

WHITE PAPER

Under Pressure: COVID-19's Immediate and Long-term Impact on the Consumer Packaged Goods Industry





"A diamond is a chunk of coal that did well under pressure." Henry Kissinger

The U.S. consumer packaged goods (CPG) industry has never been under more pressure as it faces a global pandemic, an impending recession, soaring unemployment, ubiquitous social distancing, and unparalleled consumer fear across our country. For an industry largely accustomed to glacial change, these are unnerving times requiring warp-speed decision making. William Blair and IRI's Growth Consulting practice have partnered to examine the most critical drivers affecting the CPG industry.

Executive Summary

Our goal is to help brands, manufacturers, distributors, retailers, and shareholders navigate this rapidly evolving environment. With broad data tracking and thorough analysis, we intend to help leaders identify opportunities that will inevitably be created by the intense change coming out of this transformational time.

In this paper, we explore six areas of COVID-19 and recessionary impact:

- Evolving consumer behaviors and needs showcased during panic buying
- 2. Immediate impact of pantry loading for CPG brands and manufacturers
- 3. Frameworks to understand and navigate the post-panic CPG future
- 4. State of the foodservice end market and supply chain
- 5. Explosive growth of e-commerce shopping
- 6. Longer-term impact of a recessionary environment

We also recommend actions CPG and retail companies can take to position themselves to weather the coming months and to position themselves for the inevitable economic rebound. Companies should use the coming weeks to refine their growth strategies, enhance engagement with consumers, capitalize on trial stemming from new consumers entering their brand franchises and categories, and never lose sight of the important fundamentals of building robust, demanddriven growth strategies.

Evolving Consumer Behaviors and Needs Showcased During Panic Buying

At a blazing pace-measured in weeks, not yearsfundamental consumer behavioral changes have transformed the CPG industry.

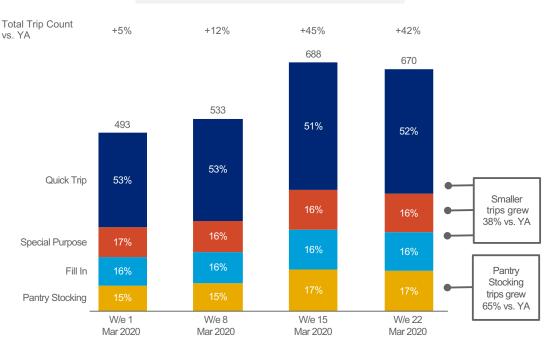
Increased Rates of Stock-up Trips

Stock-up trips, or large volume purchase occasions, have always been a part of consumer behavior. Historically, these trips were a small portion of overall trip missions and correlated most strongly with gas prices—higher gas prices generally lead to more stock-up trips and higher average basket sizes. Over the last month, even with falling gas prices, stock-up trips have exploded across all CPG channels. Terms such as "pantry loading" and "pantry stockpiling" have become commonplace among consumers and in the media.

In the early weeks of the COVID-19 crisis, almost half of U.S. consumers (43%) began making more and larger volume trips to buy groceries. The basket size increase occurred across almost all channels. The charts below highlight the recent spike in pantry stocking.

Exhibit 1 - U.S. Pantry Stocking Trips (by Trip Count)

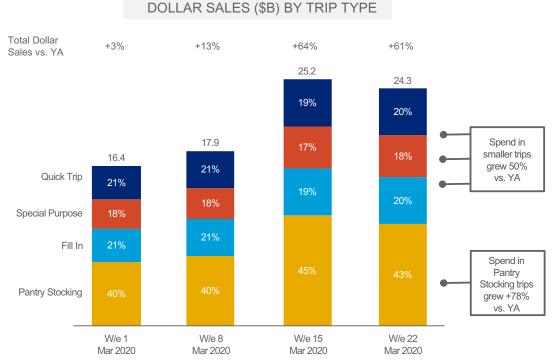
Pantry Stocking Accounted for 17% (up 65% vs. YA) of Trips in Recent Weeks



TRIP COUNT BY TYPE (M)

Note: Includes all Categories; Source: IRI National Consumer Panel 4 weeks ending March 22, 2020. All Outlets.

Exhibit 2 - U.S. Pantry Stocking Trips (by Trip Spend)



Pantry Stocking Accounted for over 40+% of Spending (up 78% vs. YA)

Note: Includes all Categories; Source: IRI National Consumer Panel 4 weeks ending March 22, 2020. All Outlets.

