\sim 13 \%$.
- Home improvement has the lowest penetration rate at $\sim 2 \%$ due to the nature of the materials used and immediacy of repair purchases.

Figure 5: Online Penetration in Office Category, 2003-2012


Source: comScore data and U.S. Census Bureau.

Figure 6: Online Penetration in Other Retail Categories, 2003-2012


Source: comScore data and U.S. Census Bureau.

## Growth in Penetration Rising at HSD-LDD Pace, with CE Above

Once again using both comScore data and U.S. Census disclosure, we see that the growth in online penetration within categories has generally converged to somewhere between $5-10 \%$, with consumer electronics and appliances still growing above $10 \%$ (though down from a mid-to-high teens rate previously). Every category accelerated online penetration growth in 2012. This graph shows the penetration rate acceleration and deceleration in individual categories (i.e., the slope of the line). For example:

- Consumer electronics had the fastest growth in online penetration at $19 \%$ in 2012, a faster rate than the $14 \%$ pace in 2011.
- Clothing and accessories has seen a strong acceleration in online penetration, growing $11 \%$ in 2012, the second fastest rate behind CE.
- Office saw a strong reacceleration of $\sim 10 \%$ in 2012 after online penetration contracted as much as $7 \%$ in 2009 from the recession and job losses.

Figure 7: Growth Rate in Penetration by Category, 2004-2012


Source: comScore data and Census data.

## Retailers Moving Up the Dotcom Ranks

The table below outlines the top 25 e-commerce retailers in 2011 (the most up-todate information for now until Internet Retailer releases the 2012 list later this year) as well as rankings for other companies in our coverage universe. Not surprisingly, AMZN ranked $\# 1$ with $\sim \$ 48$ B in web sales and $22.8 \%$ share of the top 500 . The office superstores hit the top of the list given the high B2B component of their business, where transactions are internet-based. Outside of office, WMT ranked highest in our coverage universe as \#4, up from \#6 the year prior, while LOW moved up 44 spots on $70 \%$ e-commerce growth. The average e-commerce sales growth rate in 2011 , according to the source below, was $16 \%$, with the top 500 growing $20.4 \%$.

Figure 8: Top Internet Retailers

| $2011$ <br> Rank | 2010 Rank | Company Name | 2011 Web Sales (mm) | $\begin{gathered} 2011 \\ \text { Growth } \end{gathered}$ | $\begin{gathered} 2010 \\ \text { Growth } \end{gathered}$ | Share of all Top 500 Sales (2011) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | Amazon.com | 48,080.0 | 40.6\% | 39.5\% | 22.79\% |
| 2 | 2 | Staples | 10,600.0 | 3.9\% | 4.1\% | 6.80\% |
| 3 | 3 | Apple | 6,660.0 | 27.4\% | 23.0\% | 3.48\% |
| 4 | 6 | Walmart.com | 4,900.0 | 19.7\% | 17.0\% | 2.73\% |
| 5 | 4 | Dell | 4,609.7 | -4.0\% | 6.0\% | 3.20\% |
| 6 | 5 | Office Depot | 4,100.0 | 0.0\% | 0.0\% | 2.73\% |
| 7 | 8 | Liberty Interactive Group | 3,760.0 | 23.7\% | 17.8\% | 2.03\% |
| 8 | 7 | Sears | 3,604.3 | 16.0\% | 12.0\% | 2.07\% |
| 9 | 13 | Netflix Inc. | 3,204.6 | 48.4\% | 29.3\% | 1.44\% |
| 10 | 10 | CDW Corp. | 3,000.1 | 10.4\% | 10.0\% | 1.81\% |
| 11 | 11 | Best Buy | 2,950.0 | 18.0\% | 13.6\% | 1.67\% |
| 12 | 9 | OfficeMax | 2,901.5 | 1.5\% | 3.0\% | 1.91\% |
| 13 | 12 | Newegg.com | 2,700.0 | 8.0\% | 8.7\% | 1.67\% |
| 14 | 17 | Macy's | 2,246.4 | 40.0\% | 29.0\% | 1.07\% |
| 15 | 15 | W.W. Grainger | 2,187.0 | 21.5\% | 31.3\% | 1.20\% |
| 16 | 14 | SonyStyle.com | 1,980.0 | 1.3\% | 4.0\% | 1.30\% |
| 17 | 16 | Costco | 1,900.0 | 11.8\% | 6.3\% | 1.13\% |
| 18 | 21 | L.L. Bean | 1,716.5 | 25.0\% | 29.0\% | 0.92\% |
| 19 | 18 | Victoria's Secret Direct | 1,630.0 | 4.3\% | 8.2\% | 1.04\% |
| 20 | 20 | JC Penney | 1,590.0 | 3.9\% | 2.0\% | 1.02\% |
| 21 | 19 | HP Home \& Home Office | 1,579.7 | 2.0\% | 4.5\% | 1.03\% |
| 22 | 24 | Gap Inc. Direct | 1,579.7 | 20.0\% | 13.0\% | 0.84\% |
| 23 | 22 | Target | 1,460.2 | 9.8\% | 10.0\% | 0.89\% |
| 24 | 25 | Williams-Sonoma | 1,410.0 | 17.8\% | 26.9\% | 0.80\% |
| 25 | 23 | Systemax | 1,370.0 | 3.6\% | 13.0\% | 0.88\% |
| 42 | 43 | The Home Depot | 634.0 | 15.3\% | 10.0\% | 0.37\% |
| 43 | 40 | Cabela's | 602.6 | 5.0\% | 24.0\% | 0.38\% |
| 47 | 91 | Lowe's Corp | 510.0 | 70.0\% | 4.5\% | 0.13\% |
| 101 | 126 | Dick's Sporting Goods | 208.4 | 43.7\% | 38.1\% | 0.10\% |
| 121 | 121 | AutoZone | 163.0 | 9.5\% | 2.8\% | 0.10\% |
| 189 | 172 | Bed Bath \& Beyond | 91.0 | 2.6\% | 3.0\% | 0.06\% |
| 201 | 197 | VitaminShoppe.com | 81.6 | 8.5\% | 6.8\% | 0.05\% |
| 203 | N/A | GNC.com | 81.0 | 37.3\% | N/A |  |
| 275 | 254 | RadioShack | 50.0 | 3.5\% | 5.0\% |  |
| 290 | N/A | Tractor Supply Co. | 42.3 | 16.2\% | N/A |  |
| 315 | 294 | PetSmart | 37.0 | 5.7\% | 4.2\% |  |
| 385 | N/A | Advance Auto Parts | 26.5 | 17.6\% | N/A |  |
| 442 | N/A | hhgregg | 20.1 | 9.4\% | N/A |  |

[^1]
## Death of the Big Box Greatly Exaggerated

We believe the "death of the big box due to AMZN" thesis is strongly reminiscent of the bear thesis that also once dominated the investment conversation: the first all-in-one-shopping, price-focused, product commoditizer Walmart. In our view, the simplistic AMZN view looks past the relevance of this analogy, the power of omnichannel, the sport of going to stores, the value of immediacy, and retailers' ability to better leverage their stores while sourcing margin to invest in price. Walmart has crushed many grocers/local merchants, but big box specialty and even direct competitors (e.g., COST, TGT, WFM) have thrived despite the inexorable tide of "rollbacks." We believe the same will hold true in the case of AMZN (and view its specialty website effort (e.g., Casa.com) as an acknowledgement that being the Walmart of online has limitations). Retailers are figuring out how to react faster, with varying degrees of financial pain. Key steps include 1) investing in systems and distribution capabilities, 2 ) sourcing margin to invest in price and free shipping, and 3 ) staying diligent with box sizes and lease renewals. Importantly, we believe we are in the early stages of a significant long-term improvement in the market's perception of the AMZN threat to big box retail.

## Product Issues Were At the Core

We believe specialty retail generally wins during periods of high innovation and loses during commoditization. The poster children of online encroachment had significant product issues that were a greater contributor to financial declines than AMZN's push. For books/packaged media, consumption went digital, thereby eliminating the need for the number and size of stores that sold them. For electronics, the basis of our Jan 2008 BBY downgrade from OW to UW was the crescendo of a once- in-a-generation product cycle that rapidly turned the other direction as replacement periods lengthened (e.g., TVs) and product proliferation turned to convergence (e.g., negative comps in GPS, cameras, and iPods). In office, paper consumption declines accelerated with computing mobility. Finally, the economic downturn further exacerbated the impact on electronics and office products.

Using Best Buy as an example, below we see that AMZN was the third largest player in the CE market in 2011after only appearing in the top 10 in 2008.

Figure 9: Top 100 Consumer Electronics Retailers $]$ Company Rankings by Revenue

| Rank | 2000 | 2001 | 2002 | 2003 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy |
| 2 | Circuit City | Circuit City | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart |
| 3 | Sears | Wal-Mart | Circuit City | Circuit City | Circuit City | Circuit City | Circuit City | Circuit City | Apple Stores | Apple Stores | Amazon.com |
| 4 | CompUSA | RadioShack | Dell | Dell | Dell | Dell | Dell | Apple Stores | Target | Amazon | Apple Stores |
| 5 | RadioShack | Target | Target | Target | RadioShack | Target | Target | Target | Costco | Target | Target |
| 6 | Wal-Mart | CompUSA | RadioShack | RadioShack | Target | RadioShack | RadioShack | Dell | Dell | Costco | Costco |
| 7 | Target | Staples | CompUSA | Staples | CompUSA | Game Stop | Game Stop | Game Stop | Game Stop | Game Stop | Gamestop |
| 8 | Staples | Sears | Staples | CompUSA | Costco | CompUSA | CompUSA | Costco | Amazon | Dell | Dell |
| 9 | Office Depot | Office Depot | Sears | Sam's Club | Sears | Costco | Costco | RadioShack | RadioShack | RadioShack | RadioShack |
| 10 | Kmart | Kmart | Office Depot | Office Depot | Sam's Club | Apple Stores | Apple Stores | Amazon | Sam's Club | Sam's Club | Sam's Club |

[^2]Our core thesis is that the massive digital product cycle and subsequent convergence/down cycle drove commoditization, which opened the door for AMZN and the rapid change/adoption of e-commerce took BBY by surprise. Below, we see the supercycle turned ugly after 2008. As indicated below, retail sales at U.S. electronics and appliance stores were negative in 2008-2009, followed by $1.2 \%$ growth in 2010 and $1.0 \%$ growth in 2011.

Figure 10: Retail Sales \& Growth - Electronics and Appliances Stores Only (\$ in billions)


Source: U.S. Census Bureau; J.P. Morgan estimates.

Circuit City's demise was a significant part of the drop in 2009, but the bankruptcy was symptomatic of the cycle with the low-margin, deflationary nature of the category and the financial crisis, in our view. The analog to digital product switch created a once-in-a-generation product cycle, and the adoption of new TVs, cameras, MP3 players, GPS devices plus a new gaming ecosystem from the big three players created a supercycle. Indeed as noted below, household penetration rates rose rapidly in the 2005-2008 period, and "the last leg of adoption" is often driven by mass commoditizers like COST, WMT, and AMZN.

## CE Sweet Spot Peaked in 2008

Looking back to our in-depth TV reports from 2006, we believe the "sweet spot" of adoption (i.e., when it's most beneficial for the specialty retailers financially) often occurs when household penetration ramps from $14 \%-40 \%+$. As it lurches toward $60 \%$, the AMZNs and WMTs of the world tend to take over. Looking below, TVs, notebooks, MP3s, and gaming consoles all drove a peaking of the sweet spot in the 2007-09 timeframe.

Figure 11: U.S. Household Penetration by Category

|  | 01/2005 | 01/2006 | 01/2007 | 01/2008 | 01/2009 | 01/2010 | 01/2011 | 01/2012 | 01/2013 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Digital TV Sets and Displays |  |  |  |  |  |  |  |  |  |
| DTV | 12\% | 20\% | 33\% | 50\% | 62\% | 77\% | 85\% | 88\% | 89\% |
| HDTV | 10\% | 16\% | 26\% | 41\% | 53\% | 63\% | 72\% | 87\% | 88\% |
| LCD TV | 10\% | 12\% | 17\% | 26\% | 41\% | 57\% | 67\% | 72\% | 74\% |
| Home Information Technology/Security |  |  |  |  |  |  |  |  |  |
| All Home PCs | 70\% | 74\% | 76\% | 82\% | 83\% | 87\% | 89\% | 90\% | 90\% |
| Desktop | 70\% | 72\% | 68\% | 72\% | 71\% | 75\% | 79\% | 72\% | 68\% |
| Laptop/Tablet | 28\% | 32\% | 35\% | 47\% | 53\% | 59\% | 68\% | 69\% | 71\% |
| Imaging |  |  |  |  |  |  |  |  |  |
| Digital Camera | 42\% | 55\% | 59\% | 73\% | 77\% | 81\% | 84\% | 84\% | 85\% |
| Camcorder | 45\% | 46\% | 48\% | 48\% | 51\% | 54\% | 55\% | 52\% | 42\% |
| Portable Media |  |  |  |  |  |  |  |  |  |
| MP3 Players | 14\% | 20\% | 33\% | 43\% | 46\% | 51\% | 51\% | 54\% | 45\% |
| Speaker Docks | 4\% | 7\% | 12\% | 23\% | 30\% | 35\% | 43\% | 44\% | 44\% |
| Portable Communication |  |  |  |  |  |  |  |  |  |
| Wreless Telephones | 69\% | 73\% | 76\% | 87\% | 90\% | 91\% | 91\% | 91\% | 91\% |
| Smartphones | 1\% | 4\% | 7\% | 18\% | 23\% | 33\% | 39\% | 55\% | 55\% |
| Video Gaming |  |  |  |  |  |  |  |  |  |
| Portable | 29\% | 30\% | 30\% | 30\% | 33\% | 34\% | 37\% | 34\% | 31\% |
| Console | 37\% | 38\% | 39\% | 42\% | 46\% | 47\% | 52\% | 53\% | 49\% |
| Information |  |  |  |  |  |  |  |  |  |
| Portable Navigation | 3\% | 6\% | 8\% | 12\% | 20\% | 31\% | 39\% | 45\% | 46\% |
| In-Dish Navigation | 2\% | 3\% | 4\% | 9\% | 13\% | 15\% | 19\% | 18\% | 17\% |

Source: Consumer Electronics Association.

During the 2000s, the digital cycle really hit packaged media, significantly reducing visit frequency. Then, coincident with the crisis, proliferating turned convergence with smart phone technology making the iPhone an email device, web browser, phone, GPS unit, digital camera, and gaming system.

## Retailers Were III-Prepared

We also believe the speed of AMZN's advance/the adoption of e-commerce caught retailers by surprise. They didn't have the systems in place, their supply chains and e-commerce marketing were inadequate, they charged for shipping, there was a major sales tax disadvantage and they had fewer SKUs. At their heart, big box retailers offer price and assortment leadership along with the convenience of stores. AMZN had lower prices, more SKUs, free shipping, held a 5-10\% tax advantage, and customers didn't have to leave the couch to get it. In the case of BBY, the combined price advantage was as high as $20-25 \%$. Essentially AMZN was able to attack the big box tablestakes, while BBY was left trying to understand what had happened. Indeed, online sales for most retailers were less than $1 \%$ in 2010. See figure 13 for a summary capabilities chart in 2010.

## Retailers Catching Up

E-commerce varies in importance as a sales channel for each of our companies. WSM leads the pack, having successfully transitioned from a catalog retailer to online. Most of the contract business for the office space is done online, so e-commerce is also important to ODP, OMX, SPLS, which have $\sim 37 \%$, $\sim 40 \%$, and $\sim 42 \%$ of business through the online channel, respectively.

Figure 12: Online as \% of Sales: 2012


Source: J.P. Morgan estimates, Internet Retailer, Company data. For estimates of online percentage of sales for the companies, our best estimate was made using a combination of company data, interviews, industry data, and Internet Retailer's Top 500 reports.

The bears often presume AMZN wins in every case, but so long as retailers are competitive, invest in the tablestakes, and the category isn't struck by major product issues, we disagree. It requires investment, but in the past four years, 17/18 retailers we examined significantly added SKUs online, $16 / 18$ free shipping options, $9 / 18$ in-store pick up, $3 / 18$ ship from store, and $4 / 18$ now price match AMZN. In 2013, DKS is rolling out buy online/pick up in store, while TGT is testing ship from/pick up in-store.

As when competing with WMT, price perception is key, and the likes of TGT had to introduce ad price matching. Also, they are all generally better e-commerce marketers today (e.g., HD and WSM follow up with browsers who don't buy). These efforts required store-level SKU visibility, supply chain/IT/CRM investments, and they had to either take the margin pain or source it from costs...but retailers woke up.


WSM had free shipping for 30 minimum and WMT introduced free shipping with no minimum for the first time eer
Free ship
DKS, GNC, and PETM were a part of Shoprunner when it launched in late 2010
Source: Company data.
Figure 14: 2012 Capabilities by Retailer

|  | $\sqrt[30]{30}$ | $20^{30^{25}}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $00^{200^{20}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BOPUS* | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | $\checkmark$ | $\checkmark$ | $\times$ | $\times$ | $\checkmark$ | $\checkmark$ | $\times$ | $\times$ | $\times$ | $\checkmark$ | $x$ | $x$ | $\times$ |
| Ship to store | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $x$ | $\times$ | $\checkmark$ | $\checkmark$ | $\times$ | $\times$ | $\times$ | $x$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\checkmark$ |
| Ship from store | $\checkmark$ | $\checkmark$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\checkmark$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |
| QR Codes | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $x$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | $\checkmark$ | $x$ | $x$ |
| Mobile Site | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ |
| Mobile App | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | $\times$ | $\times$ | $x$ |
| Extended online SKUs | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ |
| Testing mobile checkout | $\checkmark$ | $\times$ | $\times$ | $\times$ | $\times$ | $x$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $x$ |
| Free shipping** available | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark \checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $x$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ |
| Wifi available in stores | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | * | $\checkmark$ | $x$ | $x$ | $x$ | $\checkmark$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ | $\times$ |
| Testing same-day delivery | $\checkmark$ | $\times$ | $x$ | $\times$ | $\checkmark$ | $\times$ | $\times$ | $x$ | $\times$ | $\times$ | $x$ | $\times$ | $\times$ | $x$ | $\times$ | $\times$ | $\times$ | $x$ |
| Price match Amazon.com | $\times$ | $x$ | $x$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | $\times$ | $x$ | $\times$ | $x$ | $x$ | $\times$ | $x$ | $\checkmark$ | $\times$ | $\times$ | $\times$ |
| Free returns of online purchases in store | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Product/industry research on website | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\times$ | $\times$ | $\checkmark$ | $\times$ | $\checkmark$ | $\checkmark$ | $\times$ | $\times$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | * | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 13 | 11 | 10 | 10 | 9 | 9 | 9 | 8 | 8 | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 5 | 3 |


*BOPUS: Buy online, pick up in store; includes reserve online, pick up in store
"with minimum purchase, cutomer loyalty program, through ShopRunner, or promotional free shipping
$\checkmark \checkmark$ :Only BBBY has free ship all the time on all items; launched in July 2012
DKS only has free returns on shoes
Source: Company data.

- Ranking capabilities, WMT, HD, LOW, and DKS have enhanced the moat sharply, while COST, PETM, and TSCO have lagged. While WSM doesn't score well, it has more than $40 \%$ of sales online, best-in-class CRM capabilities, and many of the capabilities above (e.g., BOPUS) aren't as relevant given the company's sales mix.
- TGT, BBY, SPLS (Staples.com only), and HGG price match vs. AMZN. BBBY often does so in stores but does not advertise this as an official policy.
- $\quad \mathrm{BBBY}$ is the retailer earliest in the e-commerce development cycle. Oftencriticized TGT is below average in some key capabilities but, like BBBY, is pushing ahead.
- With the exception of COST and TSCO, most retailers offer free shipping through an order minimum or ShopRunner. BBY is the only retailer to offer free shipping on everything, always, while DKS offers free shipping and returns always on shoes only.
- In 2013, DKS is rolling out buy online, pick up in store. TGT is testing ship from store and pick up in store. Additionally, WMT and TGT are both testing same-day delivery in certain markets. Ship from store is critical, in our view, as it unlocks the inventory in the stores, driving higher online in-stocks and greater close rates while also helping manage markdown risk at the individual store level.
- COST re-platformed its website in 2012, TGT continues to fix its, BBBY is completing the construction of its first e-commerce fulfillment center and IT data warehouse and a new website, and BBY just launched a complete 2- to 3year web re-platforming. DKS and PETM are also actively updating their platforms.


## Big Brother Is Watching You：Web Tracking

Retailers are also all generally better e－commerce marketers now．An example is the email you get from HD or WSM a week after browsing a category online but not buying．WSM will also send you an email in the weeks or even months after looking at an item and not buying to let you know it is back in stock or went on sale．GNC will send a $15 \%$ off coupon along with a reminder about items left in your cart that were not bought，and BBBY will send a $20 \%$ off coupon（matching its traditional discount of $20 \%$ off one item）．As the slew of online offers and emails sent to customers have overwhelmed email boxes，retailers are being more targeted and direct in their email marketing now，which should create higher conversion rates．

Figure 15：Which Retailers Send Follow－Up Emails

| BBBY | BBY | COST | DKS | GNC | HD | HGG | LOW | ODP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 囚 | ＊ | 囚 | 囚 | 囚 | $\boxtimes$ | $\times$ | $\boxtimes$ | $\times$ |
| OMX | PETM | RSH | SPLS | TGT | TSCO | VSI | WMT | WSM |
| 囚 | $\times$ | $x$ | $x$ | $\times$ | $\times$ | $\boxed{\square}$ | $\times$ | 囚 |

Source：J．P．Morgan．

## Omni－Channel＞Online Only

Bricks－and－mortar retailers offer the added value of immediacy，trial／touch／feel， exclusive products，and often have deeper product／sector research on their websites （e．g．，we replaced a toilet using HD＇s Know－How video and used DKS＇running shoe calculator to pick out pronation－appropriate sneakers）．These all provide value and help keep AMZN at bay．For example， $40 \%$ of BBY＇s online sales are picked up in stores，and $>50 \%$ of Lowe＇s online sales are picked up in stores．DKS，a favorite target of the bears，rolled out ship from store in 2012 and is testing in－store pick up in 2013 while offering free shipping and returns（and return to store）on all footwear．

Figure 16: Services Available by Retailers in Our Coverage Universe

| Ticker | Services Offered |
| :---: | :--- |
| BBBY | N/A |\(\left.| \begin{array}{l}Geek Squad, cloud and data services, delivery \& installation, product repair, 3rd <br>

party wireless services\end{array}\right\}\)

Source: Company reports.

## Sales Tax Disadvantage Ending

While we recognize not paying sales tax is only one part of the reason that a consumer may shop online (whether it is a Prime membership, the convenience, or better product prices), the ongoing tax changes by states is worth noting. As the tax headwind erodes, retailers have been addressing multi-channel strategies and product and shipping pricing gaps to further level the playing field. The focus on taxes seems to be shifting to a competition in same-day delivery, with WMT the best poised retailer to compete with 4,000+ locations in the U.S. AMZN has reached agreements with many of these states in an effort to build warehouses there, which many suspect will be utilized for same-day delivery. AMZN has even begun calling for a national online tax bill to be passed so that other online-only retailers like Overstock.com will no longer enjoy the tax advantages.

In 2012, California, Texas, and Pennsylvania began collecting sales tax from the online retailer. In 2013, Massachusetts, Connecticut, New Jersey, Virginia and Arizona will be collecting sales tax from Amazon at different points throughout the year (but all by November $1^{\text {st }}$, just in time for the holiday season).

Figure 17: AMZN Sales Tax by State


Source: Sales Tax Clearinghouse.
Since many of our coverage companies have a large exposure to California and Texas, 2012 was a watershed year for taking away the online tax headwind. California and Texas both began collecting taxes in 2012, which benefitted COST and VSI the most, as $44.1 \%$ and $37.1 \%$ of their store base was in those states, respectively. This year SPLS and BBBY stand to benefit the most with $18.4 \%$ and $18.0 \%$ of their store base, respectively, in states that will begin collecting sales tax from Amazon this year.

In summary, our companies have $\sim 22 \%$ of their stores in states that currently collect AMZN sales tax. More states (VA, MA, CT, and AZ) have added/are adding AMZN sales tax in 2013, which will grow the average percentage of our retailers' store bases in states that collect AMZN sales tax to $31 \%$. The Marketplace Fairness Act, which is the closest resemblance to a national internet online sales tax, has just begun working its way through Congress. The bill would give 45 states and D.C. the authority to collect sales tax from online retailers (including AMZN). Including 2013, 13 states have collected sales tax from AMZN, and at least four other states have announced agreements with AMZN to begin collecting sales tax in 2014 or later.

Figure 18: Percentage of Each Company's Stores in States Collecting Sales Tax from AMZN, According to Effective Date, Ranked by 2013


[^3]
## Online Dislocation: Product Basics

We believe the nature of the industry and products sold play a key part in determining the degree of the threat generated from online-only retailers. Needless to say, we have quite some time before online milk sales or online tire sales set critical mass. However, company-specific initiatives also play a role in mitigating the threat of AMZN and other competitive e-tailers. In the sections that follow, we dive into the key variables that we believe influence the susceptibility of a shift to online sales. We group these variables into experience-driven and product-driven decision factors.

Figure 19: Susceptibility to AMZN / E-tailer by Category, Low to High


[^4]North America Equity Research
29 April 2013
J.P.Morgan

Figure 20: Estimated Online Threat by Mix

| Company | Category | \% of Revenue | Internet Threat |  |
| :---: | :---: | :---: | :---: | :---: |
| DKS | Apparel | 29.0\% | 1.0 | Low |
|  | Footwear | 20.0\% | 2.0 | Moderate |
|  | Hardlines | 51.0\% | 2.0 | Moderate |
|  | Total | 100.0\% | 1.7 | Moderate |
| ODP | Supplies | 65.5\% | 2.0 | Moderate |
|  | Technology | 20.9\% | 3.0 | High |
|  | Furniture and Other | 13.6\% | 3.0 | High |
|  | Total | 100.0\% | 2.5 | Moderate-High |
| OMX | Office Supplies and Paper | 50.2\% | 2.0 | Moderate |
|  | Technology Products | 40.5\% | 3.0 | High |
|  | Office Furniture | 9.3\% | 3.0 | High |
|  | Total | 100.0\% | 2.5 | Moderate-High |
| SPLS | Office Supplies | 43.9\% | 2.0 | Moderate |
|  | Services | 6.0\% | 1.0 | Low |
|  | Office Machines and Related | 30.1\% | 3.0 | High |
|  | Computers and Related | 15.0\% | 3.0 | High |
|  | Office Furniture | 5.0\% | 3.0 | High |
|  | Total | 100.0\% | 2.5 | Moderate-High |
| BBY | Consumer Electronics | 33.0\% | 3.0 | High |
|  | Computing and Mobile Phones | 44.0\% | 2.0 | Moderate |
|  | Entertainment | 10.0\% | 3.0 | High |
|  | Appliances | 6.0\% | 2.0 | Moderate |
|  | Services | 6.0\% | 1.0 | Low |
|  | Other | 1.0\% | 2.0 | Moderate |
|  | Total | 100.0\% | 2.4 | Moderate - High |
| RSH | Mobility | 53.1\% | 2.0 | Moderate |
|  | Signature | 30.4\% | 1.0 | Low |
|  | Consumer Electronics | 15.5\% | 3.0 | High |
|  | Other | 1.0\% | 2.0 | Moderate |
|  | Total | 100.0\% | 1.9 | Moderate |
| HGG | Video | 43.0\% | 3.0 | High |
|  | Appliances | 37.0\% | 2.0 | Moderate |
|  | Other | 20.0\% | 2.0 | Moderate |
|  | Total | 100.0\% | 2.4 | Moderate - High |
| PETM | Consumables | 53.4\% | 1.0 | Low |
|  | Hardgoods | 33.7\% | 2.0 | Moderate |
|  | Pet | 1.7\% | 1.0 | Low |
|  | Pet Services | 11.2\% | 1.0 | Low |
|  | Total | 100.0\% | 1.3 | Low - Moderate |
| BBBY | Domestics | 41.0\% | 2.0 | Moderate |
|  | Home Furnishings | 59.0\% | 2.0 | Moderate |
|  | Total | 100.0\% | 2.0 | Moderate |
| GNC | VMHS | 39.0\% | 2.0 | Moderate |
|  | Sports Nutrition | 44.0\% | 2.0 | Moderate |
|  | Diet Products | 10.0\% | 2.0 | Moderate |
|  | Other Wellness Products | 7.0\% | 1.0 | Low |
|  | Total | 100.0\% | 1.9 | Moderate |
| VSI | VMH | 40.0\% | 2.0 | Moderate |
|  | Supplements and Sports Nutrition | 53.0\% | 2.0 | Moderate |
|  | Other | 7.0\% | 2.0 | Moderate |
|  | Total | 100.0\% | 2.0 | Moderate |
| HD | Project | 37.0\% | 1.0 | Low |
|  | Maintenance | 32.0\% | 2.0 | Moderate |
|  | Repair | 31.0\% | 1.0 | Low |
|  | Total | 100.0\% | 1.3 | Low - Moderate |
| LOW | Project | 38.0\% | 1.0 | Low |
|  | Maintenance | 31.0\% | 2.0 | Moderate |
|  | Repair | 31.0\% | 1.0 | Low |
|  | Total | 100.0\% | 1.3 | Low - Moderate |

Source: Company reports and J.P. Morgan estimates.

Figure 21: Online Susceptibility Ranking


Source: J.P. Morgan estimates.
We believe at the heart of the decision to buy online vs. in-store are the experience and the product. We have narrowed down the experience component to include Timing/Urgency, Selection, Price, Convenience, and Service. On the product side, we believe Perishability, Level of Involvement, Ease of Shipping, and Ubiquity are key drivers of the decision to purchase online vs. offline.

Figure 22: Experience Determinants of Internet vs. Bricks-and-Mortar Sales


Source: J.P. Morgan.

Figure 23: Product Determinants of Internet vs. Bricks-and-Mortar Sales


Source: J.P. Morgan.

## Product

- Perishability: On the product side, we view perishability as a major determinant of purchasing venue which heavily favors retail.
- Involvement: We believe products with a low involvement level are more likely to be purchased on line, vs. products with a high level of involvement. Examples
of high involvement purchases include large, expensive furniture items, ultra high end apparel items where material, fit, and subtle style elements matter, products that require customization (suit, gown, golf clubs). Low involvement purchases include small accessories and other items where look and feel may be less important. In other words, commodities.
- Shipping Costs: The shipping cost is a determinant of the prevalence of a product online. Large, bulky items incur higher shipping costs, which may encourage buyers to purchase in stores. Also, it is financially inhibitive for online retailers to make money shipping products like dog food. Appliances and furniture are categories that break the mold given their infrequency and the proliferation of local delivery services.
- Ubiquity: We believe the ubiquity (or lack thereof) of a product influences the decision of where to purchase. Items such as a toothbrush or bar of soap, which can easily be found in a nearby shop, are less likely to be purchased online. On the other hand, a rare item that may be more difficult or less convenient to locate may often be purchased online due to the ease in procuring it.


## Experience

- Convenience: A key criteria influencing the decision to purchase online vs. in store is convenience. But it can cut both ways. Widely distributed product, particularly consumables (e.g., cigarettes, bread, motor oil), are a roadblock to retailers like AMZN. Project-based purchases (e.g., gardening, home repair) also lend themselves to bricks and mortar given the need for a basket of related items. On the other hand, it's easy enough to go online and produce wedding invitations given the ease of personal design.
- Price: High ticket commodity purchases are more at risk for online given the propensity of the consumer to seek out the best price. As we note below, durable products in this class are particularly susceptible.
- Timing / Urgency: Timing is a major driving factor behind the decision to purchase in stores or online. When the item in question needs to be obtained immediately, buying in stores remains the sole option. A light bulb or prescriptions are two examples where retail has a significant moat.
- Service: The level of service and the overall shopping experience that a customer seeks when making a purchase will play into the decision whether to buy online or in-store. Shoppers seeking an aesthetically pleasing environment, the look and feel of new products, or personalized attention and expertise will be better off buying in a store. Furthermore, a particular store may have a selection that is curated toward its typical demographic, while an e-tailer is likely to have a more general assortment. When personal help is required, such as for sizing or professional advice (e.g., DIY projects or golf club fitting), the bricks and mortar store will, in most cases, continue to win out.


## Most at Risk: Branded, Durable Products

We view AMZN as being the largest threat to hardgoods, particularly widely distributed branded products that have a long life/high ticket. It's a black rectangular Sony that will last a decade; and is there any other mixer sold outside of KitchenAid? The other aspect is some categories like home furnishings are heritage catalog businesses (so the consumer already knows how to buy from a picture) and the brands aren't being disciplined. These categories necessitate retailers to offer more
exclusives and expand private brands. Minimum advertised price (MAP) and uniform pricing policies (UPP) enforcement is critical.

## Private Label and Exclusives Offer Differentiation

Several retailers have focused on building private label penetration as a way to preserve market share. Categories like home furnishings are heritage catalog businesses (so the consumer already knows how to buy from a picture). WSM sells many of these branded goods (think KitchenAid mixers and Nepresso coffee makers) and has focused on a bigger private label presence through introducing WilliamsSonoma branded cookware, soaps, lotions, and fragrances in recent months. In our price comparison, we noticed that several items we compared last year now only come with features or colors that are exclusive to WSM.

Looking at the retail set included in this analysis, out of the retailers that disclose private label penetration, WSM is the leader at $85 \%$, followed by GNC at $\sim 57 \%$ (management believes they can get that number to $65 \%$ ). VSI, by comparison, offers around $\sim 22 \%$ private label products, and HD and BBY are at the lower end of the range with $\sim 11 \%$ and $\sim 5 \%$ private label penetration, respectively.

Figure 24: Private Label Penetration


Source: Company reports, J.P. Morgan estimates.

## Brands More Aware Sans Furnishings

Sony and Samsung's learning curve was steep as the allure of capacity utilization led to expanded online distribution. However, it came at a cost, and finally, in 2012, they rolled out more stern pricing mechanisms that now account for $\sim 25 \%$ of sales at BBY. Since 2011, some big home furnishings brands are seeing MAP price violations. But others have learned, including NKE and UA, which are restricted in distribution with DKS gaining product exclusives. The brands are not directly sold by AMZN.

## The War for the Last Mile

With AMZN building $\sim 16$ DCs in the U.S. in the past two years, beginning to partner with Rite-Aide, Staples, 7-Eleven, and grocery stores for lock boxes across the country, and testing same-day delivery in Baltimore, Boston, Chicago, Indianapolis, Las Vegas, NYC, Philadelphia, Phoenix, Seattle, and Washington, D.C....the war for the last mile is on. However, retail stores can be a tremendous asset, and 3/18 retailers we examined offer ship from store, a key stepping stone to same-day delivery. WMT and TGT are testing same-day shipping currently, and GNC, PETM, and RSH offer free 2-day shipping (similar to AMZN Prime) through ShopRunner (a \$79 annual membership).

This is critical, in our view, as over time more we think categories will move online as successive generations are more comfortable buying products like apparel online and supply chain innovation makes shipping large cube and/or perishable product easier (e.g., pet food). We will visit this topic in greater depth in a future report.

## Real Estate Management Critical

In the poster child sectors, we've seen store assets turn into average duration 10-year liabilities. Given our view that more will go online over time, retailers in heretofore safe sectors must remain diligent with renewals/relocations/downsizing.

## Pricing Summary

Below we summarize our proprietary pricing work for the sectors covered. See the individual sections for more detail.

Pricing methodology. For pricing, the same item was used again in the repeat comparison unless half or more of the retailers being compared no longer carried that item. CE, home furnishings, nutrition, office, and sporting goods retailers had items we looked at from a year ago. Pets and home improvement used the same items we compared a month ago. In the case that half or more of the retailers no longer carried that item, a similar item was substituted. Price comparisons include any sales and discounts readily available on the listed item, but did not include any shipping charges. We also did not distinguish between third-party sellers and Amazon.