During the week of March 30, we observed some consumers migrating back to more traditional fill-in shopping missions. Despite this reversion to more normal behavior, we do not expect all consumers to return to pre-COVID-19 shopping behaviors in the near-term. We expect that many consumers will continue to engage in higher levels of pantry loading, at least through the end of 2020. GroupSolver, a partner of IRI, explored this question in one of its recent weekly COVID-19 pulse surveys entitled, "When Will This End?" It found that 30% of consumers under age 35 plan to keep their pantries more fully stocked in the future, indicating that stock-up trips may be a long-term trend that does not go away when the virus threat diminishes.

Consumer Preference to Stock Up at Club and Mass Retailers

Early in the COVID-19 crisis in the U.S., consumers stocked up at club retailers, driven by lower prices per unit and bulk options that aligned with consumer pantry loading needs. The coming impact of COVID-19 became known to many food manufacturers, as they began to experience upticks in club orders. But stock outs quickly followed in the club channel. In a frenzy of pantry loading, consumers migrated to other channels, including grocery, mass merchandisers, limited assortment stores, dollar stores and drug stores, especially for hard-to-find items such as toilet paper and cleaning supplies.

Exhibit 3 - Pantry Stocking by Channel

Pantry Stocking Occurred Earlier in Mass and Club Channels but is Now Occurring Across Channels; The Drug Basket has Increased Consistently

Channel	Basket Size (\$ per Trip) Annual avg.	% change vs. annual avg.					
		1 w/e Mar 1	1 w/e Mar 8	1 w/e Mar 15	1 w/e Mar 22		
Grocery	\$30.7	2.3	6.4	17.5	15.6		
Walmart	\$39.7	7.0	8.1	18.9	16.0		
MassX	\$29.3	11.0	10.4	16.4	18.6		
Club	\$63.3	9.1	1.6	14.4	12.1		
Drug	\$21.4	8.9	10.7	14.3	18.2		
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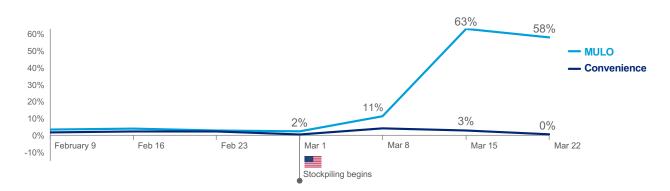
COVID-19 Impact on CPG Basket Size Across Channels

Exhibit 4 - Increase of Pantry Stocking in Large-Format Retailers





Week Ending February 9 – March 22, 2020 \$ Sales % Change vs. Year Ago



Source: IRI POS Data Ending March 22, 2020. Note: MULO includes Grocery, Drug, Mass, Club (excluding Costco), Dollar and DeCA retailers.

The COVID-19 crisis has made it clear that consumers will shift channel behaviors during pantry loading, especially when there are high incidences of stock outs. Brands and manufacturers with greater channel diversity benefited during the panic buying. Those with a club presence had early warning signals regarding the demand uptick.

Despite stock outs due to early surges in demand, manufacturers have largely been able to maintain (and broaden) sources of supply and keep manufacturing sites open and producing, as logistics and distribution partners continue to facilitate deliveries. Many manufacturers are prioritizing the production of a smaller set of high velocity SKUs in order to keep retail customers in stock with the most high-demand items.

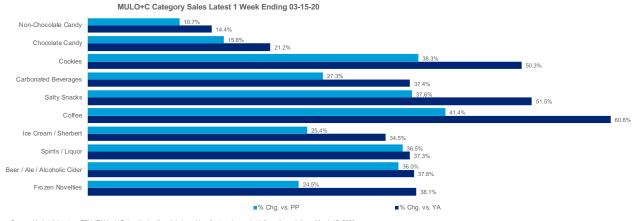
Consumer Purchasing of Comfort Products in Addition to Core Essentials

As social distancing and shelter-in-place orders have become more common across the U.S., consumers are increasingly seeking out products that bring them comfort and joy. Despite the orders to stay at home, we expect consumers to experiment with new foods and to indulge in some items, in part because of the inability to dine out, but also as a way to find small joys throughout their day.