- Greatest Progress: BBBY went from an $8 \%$ premium to AMZN to $0 \%$ (even before the ubiquitous $20 \%$ off coupon), while BBY went from $18 \%$ to $3 \%$. PETM made the biggest leap, from a $10 \%$ to a $3 \%$ premium against AMZN prices in the month-to-month compare.
- Still Wood to Chop: ODP went from a $33 \%$ premium to AMZN to $16 \%$, OMX went from a $34 \%$ to $19 \%$.
- Only LuckyVitamin.com (owned by GNC) in our coverage universe was priced lower than AMZN, on average. GNC's own site is at a premium, though we believe comparison shopping is extremely difficult in this space.
- Both Quidsi sites, Casa.com and Wag.com (both owned by AMZN), were at a premium to AMZN prices, $8 \%$ and $6 \%$, respectively. They also both carried a limited selection of items.
- HD/LOW/DKS: High-single-digit premium to AMZN. HD/LOW premiums were driven by outdoor power equipment and power tools. DKS has wide price variability.

Figure 25: BBY, HGG, and RSH Discount/Premium to AMZN Pricing

|  | Spring 2012 |  |  | Spring 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | BBY.com | HGG.com | RSH.com | BBY.com | HGG.com | RSH.com |
| Samsung 32" LCD TV | 0\% | 0\% | 0\% | 15\% | 7\% | 37\% |
| Toshiba 40" LCD TV | -4\% | 0\% | 12\% | -9\% | -9\% |  |
| Samsung Digital Camera | 26\% |  | 40\% | -5\% | -4\% |  |
| Canon Digital Camera | 4\% |  | 5\% |  | -6\% |  |
| Nikon Digital Camera | 2\% |  | 58\% | -22\% |  |  |
| Fujifilm Digital Camera | 60\% |  | 130\% | -25\% |  |  |
| Panasonic Digital Camera | 64\% |  | 64\% | 28\% |  |  |
| Kindle Fire | 0\% | 0\% | 0\% | 0\% | 0\% |  |
| Acer Notebook | -5\% |  | -2\% | 0\% |  |  |
| Toshiba 15.6" Laptop | -1\% |  | 5\% |  |  | 11\% |
| Samsung Transform Ultra Prepaid Android Phone Virgin Mobile No-Contract | 62\% |  | -19\% | 25\% |  |  |
| Phone | 37\% |  | 37\% | 36\% |  | -19\% |
| Bose Bluetooth Headset | 0\% |  | 0\% | 0\% |  | 0\% |
| Garmin Nuvi | 0\% |  | 0\% | 1\% | -2\% | 18\% |
| Lenmar iPhone Battery Case | 25\% |  | 88\% | 0\% |  | 122\% |
| Average | 18\% | 0\% | 28\% | 3\% | -2\% | 28\% |

Source: Bestbuy.com, hhgregg.com, Radioshack.com, Amazon.com.

Figure 26: BBBY \& WSM Discount/Premium to AMZN Pricing

|  | Spring 2012 |  |  | Spring 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | BBBY.com | WSM.com | Casa.com | BBBY.com | WSM.com | Casa.com |
| Le Creuset 5-Quart Oval French Oven | 0\% | 11\% | 0\% | 2\% | Exclusive only | 2\% |
| Riedel 43 oz Ultra Decanter | 19\% | 36\% |  | 0\% | 0\% | 0\% |
| Cuisinart Mini-Prep Plus Food Processor, 3-Cup | 3\% | 2\% | 24\% | -25\% | 0\% | 3\% |
| OXO Good Grips Citrus Squeezer | 0\% | 0\% | 0\% | 0\% | Exclusive only | 0\% |
| Breville Stainless Steel Electric Tea Kettle | 0\% | 0\% | 17\% | 0\% | 0\% | 50\% |
| SodaStream Pure Soda Maker | 0\% | 0\% |  | 0\% | Exclusive only |  |
| Barista Prime K-Cups, Set of 18 | 0\% | 0\% |  | 4\% |  | 17\% |
| Miele Twist Upright Vacuum | 0\% | 0\% |  | 0\% | 0\% |  |
| Emile Henry Pizza Stone | 0\% | 0\% | 0\% | 1\% | 1\% |  |
| Nespresso Pixie Espresso Maker | 58\% | 58\% | 31\% | 5\% | 36\% | 5\% |
| Breville Die-Cast 4-Slice Smart Toaster | 0\% | 0\% |  | 8\% | 8\% |  |
| KitchenAid 5-Quart Artisan Stand Mixer | 4\% | 4\% | 4\% | 0\% | 0\% | 0\% |
| OXO Triple Timer | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Rosle Stainless Steel Ice Cream Scoop | 0\% | 0\% | 0\% | 0\% |  | 0\% |
| Vinturi Wine Aerator | 38\% | 38\% |  | 5\% | 40\% | 8\% |
| Average | 8\% | 10\% | 9\% | 0\% | 9\% | 8\% |

Source: Bedbathandbeyond.com, Williamssonoma.com, Casa.com, Amazon.com.

Figure 27: HD \& LOW Discount/Premium to AMZN Pricing

| Item | March 2013 |  | April 2013 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | HD.com | LOW.com | HD.com | LOW.com |
| BLACK \& DECKER 120 mph 90 CFM Electric 18-Volt NiCad Sweepe | $9 \%$ | $9 \%$ | $9 \%$ | $9 \%$ |
| DEWALT 20-Volt Max Lithium-lon Combo Kit (4-Tool) | $15 \%$ | $15 \%$ | $9 \%$ | $9 \%$ |
| Wagner Power Painter Plus 6.6 GPH with EZ Tilt Technology | $11 \%$ | $11 \%$ | $-11 \%$ | $-11 \%$ |
| Weber Spirit E-210 2-Burner Propane Gas Grill | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Hitachi 40cc 2-Cycle 18-in Gas Chain Saw | $34 \%$ | $34 \%$ | $33 \%$ | $33 \%$ |
| Bosch 18-Volt 1/2-in Cordless Lithium lon Compact Tough Drill/Driver | $1 \%$ | $1 \%$ | $6 \%$ | $6 \%$ |
| Kenroy Home 5-Light Wynwood Burnished Bronze Chandelier | $6 \%$ | $10 \%$ | $-4 \%$ | $10 \%$ |
| Lincoln Electric 240-Volt / 225-Amp Stick Welder | $-28 \%$ | $-28 \%$ | $-29 \%$ | $-29 \%$ |
| Hitachi 21.1cc 2-Cycle 17-in Straight Gas String Trimmer | $25 \%$ | $25 \%$ | $24 \%$ | $24 \%$ |
| ROCKWELL VersaCut Mini-Circular Saw | $1 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Bostitch 7 Ib Framing Pneumatic Nailer | $15 \%$ | $0 \%$ | $24 \%$ | $8 \%$ |
| Ames True Temper 26-in Snow Shovel with 32-in Aluminum Handle | $-1 \%$ | $-4 \%$ | $27 \%$ | $23 \%$ |
| KOHLER Revival Polished Chrome 2-Handle High-Arc Kitchen Faucet | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| BLACK \& DECKER 7-Amp Belt Power Sander | $25 \%$ | $4 \%$ | $25 \%$ | $4 \%$ |
| Hansgrohe Chrome HG Shower 3-Spray Showerhead | $23 \%$ | $36 \%$ | $23 \%$ | $36 \%$ |
| Average | $9 \%$ | $7 \%$ | $9 \%$ | $8 \%$ |

Source: HomeDepot.com, Lowes.com, Amazon.com.

Figure 28: GNC, LuckyVitamin.com, and VSI Discount/Premium to AMZN Pricing

|  | Spring 2012 |  |  | Spring 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | GNC.com | VSI.com | Lucky Vitamin.com | GNC.com | VSI.com | Lucky Vitamin.com |
| 4 Ever Fit Fruit Blast Isolate Straw Kiwi | 9\% | 9\% | -4\% | 2\% | -7\% | -14\% |
| A.C. Grace Unique-E Tocotrienol | 37\% | 24\% | -2\% | 38\% | 8\% | -23\% |
| Amazing Grass Wheatgrass Powder | 39\% | 11\% | 0\% | 35\% |  | -10\% |
| Applied Nutriceuticals, Drive | 19\% | 4\% | -13\% | 64\% | 45\% | 22\% |
| beveri Immunity Boost Natural Tangerine BioNutritional Research Group® Power | 72\% | 47\% | -2\% |  | 63\% | 17\% |
| Crunch® - Cookies \& Crème | 71\% | 4\% | 0\% | 3\% | -8\% | -13\% |
| Dr. Bronner's Magic Soaps All-One Hemp <br> Almond Pure-Castile Bar Soap <br> Designer Whey® 100\% Whey Protein - | -30\% | -28\% | -28\% | -18\% | -15\% | -15\% |
| Double Chocolate | 69\% | 0\% | -23\% | 7\% | -18\% | -20\% |
| Gaia Herbs® Echinacea Supreme | 24\% | 23\% | -19\% |  | 10\% | 23\% |
| Laci Le Beau® Super Dieter's Tea® | -11\% | 12\% | -31\% | 117\% | 52\% | 30\% |
| MuscleMeds ${ }^{\text {TM }}$ Carnivor $^{\text {TM }}$ - Fruit Punch MET-Rx® BIG 100 - Chocolate Chip | -13\% | 2\% | -1\% | 0\% | 6\% | -3\% |
| Cookie Dough | 52\% | -3\% | -5\% | 18\% | 0\% | 3\% |
| ReNew Life Formulas® Ultimate Flora 50 Billion ${ }^{\text {TM }}$ | -4\% | 20\% | -6\% | -2\% | 6\% | 6\% |
| Top Secret Nutrition Astravar ${ }^{\text {TM }}$ | 108\% | 15\% | -1\% | 150\% |  | -14\% |
| TWINLAB® AMINO FUEL® | 9\% | 9\% | 3\% | 7\% | -18\% | -24\% |
| Average | 30\% | 10\% | -9\% | 32\% | 9\% | -2\% |

Source: GNC.com, VitaminShoppe.com, Luckyvitamin.com, Amazon.com.

Figure 29: ODP, OMX, and SPLS Discount/Premium to AMZN Pricing

|  | Spring 2012 |  |  | Spring 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | ODP.com | OMX.com | SPLS.com | ODP.com | OMX.com | SPLS.com |
| Lexmark 16 (10N0016) Black Ink Cartridge | 56\% | 47\% | 56\% | 87\% | 123\% | 97\% |
| HammerMill® Copy Plus Copy Paper, 8 1/2" x | -6\% | 65\% | -6\% | 85\% | 85\% | 85\% |
| HP g7-1310us Laptop Computer With 17.3" LEDBacklit Screen \& 2nd Gen Intel® Core ${ }^{\text {TM }}$ i3- | -10\% | 7\% | 7\% | -17\% |  | -11\% |
| Mirado® Black Warrior® Pencils, No. 2, Medium Soft Lead, Box Of 12 | -22\% | -39\% | -27\% | -68\% | -73\% | -68\% |
| Sharpie $®$ Accent $®$ Retractable Pocket Highlighters, Fluorescent Yellow, Dozen | 15\% | 15\% | 13\% | 35\% | 39\% | 35\% |
| Clorox® Pine Sol Cleaner / Disinfectant / Deodorizer, 144 Oz. | 8\% | -5\% | -30\% | 66\% | 35\% | 35\% |
| Swingline $\circledR^{\text {R Light }}$ Touch ${ }^{\text {TM }}$ Antimicrobial Heav | 57\% | 66\% | 67\% | 55\% | 64\% | 55\% |
| Westcott® Titanium Bonded Scissors, 7", | 122\% | 106\% | 96\% | 30\% | 3\% | 3\% |
| BIC® Round Stic Grip ${ }^{\text {TM }}$ Ballpoint Pens, 1.0 mm, Medium Point, Clear Barrel, Blue Ink, Pack | 141\% | 125\% | 44\% | -47\% | -47\% | -47\% |
| Avery® Flexible Presentation Binder, 1" Ring | -5\% | -17\% | -12\% | -17\% | -31\% | -31\% |
| Crayola® Standard Crayon Set, Assorted | 19\% | 33\% | 33\% | 0\% | 0\% | -10\% |
| HP LaserJet Pro P1102w Monochrome Laser | 64\% | 64\% | 64\% | 16\% | 16\% | -6\% |
| Texas Instruments® Tl-84 Plus Graphing | 12\% | 12\% | 12\% | 11\% | 11\% | 11\% |
| SanDisk® Cruzer® USB 2.0 Flash Drive, 16GB | -33\% | -48\% | -44\% | -5\% | 14\% | 137\% |
| Pendaflex® Divide It Up ${ }^{\text {TM }}$ Multi-Section File Folders, Letter Size, Manila, Pack Of 24 | 44\% | 54\% | 21\% | -17\% | 21\% | -1\% |
| Scotch $®$ Magic $^{\text {TM }} 810$ Tape, 3/4" $\times 1000$ ", Pack Of 10 Rolls | 64\% | 67\% | 64\% | 35\% | 27\% | 32\% |
| Average | 33\% | 34\% | 22\% | 16\% | 19\% | 20\% |

[^5]Figure 30: PETM Discount/Premium to AMZN Pricing and Wag.com

| Item | March 2013 | April 2013 |  |
| :--- | :---: | :---: | :---: |
|  | PETM.com | PETM.com | Wag.com |
| Eukanuba® Adult Maintenance Small Bite Dog Food, 33Ibs | $-13 \%$ | $-30 \%$ | $-15 \%$ |
| cesar Dog Food Multipack 12 ct | $-15 \%$ | $-15 \%$ |  |
| Blue Buffalo Life Protection Toy Breed Adult Dog Food; Chicke | $-18 \%$ | $-12 \%$ | $-2 \%$ |
| Purina ONE® brand SmartBLEND ${ }^{\text {TM }}$ Chicken \& Rice Formula | $-13 \%$ | $-41 \%$ | $-20 \%$ |
| Hill's Science Diet Light Small Bites Adult Dog Food | $-15 \%$ | $6 \%$ | $32 \%$ |
| lams Proactive Health Adult Indoor Weight \& Hairball Care Forr | $30 \%$ | $5 \%$ | $15 \%$ |
| Frontline Plus for Dogs- 3pk; for 0-23lbs | $79 \%$ | $52 \%$ | $-2 \%$ |
| Fancy Feast 3-Flavor Grilled Gourmet Cat Food Variety Pack | $0 \%$ | $0 \%$ | $7 \%$ |
| Whiskas Choice Cuts Chef's Favorites 12 pk | $9 \%$ | $1 \%$ | $26 \%$ |
| Kong Bounzer size M | $14 \%$ | $36 \%$ |  |
| Majestic Pet Nawy Blue Links Rectangle Pet Bed, Small | $-20 \%$ | $-17 \%$ |  |
| Hip Doggie Cowboy Collars for Dogs | $8 \%$ | $-41 \%$ |  |
| Armarkat Cat Tree Pet Furniture Condo | $21 \%$ | $21 \%$ | $10 \%$ |
| ReptiBreeze Open Air Screen Cage, Extra Large 24x24x48 | $71 \%$ | $75 \%$ |  |
| Pet Gear Deluxe Tan Four Door Steel Crates | $7 \%$ | $7 \%$ |  |
| Average | $10 \%$ | $3 \%$ | $6 \%$ |

Source: Petsmart.com, Wag.com, Amazon.com.

Figure 31: DKS Premium/Discount to AMZN Price

|  | Spring 2012 | Spring 2013 |
| :---: | :---: | :---: |
| Item | DKS.com | DKS.com |
| Merrell Men's Refuge Core Stone Low Hiking Shoe |  | 4\% |
| Merrell Men's Chameleon4 Stretch Hiking Shoe |  | 16\% |
| Merrell Men's Moab Waterproof Hiking Shoe | 4\% | 18\% |
| Merrell® Moab Low Hikers |  | 3\% |
| Sorel Women's Caribou Winter Boot in Black | 43\% | 0\% |
| Sorel Women's Caribou Winter Boot in Peatmoss | 0\% | 0\% |
| New Balance Men's 940 Running Shoe | 9\% | 10\% |
| Shakespeare Ugly Stik Tiger Casting Rod | 4\% | -20\% |
| The North Face Women's Micro Logo Short Sleeve T-Shirt | -11\% | 0\% |
| Under Armour® Women's Tech Short-Sleeve Tee | 15\% | 0\% |
| Eureka! Copper Canyon 4 Person Tent | 0\% | 0\% |
| Old Town Guide 147 Canoe | -23\% | -17\% |
| Spyder Women's Full Zip Mid Weight Sweater | 10\% | 41\% |
| Bushnell PermaFocus Series Binoculars-10x50 | 29\% | 16\% |
| CamelBak M.U.L.E. 100 oz. Hydration Pack | 11\% | 12\% |
| Princeton Tec Remix Headlamp | 29\% | 32\% |
| Under Armour Men's Charged Cotton Long Sleeve Tee | 0\% | 0\% |
| Columbia Boys' Flow Summit Jacket | 0\% | 51\% |
| High Sierra Access Backpack | 32\% | -8\% |
| Average | 9\% | 8\% |

Source: Dickssportinggoods.com, Amazon.com.

## Consumer Electronics (BBY, HGG, RSH)

As noted earlier, we believe specialty retail generally wins during periods of high innovation and loses during commoditization. The poster children of online encroachment had significant product issues that were a greater contributor to financial declines than AMZN's push. For books/packaged media, consumption started moving toward digital, thereby eliminating the need for the number and size of stores that sold them. For electronics, the basis of our Jan 2008 BBY downgrade from OW to UW was the crescendo of a once-in-a-generation product cycle that rapidly turned the other direction as replacement periods lengthened (e.g., TVs) and product proliferation turned to convergence (e.g., negative comps in GPS, cameras, and iPods). In office, paper consumption declines accelerated with computing mobility. Finally the economic downturn further exacerbated the impact on electronics and office.

Using Best Buy as an example, below we see that AMZN was the third largest player in the CE market in 2011 after only appearing in the top 10 in 2008.

Figure 32: Top 100 Consumer Electronics Retailers Company Rankings by Revenue

| Rank | 2000 | 2001 | 2002 | 2003 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy |
| 2 | Circuit City | Circuit City | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart |
| 3 | Sears | Wal-Mart | Circuit City | Circuit City | Circuit City | Circuit City | Circuit City | Circuit City | Apple Stores | Apple Stores | Amazon.com |
| 4 | CompUSA | RadioShack | Dell | Dell | Dell | Dell | Dell | Apple Stores | Target | Amazon | Apple Stores |
| 5 | RadioShack | Target | Target | Target | RadioShack | Target | Target | Target | Costco | Target | Target |
| 6 | Wal-Mart | CompUSA | RadioShack | RadioShack | Target | RadioShack | RadioShack | Dell | Dell | Costco | Costco |
| 7 | Target | Staples | CompUSA | Staples | CompUSA | Game Stop | Game Stop | Game Stop | Game Stop | Game Stop | Gamestop |
| 8 | Staples | Sears | Staples | CompUSA | Costco | CompUSA | CompUSA | Costco | Amazon | Dell | Dell |
| 9 | Office Depot | Office Depot | Sears | Sam's Club | Sears | Costco | Costco | RadioShack | RadioShack | RadioShack | RadioShack |
| 10 | Kmart | Kmart | Office Depot | Office Depot | Sam's Club | Apple Stores | Apple Stores | Amazon | Sam's Club | Sam's Club | Sam's Club |

Source: TWICE; Consumer Electronics Association; J.P. Morgan estimates.
Our core thesis is that the massive digital product cycle and subsequent convergence/down cycle drove commoditization, which opened the door for AMZN and the rapid change/adoption of e-commerce took BBY by surprise. Below we see the supercycle turned ugly after 2008. As indicated below, retail sales at U.S. electronics and appliance stores were negative in 2008-2009, followed by $1.2 \%$ growth in 2010 and $1.0 \%$ growth in 2011.

Figure 33: Retail Sales \& Growth - Electronics and Appliances Stores Only (\$ in billions)


Source: U.S. Census Bureau; J.P. Morgan estimates

For reference, Circuit City closed all of its doors on March 8, 2009, leading to a big share shift among key industry payers. Circuit City's demise was a significant part of the drop in 2009, but we believe the bankruptcy was symptomatic of the cycle; the low-margin, deflating nature of the category; and the financial crisis. The analog to digital product switch created a once-in-a-generation product cycle, and the adoption of new TVs, cameras, MP3 players, GPS devices plus a new gaming ecosystem from the big three players created a supercycle. Indeed as noted below, household penetration rates rose rapidly in the 2005-2008 period, and "the last leg of adoption" is often driven by mass commoditizers like COST, WMT, and AMZN.

Looking back to our in-depth TV reports from 2006, we believe the "sweet spot" of adoption (i.e., when it's most beneficial for the specialty retailers financially) often occurs when household penetration ramps from $14 \%-40 \%+$. As it lurches toward $60 \%$, the AMZNs and WMTs of the world take over. Looking below, TVs,
notebooks, MP3 players, and gaming consoles all drove a peaking of the sweet spot in the 2007-09 timeframe.

Figure 34: U.S. Household Penetration by Category

|  | 01/2005 | 01/2006 | 01/2007 | 01/2008 | 01/2009 | 01/2010 | 01/2011 | 01/2012 | 01/2013 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Digital TV Sets and Displays |  |  |  |  |  |  |  |  |  |
| DTV | 12\% | 20\% | 33\% | 50\% | 62\% | 77\% | 85\% | 88\% | 89\% |
| HDTV | 10\% | 16\% | 26\% | 41\% | 53\% | 63\% | 72\% | 87\% | 88\% |
| LCD TV | 10\% | 12\% | 17\% | 26\% | 41\% | 57\% | 67\% | 72\% | 74\% |
| Home Information Technology/Security |  |  |  |  |  |  |  |  |  |
| All Home PCs | 70\% | 74\% | 76\% | 82\% | 83\% | 87\% | 89\% | 90\% | 90\% |
| Desktop | 70\% | 72\% | 68\% | 72\% | 71\% | 75\% | 79\% | 72\% | 68\% |
| Laptop/Tablet | 28\% | 32\% | 35\% | 47\% | 53\% | 59\% | 68\% | 69\% | 71\% |
| Imaging |  |  |  |  |  |  |  |  |  |
| Digital Camera | 42\% | 55\% | 59\% | 73\% | 77\% | 81\% | 84\% | 84\% | 85\% |
| Camcorder | 45\% | 46\% | 48\% | 48\% | 51\% | 54\% | 55\% | 52\% | 42\% |
| Portable Media |  |  |  |  |  |  |  |  |  |
| MP3 Players | 14\% | 20\% | 33\% | 43\% | 46\% | 51\% | 51\% | 54\% | 45\% |
| Speaker Docks | 4\% | 7\% | 12\% | 23\% | 30\% | 35\% | 43\% | 44\% | 44\% |
| Portable Communication |  |  |  |  |  |  |  |  |  |
| Wreless Telephones | 69\% | 73\% | 76\% | 87\% | 90\% | 91\% | 91\% | 91\% | 91\% |
| Smartphones | 1\% | 4\% | 7\% | 18\% | 23\% | 33\% | 39\% | 55\% | 55\% |
| Video Gaming |  |  |  |  |  |  |  |  |  |
| Portable | 29\% | 30\% | 30\% | 30\% | 33\% | 34\% | 37\% | 34\% | 31\% |
| Console | 37\% | 38\% | 39\% | 42\% | 46\% | 47\% | 52\% | 53\% | 49\% |
| Information |  |  |  |  |  |  |  |  |  |
| Portable Navigation | 3\% | 6\% | 8\% | 12\% | 20\% | 31\% | 39\% | 45\% | 46\% |
| In-Dish Navigation | 2\% | 3\% | 4\% | 9\% | 13\% | 15\% | 19\% | 18\% | 17\% |

Source: Consumer Electronics Association.
The top five ranked CE retailers in descending order included Best Buy, Walmart, Amazon, Apple stores, and Target. The only changes in the top 20 were Amazon.com inching above Apple for the number 3 spot and Newegg.com taking the number 11 spot from Sears. From a growth perspective, Amazon ( $+51.5 \%$ ), Apple $(+29.1 \%)$, and hhgregg ( $+18.1 \%$ ) led the top 20 with double-digit sales expansion. On the other hand, Dell was down $19.1 \%$, Toys R Us fell $12.7 \%$, and Sears CE sales declined $11.3 \%$. By channel, consumer direct (including e-commerce only players) reached $17.7 \%$ of sales vs. $15.9 \%$ last year, while multi-region CE stores dropped 120 bps to $26.6 \%$. Best Buy lost 120 bps of market share, while Amazon and Apple gained 276 and 155 , respectively.

Figure 35: Top 100 Consumer Electronics Retailers-Company Rankings by Revenue

| Rank | 2000 | 2001 | 2002 | 2003 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy | Best Buy |
| 2 | Circuit City | Circuit City | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart | Wal-Mart |
| 3 | Sears | Wal-Mart | Circuit City | Circuit City | Circuit City | Circuit City | CircuitCity | Circuit City | Apple Stores | Apple Stores | Amazon.com |
| 4 | CompUSA | RadioShack | Dell | Dell | Dell | Dell | Dell | Apple Stores | Target | Amazon | Apple Stores |
| 5 | RadioShack | Target | Target | Target | RadioShack | Target | Target | Target | Costco | Target | Target |
| 6 | Wal-Mart | CompUSA | RadioShack | RadioShack | Target | RadioShack | RadioShack | Dell | Dell | Costco | Costco |
| 7 | Target | Staples | CompUSA | Staples | CompUSA | Game Stop | Game Stop | Game Stop | Game Stop | Game Stop | Gamestop |
| 8 | Staples | Sears | Staples | CompUSA | Costco | CompUSA | CompUSA | Costco | Amazon | Dell | Dell |
| 9 | Office Depot | Office Depot | Sears | Sam's Club | Sears | Costo | Costco | RadioShack | RadioShack | RadioShack | RadioShack |
| 10 | Kmart | Kmart | Office Depot | Office Depot | Sam's Club | Apple Stores | Apple Stores | Amazon | Sam's Club | Sam's Club | Sam's Club |

Source: TWICE; Consumer Electronics Association; J.P. Morgan estimates.
With the exception of HGG, retail growth in the channel has been under pressure against the rapid growth of Amazon. We expect Amazon's growth to decelerate going forward thanks to a bigger base and expect retail sales to improve as retailers become more nimble with price comparison, shipping standards, and inventory availability.

## Online vs. Retail Penetration

According to TWICE Market Research, in 2011 consumer electronics sales (excluding appliances) from the top 100 CE retailers rose $5.1 \%$, to $\$ 133$ billion, driven by strong CE sales growth from total electronics/appliance stores, mass merchants, and consumer direct. Note the data for 2012 is expected to be published in May 2013.

Figure 36: Top 100 CE Retailers - Revenue by Retail Channel (\$ in billions)

| Retail Channel | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Electronics / Appliance Sbres | \$35.0 | \$36.5 | \$22.9 | \$22.9 | \$24.5 | \$27.2 | \$30.8 | \$32.6 | \$34.7 | \$35.2 | \$35.4 | \$53.8 |
| Electronics-Only Stores |  |  | 16.8 | 18.2 | 20.2 | 21.6 | 21.7 | 17.2 | 16.6 | 18.4 | 19.5 |  |
| Total CE / Appliance Sbres | 35.0 | 36.5 | 39.7 | 41.0 | 44.7 | 48.8 | 52.5 | 49.9 | 51.2 | 53.6 | 54.9 | 53.8 |
| Mass Merchants | 20.2 | 21.1 | 19.2 | 20.0 | 22.0 | 22.8 | 27.3 | 28.4 | 28.5 | 29.4 | 30.1 | 29.0 |
| Warehouse Clubs | 3.5 | 3.9 | 4.4 | 4.9 | 6.2 | 6.7 | 8.1 | 7.9 | 8.5 | 8.3 | 8.3 | 7.8 |
| Mass Channel | 23.7 | 24.9 | 23.6 | 24.8 | 28.2 | 29.4 | 35.4 | 36.3 | 37.1 | 37.7 | 38.4 | 36.9 |
| Computer Stores | 8.3 | 8.1 | 9.3 | 7.3 | 7.1 | 8.3 | 5.5 | 6.4 | 6.0 | 6.5 | 6.7 | 6.5 |
| Consumer Direct | 6.6 | 7.1 | 10.2 | 13.8 | 14.7 | 14.7 | 16.0 | 16.8 | 17.5 | 20.2 | 23.6 | 25.3 |
| Home Office Stores | 6.6 | 6.8 | 3.7 | 4.1 | 4.2 | 4.0 | 4.1 | 3.6 | 3.6 | 3.9 | 4.0 | 3.9 |
| Other | 0.2 | 1.2 | 3.1 | 6.7 | 7.4 | 8.9 | 11.8 | 6.2 | 5.7 | 4.8 | 5.7 | 5.2 |
| Total | 80.4 | 84.6 | 89.6 | 97.8 | 106.2 | 114.2 | 125.4 | 119.1 | 121.1 | 126.7 | 133.2 | 131.6 |

Source: TWICE; Consumer Electronics Association; J.P. Morgan estimates.

Figure 37: Top 100 Consumer Electronics Retailers -- Sales by Distribution Channel
$2000 \quad 2005$ 2012E

| 2000 | 2005 |  |
| :---: | :---: | :---: |
|  |  |  |

Source: TWICE; Consumer Electronics Association; J.P. Morgan estimates.
Growth in the online category remains strong, with e-commerce penetration reaching $\sim 13 \%$ in 2012 from $\sim 4 \%$ in 2003. We expect this rate to continue to grow at a double-digit pace for the foreseeable future. This compares to negative comps in CE same-store sales trends. Note the average comp in the below chart is dragged down by HGG. Going forward, we expect CE comp trends to stabilize and for share grabs from AMZN to become more difficult, particularly as it relates to BBY.

Figure 38: Consumer Electronics Online Penetration and SSS


Source: Company reports, ComScore, Census data, and J.P. Morgan estimates.

## BBY Capabilities Improving

The charts below articulate how far retailers, and CE retailers particularly, have come with their omni-channel philosophy to better compete in the industry. Retailers now have both the technical and supply chain capabilities to steadily grow the direct side of their business. For instance, BBY is planning to use its $\sim 1,100$ domestic store network as distribution point next year, and already $40 \%$ of online orders are picked up in stores. The former should help drive better online close rates (i.e., they only fulfill from one facility currently), while the latter presents a significant advantage for consumers who wish to buy online during the day and pick up merchandise in store on their way home.

Figure 39: CE Retailers' Online Capabilities Chart

|  | Online sales as a \% of total revenue |  |  |  |  | 2012 Online Sales Contribution to Comp? | Effect of Online Sales on Operating Margins | BOPUS? | Ship to store? | Same day delivery? | $\qquad$ | $\begin{aligned} & \text { Requirement } \\ & \text { for free } \\ & \text { shipping? } \\ & \hline \end{aligned}$ | Promotional free shipping? | Mobile growth | Mobile site? | Mobile app? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013E |  |  |  |  |  |  |  |  |  |  |  |
| BBY | N.A. | 7\% | 6\% | 7\% | expect growth | Included, meaningful contribution | Slightly lower | Yes | No | No | No, use all DCs | Free shipping all the time | Yes | Saw large growth during holidays in 2012 | Yes | Yes |
| HGG |  |  | Not dis | osed |  | Included, but not disclosed. | Similar to retail stores. | Yes | No | No | No, they come from the closest DC | Varies | Yes | Not disclosed. | Yes | No |
| RSH | <5\% | <5\% | <5\% | <5\% | <5\% | Not included. | Not meaningful. | No | Yes | No | No, multiple DCs and fulfilled directly from vendor as well | $\$ 50$ order minimum; Shoprunner | Yes | Not disclosed. | Yes | Yes |

[^6]Figure 40: CE Retailers' Online Pricing and Products

|  | SKUs offered |  |  | Private label Expanded <br> categories <br> percentage <br> online?  |  | Pricing different online? | Price match to own website? | Price match other brick \& mortar retailers' online prices? | Price match to Amazon? | Difference since TX and CA began collecting taxes on AMZN? | Use QR Codes? | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Online 2010 | $\begin{gathered} \text { In-store } \\ \hline 2012 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { Online } \\ & 2012 \end{aligned}$ |  |  |  |  |  |  |  |  |  |
| BBY | <70,000 | <10,000 | >100,000 | 5\% | Music, media, small appliances, phone/tablet accessories | No | N/A | Yes | Yes | Have noticed a difference in BOPUS \& online sales in those areas | Yes | Consolidating websites and improving product search and rewards zone viewing online. |
| HGG | N/A | N/A | Not much change from 2010. | Not disclosed. | No | No | N/A | Yes | Yes | N/A | No | Focusing on adding functionality to the mobile site. |
| RSH | Not disclosed. | $\sim 4,000$ | $\sim 16,000$ | Not disclosed. | Everything plus additional categories not in stores | Yes | No | No | No | N/A | Yes | N/A |

Source: Company reports and J.P. Morgan estimates.

## Electronics Pricing Study: BBY Closing the Gap

Below we present a basic pricing survey of core items sold online through Amazon, Best Buy, hhgregg, and RadioShack. Overall, Best Buy is priced at a $3 \%$ premium to Amazon (including third parties), which is a significant contraction from being priced $18 \%$ higher only a year ago. Hhgregg prices are basically at parity to Amazon but for a much smaller subset of items. Interestingly, all items in our dataset were within $+/-10 \%$. Finally, RadioShack pricing appears to be all over the board, with one item priced as high as $130 \%$ higher last year to $19 \%$ cheaper this year.

Figure 41: BBY, HGG, and RSH Discount/Premium Pricing to AMZN

|  | Spring 2012 |  |  | Spring 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | BBY.com | HGG.com | RSH.com | BBY.com | HGG.com | RSH.com |
| Samsung 32" LCD TV | 0\% | 0\% | 0\% | 15\% | 7\% | 37\% |
| Toshiba 40" LCD TV | -4\% | 0\% | 12\% | -9\% | -9\% |  |
| Samsung Digital Camera | 26\% |  | 40\% | -5\% | -4\% |  |
| Canon Digital Camera | 4\% |  | 5\% |  | -6\% |  |
| Nikon Digital Camera | 2\% |  | 58\% | -22\% |  |  |
| Fujifilm Digital Camera | 60\% |  | 130\% | -25\% |  |  |
| Panasonic Digital Camera | 64\% |  | 64\% | 28\% |  |  |
| Kindle Fire | 0\% | 0\% | 0\% | 0\% | 0\% |  |
| Acer Notebook | -5\% |  | -2\% | 0\% |  |  |
| Toshiba 15.6" Laptop Samsung Transform Ultra | -1\% |  | 5\% |  |  | 11\% |
| Prepaid Android Phone Virgin Mobile No-Contract | 62\% |  | -19\% | 25\% |  |  |
| Phone | 37\% |  | 37\% | 36\% |  | -19\% |
| Bose Bluetooth Headset | 0\% |  | 0\% | 0\% |  | 0\% |
| Garmin Nuvi | 0\% |  | 0\% | 1\% | -2\% | 18\% |
| Case | 25\% |  | 88\% | 0\% |  | 122\% |
| Average | 18\% | 0\% | 28\% | 3\% | -2\% | 28\% |

[^7]
## Discounters (COST, TGT, WMT)

The breadth of assortment at discounters / superstores / warehouse clubs leaves some categories susceptible to share loss from internet sales, while others are protected. Categories such as food and consumables, which in many cases have high perishability and high ubiquity, are likely to be purchased in store. Other categories such as home, apparel, and electronics, suffer a greater threat from the internet. When timing is a key factor, the bricks-and-mortar discount stores typically win out. In most cases, the stores have a big enough assortment that most shoppers' needs can be met in one trip without resorting to the web.