Exhibit 5 - Growth of Comfort Categories

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Seeking Comfort

Source: Market Advantage TSV; IRI Liquid Data - the leading global provider of enterprise market information solutions, March 15, 2020

Increased Consumer Focus on and Purchases of Self-Care Items

The COVID-19 pandemic has increased consumer interest in self-care items such as thermometers, sanitizing wipes, immunity-boosting products, disposable gloves and hand sanitizers. Consumers have a heightened concern for personal and family safety and are stocking up on many self-care products. We anticipate that this will be one of the long-term impacts of the COVID-19 crisis, with consumers spending disproportionately in these categories in the future. Consumers have a heightened concern for personal and family safety and are stocking up on many self-care products.

Exhibit 6 - Growth of Self-Care Categories

Buyer Increases Accelerating Purchasing Across Many Self-Care Categories

	% Change in Buyers	% Change in Spend
Personal Thermometers	160.5	22.4
Cleaning Cloths / Wipes	136.2	36.9
Immunity Products	124.9	34.2
Disposable Gloves	109.1	42.0
Hand Sanitizers	107.3	103.3
Liquid Hand Soap	97.3	29.3
Bleach	79.7	14.3
Facial Tissue	58.3	26.4
First Aid Antiseptics	52.9	28.4
Household Cleaners	41.3	39.9
Internal Analgesics	40.4	27.7
Paper Towels	39.6	31.3
Toilet Tissue	32.7	45.6
Laundry Detergent	30.4	19.0
Cold / Cough / Allergy	29.3	27.1
Vitamins	27.4	14.9
Sports / Energy Drinks	23.6	10.6
Toothpaste	22.7	8.8
Refrigerated Orange Juice	20.5	8.4
Water	14.0	33.9

Source: IRI National Consumer Network; Total All Outlets *% Change in Buying Rate

Immediate Impact of Pantry Loading for CPG Brands and Manufacturers

After a panicked month of pantry loading, we are left wondering, who benefited in the COVID-19 crisis? Did smaller brands gain share and rise to fill the void left by the out-of-stocks of large brands? Did private label perform differently than large or small brands? What is the opportunity for brands as consumers come out of panic buying?

Sales Growth Across Large, Small and Private Label Brands

By examining eight categories (five edible plus three nonedible), we found that almost all brands (large, small, and private label) grew dramatically in the four weeks or so since the coronavirus outbreak relative to the four weeks prior. For example, each of the top 100 largest soup brands all grew in sales during that period by more than 27%. Similar results were found in other categories.

Share Gains Across Large, Small and Private Label Brands

While brands have grown in terms of sales, it seems as though the rising tide of demand has benefited all players - big, small and private label.

In Exhibit 7 below, we show the change in share of the top 10 brands, as well as other brands within each category. Across almost every category, we find the share of both larger and smaller brands (non-top 10) has largely stayed static (less than +/- 1% change) prior to and after February 23.

In one outlier category, we do observe strong consumer preference for leading branded products in household cleaning. This is a category where perceived product efficacy is critical in consumer selection. We anticipate this trend will continue and is likely to be seen in other self-care categories as well.

Exhibit 7 - Market Share of Brands and Private Label

Market Share has Remained Largely Static in Most Categories



Source: IRI POS Data Week Ending March 22, 2020 vs. Year Ago

Who Gained New Users During This Crisis?

Pantry loading is driving a significant increase in consumer trial of new brands and products. The shelterin-place orders sweeping across the U.S. have created many new occasions and need states. With less dining out and more free time on their hands, households are experimenting with new categories and new brands as they scramble to provide meals and snacks for family members. For example, frozen and refrigerated meat substitutes are experiencing very strong growth in buyers, as shown below. Brands and products that deliver on consumer-evolved requirements are likely to experience sustained growth following the crisis. The quarantine provides an opportunity for CPG companies to convert shoppers into longtime buyers. A key challenge for CPG companies will be to quickly identify the new households entering their categories and experimenting with their brands. Many companies may have the urge to cut back on advertising. But this may be an opportune time to identify new households, customize messaging to them and foster an emotional attachment to these brands, leading to repeat purchases in the coming weeks and months.

Exhibit 8 - Growth in Categories and Buyers

Total U.S. (4-Region Total) – All Outlets	Bu	yers (MM)	\$ Sales per Buyer Past 12 Weeks		
12 Weeks Ending March 8, 2020	Current	% Chg. vs. YA	Current	% Chg. vs. YA	
Hand Sanitizers	18.3	62.2	\$6.12	47.0	
Dried Beans / Grains	30.9	1.6	\$7.62	29.0	
Hair Accessories	42.7	1.3	\$9.40	13.9	
Cloth All-Purpose Cleaner	34.5	32.8	\$10.05	12.8	
Spray Disinfectant	17.0	46.5	\$9.79	12.3	
Sleeping Aid Tablets	13.9	7.6	\$17.68	12.0	
Baby Wipes	26.9	2.1	\$14.81	10.1	
Dry Rice	53.9	4.4	\$8.70	9.5	
Frozen / Rfg Meat Substitutes	10.2	28.7	\$19.38	9.3	
Cough Syrup	14.8	3.2	\$15.75	9.3	
Toilet Tissue	91.8	1.0	\$30.81	8.6	
Shelf-Stable Lunch Meats	30.3	2.3	\$9.59	8.6	
First Aid Ointments / Antiseptics	29.7	8.5	\$6.87	7.6	
Salty Snacks - Cheese Snacks	50.1	5.6	\$10.04	7.6	
Dried Meat Snacks	15.1	6.4	\$13.26	6.9	

Many Categories Are Seeing New Buyers and Growth Relative to a Year Ago

Source: IRI National Consumer Network Product Trips Percent Change vs. Year Ago Through March 8, 2020

A key challenge for CPG companies will be to quickly identify the new households entering their categories and experimenting with their brands.

Frameworks to Understand and Navigate the Post-Panic Buying Future

Pantry loading is not an unfamiliar occurrence. In fact, general stockpiling behaviors occur frequently, with recent examples including Hurricane Harvey in Texas and Hurricane Irma in Florida, both occurring in late summer 2017. We can examine these events to learn what people typically buy during a major disaster and what happens post disaster.

Of course, we need to be careful when comparing a global health crisis with isolated natural disasters. For the purposes of this article, we kept our commentary to the most obvious parallels. For example, it is much more likely that consumers will continue to pantry load for months as a result of COVID-19, and it is possible that there will be much greater bifurcation of consumer behavior in the coming months due to the impending recession's high level of expected unemployment.

In the examples of Hurricanes Harvey and Irma, pantry loading occurred across multiple shelf-stable categories. Clear stockpiling demand spiked occurred across impacted categories, followed by a trail-off of shoppers preparing for the next crisis, and ultimately a return to a steady state. Through the course of a natural disaster, CPG manufacturers typically experience a combination of three impacts:

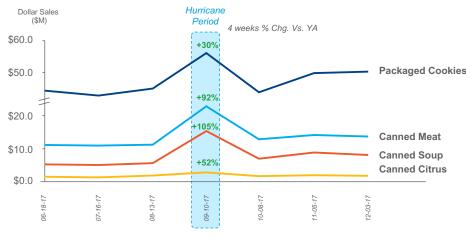
- The gaining (and losing) of consumers through the new trial created by the crisis which sparks new long-term adoption and changes in market share
- A short-term period of reduced sales as consumers work through excess on-hand product before purchasing again
- A long-term loss of consumers who consume an excess amount of product and then disengage after having grown tired of the product, or possibly negatively associating it with the crisis

It is much more likely that consumers will continue to pantry load for months as a result of COVID-19.

Exhibit 9 - Previous Short- and Long-Term Effects From Stockpiling

Historically, CPG Manufacturers Have Seen a Positive Boon in Sales in Times of Crisis Due to Stockpiling Behavior

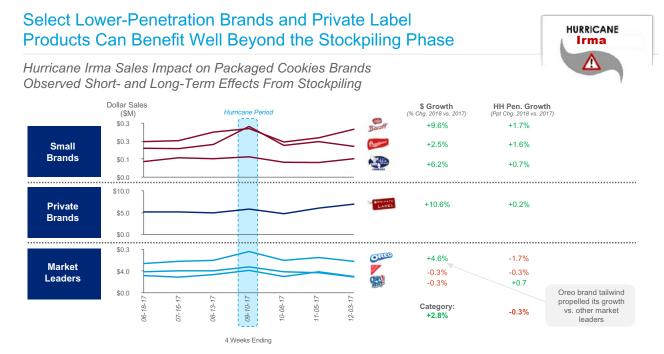
Hurricane Irma Impact on Select CPG Categories (similar behavior was observed during Hurricane Harvey)





For most market leaders, the decrease in purchase volume following the crisis is usually not enough to completely offset the stockpiling leading up to it. At the same time, lower-cost products, or those with lower penetration levels, see expanded consumer trial from the stockpiling event and have the potential for consumer repeat purchase and true long-term growth. The chart below provides supporting evidence of this, detailing market leader versus private brand/small brand impacts.