## Discounters Catching Up

Figure 42: Discounters Online Capabilities Chart

|  | Online sales as a \% of total revenue |  |  |  |  | 2012 Online Sales Contribution to Comp? | Effect of Online Sales on Operating Margins | BOPUS? | Ship to store? | Same day delivery? | $\qquad$ | Requirement for free shipping? | Promotional free shipping? | Mobile growth | Mobile site? | Mobile app? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013E |  |  |  |  |  |  |  |  |  |  |  |
| COST | 2-2.5\% | $\sim 2 \%$ | ~2\% | 2.2\% | ~2.5\% | Included, but not disclosed. | Online business produces a higher pretax operating margin. | No | No | No | Majority direct from supplier, rest comes from two other warehouses. | No free shipping; often included in price | No | Not disclosed | Yes | Yes |
| TGT | 1-2\% | <2\% | <2\% | <2\% | Outpace industry growth rate | Included, not disclosed. | Online not as profitable as stores yet. | Testing | No | Testing | Several dedicated online fulfillment warehouses or direct from supplier. | Redcard members get free shipping always; frequently $\$ 50$ minimum | Yes | Strong triple digit growth | Yes | Yes |
| WMT |  | disclos |  | ~3\% | Not disclosed. | Included in comp, but not disclosed. | Not disclosed. | Yes | Yes | Testing | Two online only warehouses but merchandise is also shipped from regular DCs. | Free shipping to home on consumables purchases of $\$ 45$ or more. | Yes | Not disclosed | Yes | Yes |

As these large retailers began to catch up with online-only retailers by offering a larger breadth and assortment online, easy in-store returns, and price matching, they found themselves competing on a much more even playing field. The next push is to turn their stores into an advantage again: same-day delivery. WMT and TGT have begun testing same-day delivery using their stores as mini-distribution centers. With $\sim 3,710$ WMT stores and $\sim 1,780$ TGT stores, both discount chains are able to reach a much larger percentage of the population if the online war continues to go down this path of same-day delivery.

Figure 43: Discounters Online Pricing and Products

|  | SKUs offered |  |  | Private label percentage | Expanded categories online? | Pricing different online? | Price match to own website? | Price match other brick \& mortar retailers' online prices? | Price match to Amazon? | Difference since TX and CA began collecting taxes on AMZN? | Use QR Codes? | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Online $2010$ | $\begin{aligned} & \text { In-store } \\ & 2012 \\ & \hline \end{aligned}$ | Online $2012$ |  |  |  |  |  |  |  |  |  |
| COST | N/A | 3,800 | 3,800 | 20\% | Electronics and furniture | Yes, because most prices includes the shipping. | N/A | No | No | No. | Yes | N/A |
| TGT | N/A | 75,000 | $\sim 750,000$ | 33\% | Home, apparel, big ticket items, music, movies, and books | Yes | Yes | Yes | Yes | Yes, have seen an overall lift in web sales in those states. | Yes | Free wifi in all stores. Focusing on mobile product search, in-store maps, shopping lists, integrating product offerings with mobile coupons. Continued collaboration with MCX for future mobile payment system. |
| WMT | N/A | ~140,000 | >1,000,000 | Not dis closed. | Electronics and home | Yes | No | No | No | No | Yes | Scan and go, in-store maps, shopping lists, budgeting via eReceipts, QR coes lead to more choices online. Walmart Labs runs like a startup and focuses on ecommerce initiatives. |

[^8]
## COST Web Strategy: Expand Value to the Consumer While Protecting the Store

COST and Sam's Club operate a different model (membership dues for bulk quantity discounts and a loyal customer base) that preserves market share and allows them to refrain from directly competing with Amazon. COST uses its online platform to focus on big ticket items (e.g., furniture, patio sets, jewelry, and electronics), in addition to offering opportunistic diversions (e.g., Prada bags in mid-April). Interestingly, this differentiates the experience while preserving the competitiveness of the store.

## WMT Moving to Head of Pack on Capabilities

In the case of the traditional discount stores, TGT and WMT are now a part of the innovation e-commerce cycle by focusing on their omni-channel capabilities.

- WMT is testing scan and go technologies in the stores, in-store maps, budgeting tools via online receipts, and even acquired a start-up in Silicon Valley to focus solely on e-commerce initiatives.
- TGT is also testing buy online pick-up in stores, BOPUS, buy at one store, pick up at another, and made price matching a permanent feature, including matching non-third party prices on AMZN.


## Home Furnishings (BBBY, WSM)

We focus specifically on BBBY, WSM, AMZN, and Casa.com, owned by Amazon's Quidsi platform. While internet sales at BBBY were limited to an estimated $\sim 2 \%$ of revenue in 2012, WSM has embraced e-commerce as a sales channel since launching its website in 1999 after nearly 30 years in the direct-to-consumer business via catalogs. According to Internet Retailer, in 2011 WSM ranked \#24 in terms of web sales, comprising $0.8 \%$ of total online sales from the top 500 e-commerce retailers. WSM continues to be the \#1 online website in home furnishings.

## AMZN Pushes in with Casa.com

While AMZN has sold home goods for a number of years, the category was never a core competency, in our view. In early 2012, Amazon's Quidsi launched Casa.com, an online retailer of home goods, decor, and housewares products.

- The site had about 35,000 SKUs at launch and offered free 2-day shipping on orders of $\$ 49$ or more at its inception. That free shipping requirement has since come down to $\$ 35$ or more on Casa.com (as well as sister sites such as Wag.com). Compared to Amazon.com, Casa.com offers a more curated assortment with a specialty channel experience. According to HFN, online-only retailers represented $15 \%$ of home furnishings market share in 2012, more than doubling the $7 \%$ share they represented in 2010.

Figure 44: Home Furnishing Sales by Channel 2002, 2010-2011


Source: HFN.
With the ability to offer many customization options online plus branded durables in the kitchen area, home furnishings lends itself to being an ideal category for the omni-channel experience. The in-store experience of touch, feel and see allows the consumer to try a standard version of a product they are interested in and then customize color, size, and other options online. According to the comScore and census data, online sales in furniture and appliances reached $\sim 6.5 \%$ penetration, on a growth rate of $5 \%$, in 2012. We believe the continued increase in online penetration in this combined category (furniture + appliances) is in line with recent HD and LOW comments that appliances have been doing well, including through their online channels. As an average, same-store sales for home furnishings grew $3.5 \%$ in 2011 and $4.1 \%$ in 2012.

Figure 45: Home Furnishings \& Appliance Online Penetration and SSS


Source: Company reports, comScore, Census data, and J.P. Morgan estimates.

## BBBY Racing to Catch Up

Both WSM and BBBY continue to focus on building out the e-commerce channel, though WSM sees much more of its business, about $43 \%$, come through its online channel versus BBBY, which we estimate to be about $2 \%$ of its sales. While WSM did not see a need from its customers to implement BOPUS, they saw that many customers shopped in store and wanted the store associate to order it online for them while still in the store and have the item shipped to their house. Neither retailer has mentioned looking at ship from store, but instead both retailers are focusing on the website interface experience where a consumer is likely to experiment with customization and can place an order.

Figure 46: Home Furnishings Online Capabilities

|  | Online sales as a \% of total revenue |  |  |  |  | 2012 Online Sales Contribution to Comp? | Effect of Online Sales on Operating Margins | BOPUS? | Ship to store? | Same day delivery? | Online purchases ship from a specific warehouse(s)? | Requirement for free shipping? | Promotional free shipping? | Mobile growth | Mobile site? | Mobile app? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013E |  |  |  |  |  |  |  |  |  |  |  |
| BBBY | N/A | N/A | ~1\% | $\sim 2 \%$ | N/A | Not included. | Not disclosed. | Yes | No | No | Yes, just opened new ecommerce DC in 2012. | N/A | Yes | Not disclosed. | Yes | Yes |
| WSM | 30\% | 34\% | 38\% | 41\% | $\sim 43 \%$ | Included in comp, not disclosed. | DTC channel has operating margin of ~1000 bps higher than retail channel. | No | No | No | Yes, dedicated warehouse for DTC orders. | No set requirement. Frequently $\$ 49$. | Yes | Not disclosed. | Yes | No |

Source: Company reports and J.P. Morgan estimates.
Figure 47: Home Furnishings Online Pricing and Products

|  | SKUs offered |  |  | Private label percentage | Expanded categories online? | Pricing different online? | Price match to own website? | Price match other brick \& mortar retailers' online prices? | Price match to Amazon? | Difference since TX and CA began collecting taxes on AMZN? | Use QR Codes? | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Online } \\ 2010 \\ \hline \end{gathered}$ | In-store 2012 | $\begin{gathered} \text { Online } \\ 2012 \\ \hline \end{gathered}$ |  |  |  |  |  |  |  |  |  |
| BBBY | N/A | N/A | N/A | Not disclosed. | Not disclosed. | No | N/A | Yes | When asked. | N/A | Yes | New website to be rolled out in 2013. |
| WSM | N/A | N/A | N/A | 85\% | Furniture | No | N/A | No | No | N/A | No | Ecommerce is becoming an important navigation tool. Investing into functionality with the mobile site and implementing store-level inventory visibility. Testing with Google Local. |

[^9]
## BBBY Closes Price Gap; Casa Remains Limited

In a pricing analysis, WSM and BBBY remained closely priced on most items, with BBBY making the most strides to close the price gap with AMZN from last year, even without the benefit of its coupon. WSM, however, remains premium priced, and even AMZN is trying to get a little margin by pricing Casa higher than its core site.

Figure 48: Discount/Premium to AMZN Pricing

|  | Spring 2012 |  |  | Spring 2013 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | BBBY.com | WSM.com | Casa.com | BBBY.com | WSM.com | Casa.com |
| Le Creuset 5-Quart Oval French Oven | $0 \%$ | $11 \%$ | $0 \%$ | $2 \%$ | Exclusive only | $2 \%$ |
| Riedel 43 oz Ultra Decanter | $19 \%$ | $36 \%$ |  | $0 \%$ | $0 \%$ | $0 \%$ |
| Cuisinart Mini-Prep Plus Food Processor, 3-Cup | $3 \%$ | $2 \%$ | $24 \%$ | $-25 \%$ | $0 \%$ | $3 \%$ |
| OXO Good Grips Citrus Squeezer | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | Exclusive only | $0 \%$ |
| Breville Stainless Steel Electric Tea Kettle | $0 \%$ | $0 \%$ | $17 \%$ | $0 \%$ | $0 \%$ | $50 \%$ |
| SodaStream Pure Soda Maker | $0 \%$ | $0 \%$ |  | $0 \%$ | Exclusive only |  |
| Barista Prime K-Cups, Set of 18 | $0 \%$ | $0 \%$ |  | $4 \%$ |  | $17 \%$ |
| Miele Twist Upright Vacuum | $0 \%$ | $0 \%$ |  | $0 \%$ | $0 \%$ |  |
| Emile Henry Pizza Stone | $0 \%$ | $0 \%$ | $0 \%$ | $1 \%$ | $1 \%$ |  |
| Nespresso Pixie Espresso Maker | $58 \%$ | $58 \%$ | $31 \%$ | $5 \%$ | $36 \%$ | $5 \%$ |
| Breville Die-Cast 4-Slice Smart Toaster | $0 \%$ | $0 \%$ |  | $8 \%$ | $8 \%$ |  |
| KitchenAid 5-Quart Artisan Stand Mixer | $4 \%$ | $4 \%$ | $4 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| OXO Triple Timer | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Rosle Stainless Steel Ice Cream Scoop | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |  |
| Vinturi Wine Aerator | $38 \%$ | $38 \%$ |  | $5 \%$ | $40 \%$ | $8 \%$ |
| Average | $8 \%$ | $10 \%$ | $9 \%$ | $0 \%$ | $9 \%$ | $8 \%$ |

Source: Bedbathandbeyond.com, Williamssonoma.com, Casa.com, Amazon.com.
Casa.com still does not carry the large selection that WSM, BBBY, and AMZN do, and several of those items still remain at a premium to Amazon.com. WSM has commented on the effort to offer more exclusives and private branded products, and this was evident in our price match this year, as many of the products we used last year were similar but now exclusive to WSM with certain features or colors and thus not directly comparable.

## Home Improvement (HD, LOW)

## A Wide Moat

Relative to our coverage universe, we believe home improvement has one of the widest moats. While some categories are lower risk than others (i.e., paint, flooring, kitchen, perishables vs. handheld tools and appliances), overall we believe HD and LOW are well positioned going forward to maintain share, particularly considering the sway they have over vendors given their near-50\% combined market share.

Urgency is often high (e.g., a builder making a trip to the store for a job that day), as are shipping costs (many large heavy items) and involvement level (picking out the perfect nail out of hundreds). From an experience standpoint, in-store expertise may be valuable, particularly for the DIY customer. While not all that HD and LOW sells, building materials, garden equipment, and supplies dealers (categories of comScore and census data) have seen growth in online penetration steadily decelerate since 2007, when housing began to cool off. Online penetration growth began to rebound last year, with growth at $6 \%$. Due to the nature of these materials, we view this aspect of home improvement as the most protected from online encroachment. Interestingly, we believe HD and LOW have made some of the greatest strides in their online initiatives within our coverage universe.

Figure 49: Home Improvement Online Penetration and SSS


Source: Company reports, comScore, Census data, and J.P. Morgan estimates.
While online sales for both home improvement retailers represent a low percentage of total sales, both retailers have embraced e-commerce to build out their services for customers. HD acquired a start-up last year called RedBeacon to help connect contractors and with projects that customers needed to get done. HD also added a service online for their Pro customer to take roof measurements using satellite services instead of physically taking the measurements and also created an online tool for the Pro customer to create professional contracts and order materials from HD. LOW has built out MyLowes.com, which enables customers to electronically store details about a home renovation project they might be working on or the paint last used so they can buy the same color again next season. LOW and HD also use
targeted emails to encourage customers to return to their sites and purchase items that were simply left in the cart.

## HD/LOW Reinforcing the Moat

Figure 50: Home Improvement Retailers' Online Capabilities

|  |  | e sa | as | of total | venue |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013E | Sales Contribution to Comp? | Effect of Online Sales on Operating Margins | BOPUS? | Ship to store? | Same day delivery? | ship from a specific warehouse(s)? | Requirement for free shipping? | Promotional free shipping? | Mobile growth | Mobile site? | Mobile app? |
| HD | <2\% | <2\% | <2\% | $\sim 2 \%$ | $\begin{aligned} & \text { Expect to } \\ & \text { grow } \\ & \hline \end{aligned}$ | Included, but not disclosed. | Not discloed | Yes | Yes | No | Two direct fulfillment facilities, two more to be in service by 2014 | \$45 minimum | Yes | Usage continues to grow, especially in-store | Yes | Yes |
| LOW | N/A | <1\% | $\sim 1 \%$ | ~1.5\% | $\begin{gathered} \text { Expect to } \\ \text { grow } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Included, } \sim 50 \\ \text { bps. } \end{gathered}$ | Margins aren't significantly different | Yes | Yes | No | Ship from 50 locations and stores | \$49 minimum | Yes | $20 \%$ of traffic | Yes | Yes |

Source: Company reports and J.P. Morgan estimates.
Figure 51: Home Improvement Online Pricing and Products

|  | SKUs offered |  |  | Private label percentage | Expanded categories online? | Pricing different online? | Price match to own website? | Price match other brick \& mortar retailers' online prices? | Price match to Amazon? | Difference since TX and CA began collecting taxes on AMZN? | Use QR Codes? | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Online $2010$ | $\begin{aligned} & \text { In-store } \\ & 2012 \end{aligned}$ | Online 2012 |  |  |  |  |  |  |  |  |  |
| HD | Not disclosed. | $\sim 35,000$ | 300,000 | ~11\% | Décor items | No | N/A | No | No | Not disclosed. | Yes | Focusing on creating an app for the professional customer. Paypal is a mobile payment option in stores. |
| LOW | <200,000 | $\sim 40,000$ | 500,000 | ~17\% | Décor, power tools, and faucets | No | N/A | No | No | Not disclosed. | Yes | N/A |

Source: Company reports and J.P. Morgan estimates.

## HD/LOW: Higher Prices Driven by Tools/OPE

In the month between the two proprietary pricing surveys we conducted, the gaps between AMZN and HD and AMZN and LOW remained roughly unchanged. HD prices remained at a $\sim 9 \%$ premium to AMZN's, and LOW prices were at a $7-8 \%$ premium, mainly in power tools and outdoor power equipment.

Figure 52: Discount/Premium to AMZN Prices
Figure 52: Discount/Premium to AMZN Prices

| Item | March 2013 | April 2013 |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | HD.com | LOW.com | HD.com | LOW.com |
| BLACK \& DECKER 120 mph 90 CFM Electric 18-Volt NiCad Sweepe | $9 \%$ | $9 \%$ | $9 \%$ | $9 \%$ |
| DEWALT 20-Volt Max Lithium-Ion Combo Kit (4-Tool) | $15 \%$ | $15 \%$ | $9 \%$ | $9 \%$ |
| Wagner Power Painter Plus 6.6 GPH with EZ Tilt Technology | $11 \%$ | $11 \%$ | $-11 \%$ | $-11 \%$ |
| Weber Spirit E-210 2-Burner Propane Gas Grill | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Hitachi 40cc 2-Cycle 18-in Gas Chain Saw | $34 \%$ | $34 \%$ | $33 \%$ | $33 \%$ |
| Bosch 18-Volt 1/2-in Cordless Lithium lon Compact Tough Drill/Driver | $1 \%$ | $1 \%$ | $6 \%$ | $6 \%$ |
| Kenroy Home 5-Light Wynwood Burnished Bronze Chandelier | $6 \%$ | $10 \%$ | $-4 \%$ | $10 \%$ |
| Lincoln Electric 240-Volt / 225-Amp Stick Welder | $-28 \%$ | $-28 \%$ | $-29 \%$ | $-29 \%$ |
| Hitachi 21.1cc 2-Cycle 17-in Straight Gas String Trimmer | $25 \%$ | $25 \%$ | $24 \%$ | $24 \%$ |
| ROCKWELL VersaCut Mini-Circular Saw | $1 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| Bostitch 7 Ib Framing Pneumatic Nailer | $15 \%$ | $0 \%$ | $24 \%$ | $8 \%$ |
| Ames True Temper 26-in Snow Shovel with 32-in Aluminum Handle | $-1 \%$ | $-4 \%$ | $27 \%$ | $23 \%$ |
| KOHLER Revival Polished Chrome 2-Handle High-Arc Kitchen Faucet | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ |
| BLACK \& DECKER 7-Amp Belt Power Sander | $25 \%$ | $4 \%$ | $25 \%$ | $4 \%$ |
| Hansgrohe Chrome HG Shower 3-Spray Showerhead | $23 \%$ | $36 \%$ | $23 \%$ | $36 \%$ |
| Average | $9 \%$ | $7 \%$ | $9 \%$ | $8 \%$ |

Source: Homedepot.com, Lowes.com.

## Nutrition (GNC, VSI)

As we highlighted in our in-depth nutrition report earlier this year, the supplement industry growth has accelerated to a $6-7 \%$ pace annually and should continue to do so for the next several years, according to the Nutritional Business Journal (NBJ). This should mainly be driven by (1) secular trends toward healthy living; (2) greater sports involvement, combined with significant product innovation; and (3) an aging population that looks to treat certain ailments and preventative solutions. Indeed, the trend of increased focus on health and wellness doesn't appear to be slowing, and this category can be viewed as a preventative/inexpensive defense to rising healthcare costs (and fighting the effects of aging in a youth-focused culture).

## Category Size and Growth

The Nutrition Business Journal estimates the U.S. vitamins, minerals, and supplements (VMS) industry grew revenue $6.8 \%$ to $\$ 32$ billion in 2012. As shown in the table below, the largest drivers from 2005 have been vitamins, sports nutrition and specialty supplements, with average annual growth of $5.5 \%, 8.3 \%$ and $8.9 \%$, respectively. In the last couple of years, the diet category has also seen renewed strength, growing revenue $14.9 \%$ and $10.9 \%$ in 2011 and 2012, respectively. Looking ahead, the NBJ is modeling U.S. supplement sales growth of $7.0 \%$ for 2013 , slightly ahead of 2012's $6.8 \%$ increase and the $5.9 \%$ CAGR over 2002-2012. For 2014 and beyond, expectations are for top-line growth trends to remain above $6.5 \%$ for several years before returning to $\sim 6 \%$ growth through 2020. By category, U.S. vitamin and sports nutrition sales are projected to grow at a $5.4 \%$ and $7.2 \%$ CAGR through 2015, respectively. This sector continues to benefit from a focus on health and healthy living. Looking ahead, we believe growth will be driven by a combination of (1) innovation, (2) increased acceptance of the use of supplements, and (3) the aging of the U.S. population.

Figure 53: U.S. VMS Industry Sales \& Growth (units in millions)

| Product Growth | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012E | 2013E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vitamins | 0.8\% | 2.6\% | 7.7\% | 3.5\% | 3.8\% | 4.7\% | 3.9\% | 9.6\% | 7.1\% | 4.8\% | 5.6\% | 4.6\% | 5.0\% |
| Herbs/Botanicals | 3.0\% | (2.7\%) | (2.2\%) | 3.5\% | 2.1\% | 4.1\% | 4.3\% | 0.9\% | 4.9\% | 0.3\% | 4.4\% | 5.2\% | 5.0\% |
| Sports Nutrition | 8.6\% | 6.2\% | 8.6\% | 6.9\% | 5.7\% | 6.3\% | 8.5\% | 7.6\% | 5.5\% | 9.2\% | 11.2\% | 12.6\% | 11.5\% |
| Minerals | 3.4\% | 9.4\% | 15.6\% | (1.5\%) | 4.3\% | 2.0\% | 4.8\% | 5.9\% | 5.4\% | 3.7\% | 3.0\% | 3.8\% | 4.7\% |
| Meal Supplements | 11.4\% | 11.5\% | (1.9\%) | (7.7\%) | (1.2\%) | 2.7\% | 4.2\% | 4.7\% | 3.1\% | 3.6\% | 14.9\% | 10.9\% | 10.4\% |
| Specialty/Other | 10.4\% | 6.6\% | 15.3\% | 10.8\% | 13.8\% | 11.4\% | 11.7\% | 7.0\% | 7.5\% | 5.7\% | 6.7\% | 7.5\% | 8.2\% |
| Supplements | 4.6\% | 3.8\% | 5.8\% | 3.0\% | 4.6\% | 5.4\% | 5.9\% | 6.4\% | 6.0\% | 4.4\% | 7.0\% | 6.8\% | 7.0\% |
| Product \% of Sales | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012E | 2013E |
| Vitamins | 33.4\% | 33.0\% | 33.6\% | 33.7\% | 33.5\% | 33.3\% | 32.6\% | 33.6\% | 34.0\% | 34.1\% | 33.7\% | 33.0\% | 32.4\% |
| Herbs/Botanicals | 24.1\% | 22.6\% | 20.9\% | 21.0\% | 20.5\% | 20.3\% | 20.0\% | 18.9\% | 18.7\% | 18.0\% | 17.6\% | 17.3\% | 17.0\% |
| Sports Nutrition | 9.6\% | 9.8\% | 10.0\% | 10.4\% | 10.5\% | 10.6\% | 10.9\% | 11.0\% | 11.0\% | 11.5\% | 11.9\% | 12.6\% | 13.1\% |
| Minerals | 7.7\% | 8.2\% | 8.9\% | 8.5\% | 8.5\% | 8.2\% | 8.1\% | 8.1\% | 8.0\% | 8.0\% | 7.7\% | 7.5\% | 7.3\% |
| Meal Supplements | 12.8\% | 13.7\% | 12.7\% | 11.4\% | 10.8\% | 10.5\% | 10.3\% | 10.2\% | 9.9\% | 9.8\% | 10.5\% | 10.9\% | 11.3\% |
| Specialty/Other | 12.4\% | 12.7\% | 13.8\% | 14.9\% | 16.2\% | 17.1\% | 18.0\% | 18.1\% | 18.4\% | 18.6\% | 18.6\% | 18.7\% | 18.9\% |
| Supplements | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

Source: Nutrition Business Journal (NBJ); J.P. Morgan estimates.

## Online and Specialty Gaining Share; Mass Donating

Outside of GNC \& VSI (which capture about 8\% market share combined), the industry is very fragmented, with drug stores, discount stores and online vendors battling specialty stores for more share in the growing industry. Online sales in the supplement industry have been steadily growing in the double-digit range for at least the last 10 years, and online penetration has reached $6.3 \%$ of overall supplement sales. However, we note that mass channel has lost about 600 bps of market share while specialty has gained about 250 bps .

Figure 54: VMS Channel Breakdown and Penetration (units in millions)

| Channel Growth | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retail-Natural, Healh Food, Supplement, Specialty | 4.9\% | 3.5\% | 12.0\% | 4.3\% | 6.1\% | 6.7\% | 5.7\% | 7.7\% | 5.0\% | 4.7\% | 6.4\% | 5.0\% |
| Retail-Mass Merchants, Grocery, Drug, Club, Convenience | 5.1\% | 3.8\% | (1.1\%) | (3.0\%) | (1.2\%) | 2.6\% | 5.8\% | 7.7\% | 10.8\% | 4.8\% | 5.2\% | 4.5\% |
| Mail Order-Catalogs, Direct Mail, Infomercials | 8.0\% | 2.6\% | 6.2\% | 4.5\% | 2.7\% | 3.5\% | 2.7\% | 1.7\% | 6.8\% | 5.2\% | 4.2\% | 4.2\% |
| Multi Level/Network | 1.2\% | 3.1\% | 4.0\% | 6.2\% | 8.5\% | 4.7\% | 3.4\% | 0.9\% | (2.8\%) | (0.9\%) | 9.0\% | 9.0\% |
| Pracfioner | 7.8\% | 5.6\% | 8.7\% | 10.8\% | 6.7\% | 8.3\% | 9.7\% | 4.4\% | 9.1\% | 6.9\% | 9.3\% | 5.0\% |
| Internet | 16.8\% | 21.2\% | 37.2\% | 16.8\% | 24.8\% | 19.0\% | 24.2\% | 25.5\% | 16.4\% | 14.7\% | 14.6\% | 31.2\% |
| Totals | 4.8\% | 3.8\% | 5.8\% | 3.0\% | 4.6\% | 5.4\% | 5.9\% | 6.4\% | 6.0\% | 4.4\% | 7.0\% | 6.8\% |
| Channel \% of Sales | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012E |
| Retail-Natural, Healh Food, Supplement, Specialty | 33.4\% | 33.3\% | 35.3\% | 35.7\% | 36.2\% | 36.7\% | 36.6\% | 37.0\% | 36.6\% | 36.7\% | 36.5\% | 35.9\% |
| Retail-Mass Merchants, Grocery, Drug, Club, Convenience | 34.1\% | 34.1\% | 31.8\% | 30.0\% | 28.3\% | 27.6\% | 27.6\% | 27.9\% | 29.1\% | 29.3\% | 28.8\% | 28.1\% |
| Mail Order-Catalogs, Direct Mail, Infomercials | 6.1\% | 6.0\% | 6.1\% | 6.1\% | 6.0\% | 5.9\% | 5.7\% | 5.5\% | 5.5\% | 5.6\% | 5.4\% | 5.3\% |
| Multi Level/Network | 18.8\% | 18.7\% | 18.3\% | 18.9\% | 19.6\% | 19.5\% | 19.1\% | 18.1\% | 16.6\% | 15.7\% | 16.0\% | 16.4\% |
| Pracfifoner | 6.3\% | 6.4\% | 6.6\% | 7.1\% | 7.3\% | 7.5\% | 7.7\% | 7.6\% | 7.8\% | 8.0\% | 8.2\% | 8.0\% |
| Internet | 1.2\% | 1.4\% | 1.9\% | 2.1\% | 2.5\% | 2.8\% | 3.3\% | 3.9\% | 4.3\% | 4.7\% | 5.1\% | 6.3\% |
| Totals | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |

Source: Nutrition Business Journal (NBJ); J.P. Morgan estimates.

## Specialty Typically Wins During Innovative Periods

VSI is a heritage catalog business that is fast transitioning online, with direct representing $9 \%$ of total sales. GNC generates $6 \%$ of its sales online. VSI appears more at risk vs. GNC, with private label penetration rates of $22 \%$ and $57 \%$, respectively. Additionally, GNC has a discount web banner called LuckyVitamin.com. As noted earlier, however, specialty stores typically win during times of high innovation, and this sector is in the midst of such innovation, driven by the overall trend of health and wellness and aging baby boomers. Other factors that help protect market share include:

- Roughly 20-25\% of top 100 sellers churn annually (and 5-10\% of total), indicative of the pace of innovation and product cycling by the best customers.
- There are also only a few recognizable brands in this space.
- It's a consumable product that, like shopping for groceries or pet food, the consumer finds easy enough to make a monthly or every-two month trip.
- It is also a "pill" that you ingest, favoring the comfort of in-store purchasing and GNC's brand.
- Indeed, GNC's auto-replenishment option on its website has failed to impress, indicative of consumer behavioral patterns.

Figure 55: Nutrition Retailers' Online Capabilities

|  | Online sales as a \% of total revenue |  |  |  |  | 2012 Online Sales Contribution to Comp? | Effect of Online Sales on Operating Margins | BOPUS? | Ship to store? | Same day delivery? | Online purchases ship from a specific warehouse(s)? | Requirement for free shipping? | Promotional free shipping? | Mobile growth | Mobile site? | Mobile app? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013E |  |  |  |  |  |  |  |  |  |  |  |
| GNC | N/A | 4\% | 5\% | 6\% | in-line with market growth | $\sim 100 \mathrm{bps}$ | GNC.com has higher margins than companyaverage | No | No | No | No | Shoprunner; $\$ 99$ minimum | Yes (frequent) | Traffic through mobile, few sales | Yes | Yes |
| VSI | N/A | N/A | $\sim 8 \%$ | ~9\% | in-line with market growth | Not included | Lower GM, but EBIT margins are similar | No | No | No | No, manyitems ship from distributor | All orders over $\$ 25$ | No | N/A | Yes | No |

Source: Company reports and J.P. Morgan estimates.
Figure 56: Nutrition Retailers' Online Pricing and Products


[^10]
## Workout Supplements Nutrition: The One Category with National Brands

The one category in supplements that has taken off in online sales is the sports nutrition category, which has $\sim 15 \%$ online penetration. GNC happens to be a leading brand in the space, but the workout supplements, such as OxyElite and Jack3D, are often sources of promotion, as they are recognized brands (just go to bodybuilder.com). Online growth has been steady the past four years in that category, adding $\sim 100 \mathrm{bps}$ in terms of penetration each year. Sports nutrition makes up $\sim 43 \%$ of the mix at GNC and $\sim 32 \%$ of the mix at VSI.

To fight the commoditization of sports nutrition, GNC has been innovating and creating new blends through its AMP Pro Performance line, and VSI saw success with its own sports nutrition line Tru Athlete. The rest of the supplements category continues to trend upwards in terms of online penetration, but all maintain less than $6 \%$ online penetration.

Figure 57: Online Penetration by Industry Products


[^11]
## Premium Pricing for GNC; Tough Comparing Online

Over the past year, pricing as compared to AMZN has remained fairly constant for GNC.com and VSI.com. On average, GNC prices tend to be ~32\% (up from 30\% LY) higher than AMZN's, and VSI's tend to be $\sim 9 \%$ (down from $10 \% \mathrm{LY}$ ) higher than AMZN's prices. However, we note that these prices do not reflect the Gold Card discount, which was historically a $20 \%$ discount in the first week of the month, but has recently changed to varied everyday discounts. Thus, the price gap would narrow to $10-12 \%$.

LuckyVitamin.com (acquired by GNC in 2011) averaged a 2\% discount to AMZN, down from a $9 \%$ discount last year. We continue to note that AMZN has a limited selection in these third-party brands and is even more pronounced in private label brands from GNC.

Importantly, we note that given different pill counts, efficacy, and ingredient nuances, combined with special discounts and BOGOs, it is very difficult to compare prices vs. online-only retailers.

Figure 58: Discount/Premium to AMZN Pricing

|  | Spring 2012 |  |  | Spring 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | GNC.com | VSI.com | Lucky <br> Vitamin.com | GNC.com | VSI.com | Lucky <br> Vitamin.com |
| 4 Ever Fit Fruit Blast Isolate Straw Kiwi | 9\% | 9\% | -4\% | 2\% | -7\% | -14\% |
| A.C. Grace Unique-E Tocotrienol | 37\% | 24\% | -2\% | 38\% | 8\% | -23\% |
| Amazing Grass Wheatgrass Powder | 39\% | 11\% | 0\% | 35\% |  | -10\% |
| Applied Nutriceuticals, Drive | 19\% | 4\% | -13\% | 64\% | 45\% | 22\% |
| beveri Immunity Boost Natural Tangerine BioNutritional Research Group® Power | 72\% | 47\% | -2\% |  | 63\% | 17\% |
| Crunch® - Cookies \& Crème | 71\% | 4\% | 0\% | 3\% | -8\% | -13\% |
| Dr. Bronner's Magic Soaps All-One Hemp Almond Pure-Castile Bar Soap | -30\% | -28\% | -28\% | -18\% | -15\% | -15\% |
| Designer Whey® 100\% Whey Protein Double Chocolate | 69\% | 0\% | -23\% | 7\% | -18\% | -20\% |
| Gaia Herbs® Echinacea Supreme | 24\% | 23\% | -19\% |  | 10\% | 23\% |
| Laci Le Beau® Super Dieter's Tea® | -11\% | 12\% | -31\% | 117\% | 52\% | 30\% |
| MuscleMeds ${ }^{\text {TM }}$ Carnivor ${ }^{\text {TM }}$ - Fruit Punch MET-Rx® BIG 100 - Chocolate Chip | -13\% | 2\% | -1\% | 0\% | 6\% | -3\% |
| Cookie Dough | 52\% | -3\% | -5\% | 18\% | 0\% | 3\% |
| ReNew Life Formulas® Ultimate Flora 50 |  |  |  |  |  |  |
| Billion ${ }^{\text {TM }}$ | -4\% | 20\% | -6\% | -2\% | 6\% | 6\% |
| Top Secret Nutrition Astravar ${ }^{\text {TM }}$ | 108\% | 15\% | -1\% | 150\% |  | -14\% |
| TWINLAB® AMINO FUEL® | 9\% | 9\% | 3\% | 7\% | -18\% | -24\% |
| Average | 30\% | 10\% | -9\% | 32\% | 9\% | -2\% |

Source: GNC.com, VitaminShoppe.com, Luckyvitamin.com, Amazon.com.

## Office Superstores (ODP, OMX, SPLS)

## This is the Tough One

Office superstores are the most macro-sensitive sector that we follow, with correlations to top-line growth in the $70-75 \%$ range relative to such factors as payroll growth, year-over-year GDP, and industrial production. As such, the long-term growth rate should approximate payroll growth plus a factor representing market share consolidation.

This sector is also the least "retail" of all spaces that we follow, with, on average, half of the business occurring "outside of the store" and $80 \%$ of sales that occur through the retail channel representing small businesses and high-volume home offices. As such, the office superstores have made a conscious decision to focus more on the business customer and less on the average individual consumer (particularly the small and medium-size business customer).

Sales in this sector continue to lag those of other retailers, and this remains the only category that hasn't returned to sustainable positive comps post the recession, in spite of being one of the first two sectors to see negative comps back in 2006. We believe this is driven by a soft recovery in the job market and the issues surrounding declining paper consumption and high exposure to the PC/PC-related categories (printers, toner, paper, and binders...). Thus, the product cycle has combined with commodity products to drive a sustain contraction, particularly on the retail side of the business.

## Key Players

Competition remains intense, and Staples remains the industry leader. Office Depot continues to focus on taking cost out of the business and re-investing a portion of the proceeds on improvements and growth opportunities. OfficeMax is the smallest of the big three domestic players and is highly leveraged to large contract customers, which represent three-fourths of its direct segment. Combined, SPLS, ODP, and OMX capture $\sim 20 \%$ of the office supplies market, and similar levels within the retail and commercial segments. The charts below break out growth and market share for ODP, OMX, and SPLS.

Table 59: Office Depot's Share of Industry Market, 2003-13E (\$ in billions)

|  | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ODP Retail | \$5.7 | \$5.9 | \$6.5 | \$6.8 | \$6.8 | \$6.1 | \$5.1 | \$5.0 | \$4.9 | \$4.5 | \$4.2 |
| \% Growth | (2.7\%) | 5.1\% | 9.6\% | 4.3\% | 0.4\% | (10.3\%) | (16.3\%) | (2.9\%) | (1.9\%) | (8.5\%) | (6.5\%) |
| \% of Total Retail | 4.7\% | 4.8\% | 5.1\% | 5.2\% | 5.4\% | 5.5\% | 4.9\% | 4.8\% | 4.7\% | 4.4\% | 4.2\% |
| Office Depot Commercial (BSG) | \$4.0 | \$4.0 | \$4.3 | \$4.6 | \$4.5 | \$4.1 | \$3.5 | \$3.3 | \$3.3 | \$3.2 | \$3.3 |
| \% Growth | 1.3\% | 2.0\% | 6.3\% | 6.4\% | (1.3\%) | (8.3\%) | (15.9\%) | (5.5\%) | (0.9\%) | (1.4\%) | 1.2\% |
| \% of Total Commercial | 3.7\% | 3.6\% | 3.7\% | 3.7\% | 3.6\% | 3.6\% | 3.1\% | 3.0\% | 2.9\% | 2.9\% | 2.9\% |
| Total (domestic operations only) | \$9.6 | \$10.0 | \$10.8 | \$11.4 | \$11.3 | \$10.3 | \$8.6 | \$8.3 | \$8.1 | \$7.7 | \$7.4 |
| \% Growth | (1.1\%) | 3.9\% | 8.3\% | 5.1\% | (0.3\%) | (9.5\%) | (16.2\%) | (4.0\%) | (1.5\%) | (5.6\%) | (3.2\%) |
| \% of Total | 4.2\% | 4.2\% | 4.4\% | 4.5\% | 4.5\% | 4.5\% | 4.0\% | 3.9\% | 3.8\% | 3.6\% | 3.5\% |
| Industry Total | \$226 | \$235 | \$244 | \$254 | \$251 | \$226 | \$216 | \$213 | \$214 | \$212 | \$211 |
| \% Growth | 3.6\% | 4.0\% | 3.8\% | 3.9\% | (1.1\%) | (10.0\%) | (4.5\%) | (1.3\%) | 0.3\% | (1.0\%) | (0.5\%) |

Source: Company reports; SHOPA; J.P. Morgan. estimates.

Table 60: OfficeMax's Share of Industry Market, 2003-13E (\$ in billions)

|  | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| OfficeMax Retail | $\$ 4.8$ | $\$ 5.0$ | $\$ 4.5$ | $\$ 4.3$ | $\$ 4.3$ | $\$ 4.0$ | $\$ 3.6$ | $\$ 3.5$ | $\$ 3.5$ | $\$ 3.3$ |
| \% Growth | $3.2 \%$ | $4.0 \%$ | $(8.8 \%)$ | $(6.1 \%)$ | $0.3 \%$ | $(7.2 \%)$ | $(10.1 \%)$ | $(1.1 \%)$ | $(0.5 \%)$ | $(5.2 \%)$ |
| \% of Total Retail | $4.0 \%$ | $4.0 \%$ | $3.6 \%$ | $3.2 \%$ | $3.4 \%$ | $3.5 \%$ | $3.4 \%$ | $3.4 \%$ | $3.4 \%$ | $3.3 \%$ |
| OfficeMax Commercial (Ex. Boise) | $\$ 3.5$ | $\$ 3.7$ | $\$ 4.6$ | $\$ 4.7$ | $\$ 4.8$ | $\$ 4.3$ | $\$ 3.7$ | $\$ 3.6$ | $\$ 3.6$ | $\$ 3.6$ |
| \% Growth | $0.3 \%$ | $5.5 \%$ | $23.7 \%$ | $1.9 \%$ | $2.2 \%$ | $(10.5 \%)$ | $(15.2 \%)$ | $(0.6 \%)$ | $(0.3 \%)$ | $(0.5 \%)$ |
| \% of Total Commercial | $3.3 \%$ | $3.4 \%$ | $4.0 \%$ | $3.8 \%$ | $3.8 \%$ | $3.8 \%$ | $3.3 \%$ | $3.3 \%$ | $3.3 \%$ | $3.2 \%$ |
| O | $\$ 8.3$ | $\$ 8.7$ | $\$ 9.2$ | $\$ 9.0$ | $\$ 9.1$ | $\$ 8.3$ | $\$ 7.2$ | $\$ 7.2$ | $\$ 7.1$ | $\$ 6.9$ |
| Total (domestic operations only) | $2.0 \%$ | $4.7 \%$ | $5.1 \%$ | $(2.1 \%)$ | $1.3 \%$ | $(9.0 \%)$ | $(12.8 \%)$ | $(0.9 \%)$ | $(0.4 \%)$ | $(2.8 \%)$ |
| \% Growth | $3.7 \%$ | $3.7 \%$ | $3.7 \%$ | $3.5 \%$ | $3.6 \%$ | $3.7 \%$ | $3.3 \%$ | $3.4 \%$ | $3.3 \%$ | $3.3 \%$ |
| \% of Total | $\$ 226$ | $\$ 235$ | $\$ 244$ | $\$ 254$ | $\$ 251$ | $\$ 226$ | $\$ 216$ | $\$ 213$ | $\$ 214$ | $\$ 212$ |
| Industry Total | $3.6 \%$ | $4.0 \%$ | $3.8 \%$ | $3.9 \%$ | $(1.1 \%)$ | $(10.0 \%)$ | $(4.5 \%)$ | $(1.3 \%)$ | $0.3 \%$ | $(1.0 \%)$ |
| \% Growth |  |  |  |  |  | $(0.5 \%)$ |  |  |  |  |

Source: Company reports; SHOPA; J.P. Morgan estimates.
Table 61: Staples' Share of Industry Market, 2003-13E (\$ in billions)

|  | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Staples NA Retail | \$7.7 | \$8.3 | \$9.0 | \$9.9 | \$10.0 | \$9.5 | \$9.4 | \$9.5 | \$11.7 | \$11.8 | \$11.4 |
| \% Growth | 7.0\% | 8.6\% | 8.6\% | 9.7\% | 1.0\% | (5.3\%) | (1.3\%) | 1.8\% | 23.2\% | 0.7\% | (3.6\%) |
| \% of Total Retail | 6.4\% | 6.7\% | 7.1\% | 7.6\% | 8.0\% | 8.5\% | 9.0\% | 9.2\% | 11.4\% | 11.8\% | 11.5\% |
| Staples Commercial (NA Delivery) | \$3.7 | \$4.2 | \$4.9 | \$5.9 | \$6.6 | \$8.9 | \$9.6 | \$9.8 | \$8.0 | \$8.1 | \$8.0 |
| \% Growth | 9.2\% | 13.4\% | 17.8\% | 19.0\% | 12.4\% | 35.0\% | 8.0\% | 2.2\% | -19.0\% | 1.7\% | -1.0\% |
| \% of Total Commercial | 3.5\% | 3.8\% | 4.2\% | 4.8\% | 5.3\% | 7.8\% | 8.6\% | 9.0\% | 7.2\% | 7.3\% | 7.2\% |
| Total (domestic operations only) | \$11.4 | \$12.5 | \$14.0 | \$15.8 | \$16.6 | \$18.4 | \$19.0 | \$19.4 | \$19.7 | \$19.9 | \$19.4 |
| \% Growth | 7.7\% | 10.1\% | 11.7\% | 13.0\% | 5.3\% | 10.7\% | 3.2\% | 2.0\% | 1.7\% | 1.1\% | -2.5\% |
| \% of Total | 5.0\% | 5.3\% | 5.7\% | 6.2\% | 6.6\% | 8.2\% | 8.8\% | 9.1\% | 9.2\% | 9.4\% | 9.2\% |
| Industry Total | \$226 | \$235 | \$244 | \$254 | \$251 | \$226 | \$216 | \$213 | \$214 | \$212 | \$211 |
| \% Growth | 3.6\% | 4.0\% | 3.8\% | 3.9\% | (1.1\%) | (10.0\%) | (4.5\%) | (1.3\%) | 0.3\% | (1.0\%) | (0.5\%) |

Source: Company reports; SHOPA; J.P. Morgan estimates.
Table 62: U.S. Office Products Market by Segment - Annual Revenues (\$ in billions)

| Segment | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3 E}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Retail (\$B) | $\$ 120$ | $\$ 124$ | $\$ 128$ | $\$ 131$ | $\$ 126$ | $\$ 112$ | $\$ 104$ | $\$ 103$ | $\$ 103$ | $\$ 101$ | $\$ 100$ |
| \% Growth | $2.6 \%$ | $3.5 \%$ | $2.8 \%$ | $2.8 \%$ | $(4.0 \%)$ | $(11.0 \%)$ | $(7.0 \%)$ | $(1.0 \%)$ | $(0.5 \%)$ | $(2.0 \%)$ | $(1.0 \%)$ |
| \% of Total | $52.9 \%$ | $52.7 \%$ | $52.2 \%$ | $51.6 \%$ | $50.1 \%$ | $49.6 \%$ | $48.2 \%$ | $48.4 \%$ | $48.0 \%$ | $47.5 \%$ | $47.2 \%$ |
| Commercial (\$B) | $\$ 107$ | $\$ 111$ | $\$ 117$ | $\$ 123$ | $\$ 125$ | $\$ 114$ | $\$ 112$ | $\$ 110$ | $\$ 111$ | $\$ 111$ | $\$ 111$ |
| \% Growth | $4.7 \%$ | $4.6 \%$ | $5.0 \%$ | $5.0 \%$ | $2.0 \%$ | $(9.0 \%)$ | $(2.0 \%)$ | $(1.5 \%)$ | $1.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| \% of Total | $47.1 \%$ | $47.3 \%$ | $47.8 \%$ | $48.4 \%$ | $49.9 \%$ | $50.4 \%$ | $51.8 \%$ | $51.6 \%$ | $52.0 \%$ | $52.5 \%$ | $52.8 \%$ |
| Industry Total (\$B) | $\$ 226$ | $\$ 235$ | $\$ 244$ | $\$ 254$ | $\$ 251$ | $\$ 226$ | $\$ 216$ | $\$ 213$ | $\$ 214$ | $\$ 212$ | $\$ 211$ |
| \% Growth | $3.6 \%$ | $4.0 \%$ | $3.8 \%$ | $3.9 \%$ | $(1.1 \%)$ | $(10.0 \%)$ | $(4.5 \%)$ | $(1.3 \%)$ | $0.3 \%$ | $(1.0 \%)$ | $(0.5 \%)$ |

Source: Company reports; SHOPA; J.P. Morgan estimates.

## Online vs. Retail Penetration

Given that business and contract sales at SPLS, ODP and OMX (a significant percentage of total sales) take place via an online portal, the companies have high internet sales penetration. The companies ranked 2, 5 and 9, respectively, in 2011 web sales, according to the Internet Retailer Top 500 Guide. While the retail side of the business is not captured through e-commerce quite as much, this is a priority for the retailers. For example, OMX recently hired a new Chief Digital Officer to focus on e-commerce and multichannel capabilities. After the large declines in office supplies in 2007-2009, online penetration began to rebound again in 2010 by MSD and reached $10 \%$ growth in 2012. Online penetration reached $32 \%$ in 2012. As an average, office supply SSS have not yet turned positive.

Figure 63: Office Supplies Online Penetration and SSS


Source: Company reports, comScore data, Census Bureau data, and J.P. Morgan estimates.

## Office Fighting Uphill

The chart below details estimates of online sales for OMX, SPLS and ODP. The companies are well prepared to grow internet sales in the retail space, in our view, given the capabilities and relationships they have built for contract sales. This is a key core competency that Amazon and other online retailers will find difficult to replicate.

Figure 64: Office Supply Retailers' Online Capabilities

|  | Online sales as a \% of total revenue |  |  |  |  | $\begin{aligned} & 2012 \text { Online } \\ & \text { Sales } \\ & \text { Contribution to } \\ & \text { Comp? } \\ & \hline \end{aligned}$ | Effect of Online Sales on Operating Margins | BOPUS? | Ship to store? | Same day delivery? | Online purchases ship from a specific warehouse(s)? | Requirement for free shipping? | Promotional free shipping? | Mobile growth | Mobile site? | Mobile app? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013E |  |  |  |  |  |  |  |  |  |  |  |
| ODP | 34\% | 35\% | 36\% | $\sim 37 \%$ | Not disclosed. | Only online sales picked up in store are counted in the comp | Not disclosed. | Yes | No | No | No, typically shipped from the closest DC. | Orders of $\$ 50$ or more qualifies for next day free shipping | Yes | Seeing a migration from customers using traditional browsers to mobile browsers | Yes | Yes |
| OMX | N/A | N/A | $\sim 36 \%$ | $\sim 40 \%$ | Not disclosed. | Not included. | Not disclosed. | Yes | No | No | No | \$50 minimum | Yes | Not disclosed. | Yes | Yes |
| SPLS | 40\% | 41\% | 42\% | 42\% | Expect to increase | Not included | Online operating margins are better than company average by $\sim 200$ bps | Yes | Yes | No | No, 50 fulfillment centers | Free for Staples Rewards members; \$45 for nonmembers | Yes | Small, expect growth | Yes | Yes |

[^12]Figure 65: Office Supply Retailers' Online Pricing and Product

|  | SKUs offered |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Online } \\ 2010 \\ \hline \end{gathered}$ | In-store 2012 | Online <br> 2012 | Private label percentage | Expanded categories online? | Pricing different online? | Price match to own website? | Price match other brick \& mortar retailers' online prices? | Price match to Amazon? | Difference since TX and CA began collecting taxes on AMZN? | Use QR Codes? | Other |
| ODP | Not disclosed. | 8,000 | 60,000 | Not disclosed. | N/A | Yes | Yes | Only in same channel | No | Not disclosed. | Yes | N/A |
| OMX | Not disclosed. | 11,000 | >40,000 | Not disclosed. | furniture | Yes | Yes | Yes | No | Not disclosed. | No | Much less traffic goes through Officemax.com, much more through Officemaxworkplace.com, so working on improving the experience at both sites. |
| SPLS | <30,000 | ~7,500 | 100,000 | 28\% | Business technology, cleaning \& breakroom supplies, mail \& ship supplies, furniture, office décor and industrial supplies | Yes | Yes | $\begin{gathered} \text { Yes- Staples.com } \\ \text { only } \end{gathered}$ | YesStaples.com only | Not a meaningful change | Yes | 12,000 sq. ft. omnichannel store opening in May. Have combined retail and ecommerce management teams. |

However, what remains unclear are: (1) the trend in PC sales, which has a significant impact on revenue at these retailers; (2) how the companies will maintain share with micro and small businesses as they leverage Amazon Prime memberships, particularly as office product consumption declines; and (3) what to do with all the stores (we estimate the 4,000 stores in North America are at least $2 x$ too large or too many). The proposed ODP/OMX merger could help speed up some of the necessary structural change in the industry.

## Office Retailers Investing in Price, But Gap Remains Wide

Below we present a basic price comparison of core items sold online at Amazon.com versus Office Depot, OfficeMax, and Staples. Our survey reflects the large price gap Amazon commands versus its office supply peers but shows the pricing gap has been cut in half over the past year alone. We expect this gap to narrow even further as office supply retailers continue to become more competitive with prices. ODP is priced the closest to Amazon, with prices at a $16 \%$ premium compared to a $20 \%$ premium and $19 \%$ premium at Staples and Office Depot, respectively. We note this compares to prices that were $\sim 32 \%$ more expensive last spring when we conducted this survey. Finally, we believe prices are relatively comparable between the three major office supply retailers.

Figure 66: OSS Prices at Distinct Premium to Amazon.com

|  | Spring 2012 |  |  | Spring 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | ODP.com | OMX.com | SPLS.com | ODP.com | OMX.com | SPLS.com |
| Lexmark 16 (10N0016) Black Ink Cartridge | 56\% | 47\% | 56\% | 87\% | 123\% | 97\% |
| HammerMill® Copy Plus Copy Paper, 8 1/2" x | -6\% | 65\% | -6\% | 85\% | 85\% | 85\% |
| HP g7-1310us Laptop Computer With 17.3" LEDBacklit Screen \& 2nd Gen Intel $\mathbb{R}^{\text {C }}$ Core ${ }^{\text {TM }}$ i3- | -10\% | 7\% | 7\% | -17\% |  | -11\% |
| Mirado® Black Warrior® Pencils, No. 2, Medium Soft Lead, Box Of 12 | -22\% | -39\% | -27\% | -68\% | -73\% | -68\% |
| Sharpie ${ }^{\circledR}$ Accent® Retractable Pocket Highlighters, Fluorescent Yellow, Dozen | 15\% | 15\% | 13\% | 35\% | 39\% | 35\% |
| Clorox® Pine Sol Cleaner / Disinfectant / Deodorizer, 144 Oz. | 8\% | -5\% | -30\% | 66\% | 35\% | 35\% |
| Swingline® LightTouch ${ }^{\text {™ }}$ Antimicrobial Heawy | 57\% | 66\% | 67\% | 55\% | 64\% | 55\% |
| Westcott® Titanium Bonded Scissors, 7", | 122\% | 106\% | 96\% | 30\% | 3\% | 3\% |
| BIC® Round Stic Grip ${ }^{\text {™ }}$ Ballpoint Pens, 1.0 mm, Medium Point, Clear Barrel, Blue Ink, Pack | 141\% | 125\% | 44\% | -47\% | -47\% | -47\% |
| Avery® Flexible Presentation Binder, 1" Ring | -5\% | -17\% | -12\% | -17\% | -31\% | -31\% |
| Crayola® Standard Crayon Set, Assorted | 19\% | 33\% | 33\% | 0\% | 0\% | -10\% |
| HP LaserJet Pro P1102w Monochrome Laser | 64\% | 64\% | 64\% | 16\% | 16\% | -6\% |
| Texas Instruments $\circledR^{\circledR} 71-84$ Plus Graphing | 12\% | 12\% | 12\% | 11\% | 11\% | 11\% |
| SanDisk® Cruzer® USB 2.0 Flash Drive, 16GB | -33\% | -48\% | -44\% | -5\% | 14\% | 137\% |
| Pendaflex® Divide It Up ${ }^{\text {TM }}$ Multi-Section File Folders, Letter Size, Manila, Pack Of 24 | 44\% | 54\% | 21\% | -17\% | 21\% | -1\% |
| Scotch® Magic ${ }^{\text {TM }} 810$ Tape, 3/4" x 1000", Pack Of 10 Rolls | 64\% | 67\% | 64\% | 35\% | 27\% | 32\% |
| Average | 33\% | 34\% | 22\% | 16\% | 19\% | 20\% |

Source: Officedepot.com, Officemax.com, Staples.com, and Amazon.com.

## Pet (PETM)

PetSmart and TSCO have seen solid to very strong comp growth in the past five years of internet encroachment given the consumable nature of sales ( $40-50 \%$ of the mix) and trade-up in the pet food category to super-premium product. While the household pet penetration has stayed consistent at $\sim 62 \%$ the last few years, average spending on pets continues to grow healthily as retailers and manufacturers have found innovative ways and merchandise to connect to pet owners. Growth in spend per pet has been driven by an increase in veterinarian visits, pet services, and even nutritional products. We expect this trend to continue as people take better care of their pets. Similarly, top-line strength at PetSmart has emerged from growth in premium and super premium food, flea \& tick products, wellness and GNC merchandise.

The sector's exclusivity of premium and super-premium foods has largely kept the mass retailers at bay. Iams went mass in the early 2000s, and it hurt pet specialty comps by hundreds of basis points, but the brand experience was not positive in retrospect. We continue to believe pet specialty will maintain exclusivity in the retail channel as the branded manufacturers manage a good-better-best strategy (and the Iams experience hasn't been as good as they hoped when they made the decision).

AMZN's Wag.com, a pet specialty e-tailer, was launched by Quidsi in 2011 shortly after being acquired by AMZN. Wag.com offers food, treats, toys, pampering, and other pet products with free two-day shipping with a $\$ 35$ purchase (recently lowered from \$49).

## Watching Wag Shipping Price: Getting Sharper; High-Teens a Key Level

We do, however, expect the internet channel to gain share at the margin given Wag.com's selling of high-end brands like Blue Buffalo Recently, Wag lowered its free ship minimum purchase to $\$ 35$ from $\$ 49$. However, the impediments are as follows:

- There is a secular trend toward the humanization of pets, which has translated into buying more expensive foods, treats, and other products for animals. This generally favors specialty. The pet industry is expected to grow to $\$ 55.5 \mathrm{~B}$ this year, and PETM is the largest player with $\$ 6.8 \mathrm{~B}$ in sales last year.
- The shopping experience ranges from experiential for the "pet parent" to a biweekly grocery trip for the typical family.
- Specialty retailers do offer services and knowledgeable associates; and the average ticket at PETM is $\$ 42$ with $40 \%$ representing food $(\sim \$ 17)$ - hence a $\$ 35$ free ship still requires consumers to buy a larger quantity of food than a customer typically spends on a trip to PETM.
- So far, e-commerce replenishment programs in similar sectors have had little impact.


## Key Players

PETM and PETCO are the two primary pet specialty retailers.

Figure 67: Estimated Pet Superstore Volume Market Share, 2005-13E (\$ in billions)

| Company | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013E |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PetSmart Revenues (\$B) | \$3.4 | \$3.8 | \$4.2 | \$4.7 | \$5.1 | \$5.4 | \$5.7 | \$6.1 | \$6.8 | \$7.0 |
| \% Change | 12.4\% | 11.8\% | 12.6\% | 10.4\% | 9.0\% | 5.4\% | 6.0\% | 7.4\% | 10.5\% | 2.9\% |
| \% of Pet Supersbres | 65.0\% | 65.3\% | 65.8\% | 67.9\% | 69.8\% | 71.0\% | 71.6\% | 72.1\% | 72.2\% |  |
| \% of Total Industry | 9.8\% | 10.4\% | 11.0\% | 11.3\% | 11.8\% | 11.8\% | 11.8\% | 12.0\% | 12.7\% | 12.5\% |
| PETCO Revenues (\$B) | \$1.8 | \$2.0 | \$2.2 | \$2.2 | \$2.2 | \$2.2 | \$2.3 | \$2.4 | \$2.6 |  |
| \% Change | 12.5\% | 10.2\% | 10.5\% | 0.0\% | 0.0\% | -0.7\% | 3.0\% | 5.0\% | 10.0\% |  |
| \% of Pet Supersbres | 35.0\% | 34.7\% | 34.2\% | 32.1\% | 30.2\% | 29.0\% | 28.4\% | 27.9\% | 27.8\% |  |
| \% of Total Industry | 5.3\% | 5.5\% | 5.7\% | 5.4\% | 5.1\% | 4.8\% | 4.7\% | 4.6\% | 4.9\% |  |
| Pet Supersbres Revenues | \$5.2 | \$5.8 | \$6.4 | \$6.9 | \$7.3 | \$7.6 | \$7.9 | \$8.5 | \$9.4 |  |
| \% Change | 12.4\% | 11.2\% | 11.9\% | 6.8\% | 6.1\% | 3.5\% | 5.2\% | 6.7\% | 10.4\% |  |
| \% of Total Industry | 15.0\% | 15.9\% | 16.7\% | 16.7\% | 16.9\% | 16.6\% | 16.4\% | 16.6\% | 17.6\% |  |
| Total Industry Revenues (\$B) | \$34.4 | \$36.3 | \$38.5 | \$41.2 | \$43.2 | \$45.5 | \$48.4 | \$51.0 | \$53.3 | \$55.5 |
| \% Change | 6.2\% | 5.5\% | 6.1\% | 7.0\% | 4.9\% | 5.3\% | 6.3\% | 5.4\% | 4.7\% | 4.1\% |

Figure 68: Total U.S. Pet Market Estimated at \$55+ Billion


Source: APPMA and J.P. Morgan estimates.

Figure 69: PetSmart Online Capabilities


Source: Company reports and J.P. Morgan estimates.

Figure 70: PetSmart Online Pricing and Products

|  | SKUs offered |  |  | Private label percentage | Expanded categories online? | Pricing different online? | Price match to own website? | Price match other brick \& mortar retailers' online prices? | Price match to Amazon? | Difference since TX <br> and CA began collecting taxes on AMZN? | Use QR Codes? | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Online } \\ 2010 \\ \hline \end{gathered}$ | In-store 2012 | $\begin{gathered} \text { Online } \\ 2012 \\ \hline \end{gathered}$ |  |  |  |  |  |  |  |  |  |
| PETM | <10,000 | 11,000 | 21,000 | Not disclosed. | Hardgoods | No | Yes | No | No | Not disclosed. | Yes | Omnichannel strategy and continuing to improve website functionality, navigation, product reviews, recommendations, \& online search. |

[^13]
## PetSmart Closes Pricing Gap; Wag Taking Margin Too

In the month between the two pricing surveys we did, PETM was able to close the price gap with AMZN from $10 \%$ to $3 \%$ on the same or similar items. The price gap is smaller than that of Wag.com, which was at a $6 \%$ premium to Amazon prices. Much of the canned dog and cat food that is sold by PETM is not available on its website, and larger quantities of its dry food are not available due to the difficulty in shipping these items that can weigh 20 lbs or more.

Figure 71: Discount/Premium to AMZN Price

|  | March 2013 | April 2013 |  |
| :--- | :---: | :---: | :---: |
| Item | PETM.com | PETM.com | Wag.com |
| Eukanuba® Adult Maintenance Small Bite Dog Food, 33lbs | $-13 \%$ | $-30 \%$ | $-15 \%$ |
| cesar Dog Food Multipack 12 ct | $-15 \%$ | $-15 \%$ |  |
| Blue Buffalo Life Protection Toy Breed Adult Dog Food; Chicke | $-18 \%$ | $-12 \%$ | $-2 \%$ |
| Purina ONE® brand SmartBLEND ${ }^{\text {TM }}$ Chicken \& Rice Formula | $-13 \%$ | $-41 \%$ | $-20 \%$ |
| Hill's Science Diet Light Small Bites Adult Dog Food | $-15 \%$ | $6 \%$ | $32 \%$ |
| lams Proactive Health Adult Indoor Weight \& Hairball Care Forr | $30 \%$ | $5 \%$ | $15 \%$ |
| Frontline Plus for Dogs- 3pk; for 0-23lbs | $79 \%$ | $52 \%$ | $-2 \%$ |
| Fancy Feast 3-Flavor Grilled Gourmet Cat Food Variety Pack | $0 \%$ | $0 \%$ | $7 \%$ |
| Whiskas Choice Cuts Chef's Favorites 12 pk | $9 \%$ | $1 \%$ | $26 \%$ |
| Kong Bounzer size M | $14 \%$ | $36 \%$ |  |
| Majestic Pet Nawy Blue Links Rectangle Pet Bed, Small | $-20 \%$ | $-17 \%$ |  |
| Hip Doggie Cowboy Collars for Dogs | $8 \%$ | $-41 \%$ |  |
| Armarkat Cat Tree Pet Furniture Condo | $21 \%$ | $21 \%$ | $10 \%$ |
| ReptiBreeze Open Air Screen Cage, Extra Large 24x24x48 | $71 \%$ | $75 \%$ |  |
| Pet Gear Deluxe Tan Four Door Steel Crates | $7 \%$ | $7 \%$ |  |
| Average | $10 \%$ | $3 \%$ | $6 \%$ |

Source: Petsmart.com, Wag.com, Amazon.com.

## Sporting Goods (DKS)

Sporting goods was one of the hottest categories in retail in 2011, with continued strength in 2012, despite unfavorable weather trends, thanks to growing health consciousness among consumers. Growth has been spearheaded by the apparel and footwear categories as consumers seek high quality products for excellence on and off the field. In addition, strong manufacturer innovation in the channel has encouraged athletes and outdoor enthusiasts alike to trade up to more premium products. This includes NorthFace and Columbia Sportswear winter gear, Under Armour compression technology, Taylor Made R11 driver, toning footwear, and many other examples. This fashion shift to more technical performance gear has created a share of wallet shift and favorable average selling price tailwinds.

We believe DKS and other sporting goods retailers are able to differentiate themselves from AMZN and banner sites from the experience and customer service aspect. For instance, DKS has PGA professionals in stores to answer any questions and instruct consumers on equipment, fitting, etc. In addition DKS focuses on the core athlete, while AMZN is largely dedicated to the more casual athlete.

Online penetration in sporting goods was $\sim 7 \%$, with a constant acceleration in online penetration growth from $2 \%$ in 2010 to a $\sim 6 \%$ growth rate in 2012. Average samestore sales for sporting goods were $6 \%$ in 2012. Afterschool.com, an AMZN Quidsi site, opened in late 2012, sells to more causal athletes and does not include Nike, Adidas, or UA brands. The online penetration for DKS was $\sim 4 \%$ and $\sim 5 \%$ of total sales in 2011 and 2012, respectively, and contributed 166 bps to comp in 2012.

Figure 72: Sporting Goods Online Penetration and SSS


Source: Company reports, comScore data, Census Bureau data, and J.P. Morgan estimates.

## DKS Investing in Capabilities

DKS has invested heavily in its website and online capabilities. Currently the company partners with GSI (eBay) on the fulfillment side and is running fully operational ship from store in its supply chain. It is also testing/rolling out in-store pick-up in 2013. Online growth has been running in the $30-50 \%$ range for two years, well ahead of the average for pureplay online retailers.

Figure 73: DKS' Online Capabilities

|  | Online sales as a \% of total revenue |  |  |  |  | 2012 Online Sales Contribution to Comp? | Effect of Online Sales on Operating Margins | BOPUS? | Ship to store? | Same day delivery? | Online purchases ship from a specific warehouse(s)? | Requirement for free shipping? | Promotional free shipping? | Mobile growth | Mobile site? | Mobile app? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | 2010 | 2011 | 2012 | 2013E |  |  |  |  |  |  |  |  |  |  |  |
| DKS | 2\% | 3\% | 4\% | 5\% | continued growth | Included, contributed ~160 bps | Profitable business; expect GMto be higher than stores eventually because guns and ammo not sold online | Testing | No | No | No, ship from stores fully fuctional | \$15 shipping credit with $\$ 99$ minimum purchase; shoes always ship free | Yes | Not disclosed. | Yes | Yes |

Source: Company reports and J.P. Morgan estimates.

Figure 74: DKS' Online Price and Products


Source: Company reports and J.P. Morgan estimates.

## Top Reasons Why DKS Isn't BBY and Why There Is a Moat

1. DKS is very different from BBY. Besides slower innovation, three key changes occurred in the past decade that eroded BBY's dominance (see our recent 30-page report). First, the disintermediation of CDs/DVDs made the bigbox electronics business more big-ticket in nature and drove trip frequency lower (5-6x per year to 1-2x per year). DKS, however, has north of $50 \%$ exposure to the short replacement cycle apparel and footwear categories, and there are four-plus sports seasons per year. Second, the emergence of the internet changed the convenience/assortment factors from having the best locations with the biggest assortment to having the best prices online (thus the street location and assortment factors were neutralized). The price issue became particularly acute when longer cycle TVs and PCs commoditized ( $\sim 40-50 \%$ of sales). DKS, by comparison, has products that get replaced annually (new soccer cleats for the kids?), and innovation is strong. Online retailers operate with thinner margins and don't have the cost burden of operating a thousand stores nationwide (fair point - this is the biggest concern). Third, product convergence is causing the decline of entire categories at BBY (e.g., 1 digital camera +1 GPS $+1 \mathrm{PC}+1$ cell phone $=1$ smart phone.), which results in the need for a lot less floor space in the store. For DKS, products are proliferating, not converging.
2. Secular trends, innovation, and pricing bolster sales outlook. DKS' top line continues to benefit from a healthy living trend and youth-sports focus. This is being amplified by innovation from the likes of NKE and UA, while a wider color pallet is adding upside from fashion. Innovation makes specialty a share taker, and DKS is moving upstream in its assortment while its relationship with vendors allows for product exclusives. Nike and Under Armour don't even ship directly to AMZN, and Afterschool.com appears to be targeting a different customer (and also doesn't carry these key brands).
3. Golf pro in every store, private brands, and you can't ship a shotgun. DKS has a golf pro in nearly every store who will custom fit clubs for customers (and high-end Ping brand clubs in about $25 \%$ of stores). Furthermore, the company
recently added Top-Flite to its growing private brand portfolio, which also includes Maxfli, Field and Stream, Umbro, and Koppen (whose high gross margins can help fund price investments). Finally, guns may represent a low- to mid-single-digit percentage of sales, and you can't ship a shotgun.
4. Amazon is the Walmart of 20 years ago. AMZN is the Walmart of twenty years ago, winning by wide assortments and cheap prices on commodity products...Macy's and Nordstrom seem to be doing ok given differentiated products/exclusives, tailored assortments, and service. If the bear case on DKS is right, then we think all of retail could be a bear case. The reality is not all consumers want a Walmart shopping experience due to the environment and product availability.
5. Merchandising efforts growing in-store and online. We expect DKS to add an incremental 100 Nike Fieldhouse shops, 70 UA All-American shops, and 65 new brand shops with Adidas, on top the 171 Nike, 107 UA, and 91 North Face shops they already operate. DKS has a total 599 core stores. These set-ups feature expanded assortments, exclusives, and a differentiated experience. From an online perspective, 2011 featured DKS upgrading the functionality of its website and adding dotcom kiosks to all of its stores. 2012 was ship from store and 2013 is ship to store. These in-store and online investments position DKS offensively and defensively in the category. This is critical, as we view AMZN as a threat longer term, so it is up to DKS to have a strong in-store strategy with differentiated product while also having a competitive dotcom strategy. The company's planned $8 \%$ store growth per year should also be an added market share driver.
6. Zappos: Been there, done that. Shoes were an early e-commerce success strategy, and DKS is already in line from a capabilities perspective. The company offers free shipping and returns on all shoe purchases plus free returns to stores, all the while offering an expanded assortment. It also has expanded the number of shared services it has in operation with 174 stores utilizing this approach. We expect the company to add another 44 shared services locations in 2013 with all new stores built under this strategy.

## DKS 8\% Premium Pricing with Wide Dispersion

The premium to AMZN prices was constant in the previous and current year, with DKS priced $\sim 8 \%$ higher than AMZN.

Figure 75: Premium/Discount to AMZN Price

|  | Spring 2012 | Spring 2013 |
| :--- | :---: | :---: |
| Item | DKS.com | DKS.com |
| Merrell Men's Refuge Core Stone Low Hiking Shoe |  | $4 \%$ |
| Merrell Men's Chameleon4 Stretch Hiking Shoe |  | $16 \%$ |
| Merrell Men's Moab Waterproof Hiking Shoe | $4 \%$ | $18 \%$ |
| Merrel® Moab Low Hikers |  | $3 \%$ |
| Sorel Women's Caribou Winter Boot in Black | $43 \%$ | $0 \%$ |
| Sorel Women's Caribou Winter Boot in Peatmoss | $0 \%$ | $0 \%$ |
| New Balance Men's 940 Running Shoe | $9 \%$ | $10 \%$ |
| Shakespeare Ugly Stik Tiger Casting Rod | $4 \%$ | $-20 \%$ |
| The North Face Women's Micro Logo Short Sleeve T-Shirt | $-11 \%$ | $0 \%$ |
| Under Armour® Women's Tech Short-Sleeve Tee | $15 \%$ | $0 \%$ |
| Eureka! Copper Canyon 4 Person Tent | $0 \%$ | $0 \%$ |
| Old Town Guide 147 Canoe | $-23 \%$ | $-17 \%$ |
| Spyder Women's Full Zip Mid Weight Sweater | $10 \%$ | $41 \%$ |
| Bushnell PermaFocus Series Binoculars-10x50 | $29 \%$ | $16 \%$ |
| CamelBak M.U.L.E. 100 oz. Hydration Pack | $11 \%$ | $12 \%$ |
| Princeton Tec Remix Headlamp | $29 \%$ | $32 \%$ |
| Under Armour Men's Charged Cotton Long Sleeve Tee | $0 \%$ | $0 \%$ |
| Columbia Boys' Flow Summit Jacket | $0 \%$ | $51 \%$ |
| High Sierra Access Backpack | $32 \%$ | $-8 \%$ |
| Average | $9 \%$ | $8 \%$ |

[^14]Companies Recommended in This Report (all prices in this report as of market close on 26 April 2013) Amazon.com (AMZN/\$254.81/Neutral)

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[^0]:    Source: comScore data.

[^1]:    Source: Top 500 Guide.

[^2]:    Source: TWICE; Consumer Electronics Association; J.P. Morgan estimates.

[^3]:    Source: Company data and J.P. Morgan estimates

[^4]:    Source: Company Reports, J.P. Morgan.

[^5]:    Source: Officedepot.com, Officemax.com, Staples.com, and Amazon.com.

[^6]:    Source: Company reports and J.P. Morgan estimates.

[^7]:    Source: Bestbuy.com, hhgregg.com, Radioshack.com, Amazon.com.

[^8]:    Source: J.P. Morgan estimates, Company data.

[^9]:    Source: Company reports and J.P. Morgan estimates.

[^10]:    Source: Company reports and J.P. Morgan estimates.

[^11]:    Source: NBJ data, J.P. Morgan estimates.

[^12]:    Source: Company reports and J.P. Morgan estimates

[^13]:    Source: Company reports and J.P. Morgan estimates.

[^14]:    Source: Dickssportinggoods.com, Amazon.com.