Exhibit 10 - Hurricane Irma Sales Impact on Packaged Cookies Brands



Source: IRI POS Data, 4 Weeks Ending 12-03-17, Florida MULO+C. IRI Growth Consulting

Typically, longer- term growth impacts vary depending on a brand's penetration and price positioning prior to the pantry-loading event. Brands with high penetration and prices (relative to the category) are most at risk to see their penetration decline long-term. On the other hand, brands with low penetration and private label brands typically see longer-term gains (Exhibit 11).

Brands with low penetration and private label brands typically see longer-term gains.

Exhibit 11 - Brand Expectations During Stockpiling

Within These Categories, Brands With Low Penetration or Price Position Are Best Suited to See Longer-Term Gains From Stockpiling Behavior

Effects from Stockpiling – Framework of Long-Term Stockpiling Risk After Initial Spike in Demand



Source: IRI Growth Consulting

(Pre-Stockpiling Event)

State of the Foodservice End Market and Supply Chain

The onset of COVID-19 and the resulting shelter-at-home orders, has had a profound impact on the restaurant industry as well as foodservice suppliers. Almost overnight, U.S. consumers have shifted from spending ~55% of food expenditures away from home to almost exclusively preparing and consuming all meals at home. Overall restaurant industry sales are down 45-50%.

Significant but Uneven Impact for Restaurants

Hardest hit during the crisis have been casual and fine dining establishments, which lead with experiential models enabled through expansive menus and significant investments in atmosphere. Many of these businesses have rapidly reduced staff and moved to limited menus designed exclusively for curbside pick-up and delivery. Even with these efforts, many have seen sales declines over 70%.

Those less immediately and severely impacted have been QSRs and fast-casual restaurants, as their menu offerings and focus on carry-out and delivery have allowed them to experience a less steep decline. For example, McDonalds posted a 22% drop in sales in March 2020. As a result, most have not had to engage in the more severe and structural changes occurring in casual and fine-dining concepts.

All of this trickles up to food producers, many of whom produce for both CPG and foodservice channels. Given strong retail demand, production lines equipped for retail packaging are running at full capacity. Lines and facilities exclusively focused on foodservice products are focused on their smallest pack sizes, aiming to take advantage of the FDA's temporarily relaxed labeling requirements that enable some foodservice labeled products to be sold in CPG channels.

Longer-term, we will be watching whether foodservice producers attempt to further complement their channel focus with more CPG products. This is likely to take the form of co-manufactured products for other CPG producers or brands who are capacity constrained given the recent influx of volume.

Foodservice Distributors are Leveraging Their Assets in the Short Term

Foodservice distributors—with highly sophisticated supply chains and tailored operations to serve restaurants with curated, frequent deliveries—have scrambled to adjust to these new pressures. Facing significant declines in product demand from restaurants, foodservice distributors have looked to retail channels to drive revenue.

Most foodservice products are not easily diverted into retail or grocery. Large volume packaging and labeling requirements make it difficult to sell foodservice products to consumers. Certain distributors, however, have been able to leverage their distribution network and fleet to partner with grocery distributors to ease the stress on their supply chain due to the increased demand. While this is not a long-term strategy for channel expansion, it has allowed distributors to keep workers employed and to cover some of their fixed costs.

Concurrently, some specialty and niche foodservice suppliers have adjusted their models and created a direct-to-consumer offering. Leveraging Facebook, Instagram and newly-created consumer-facing websites, companies such as Wild Alaskan Company, D'Artagnan Foods and Regalis Foods have found demand from consumers for their specialty products, thus finding an outlet to move highly perishable SKUs and keep operations and employees functioning.

Explosive Growth of E-Commerce Shopping

More than 90% of the U.S. population across all but five states now have mandated stay-at-home orders for all or at least part of their states. Grocery stores and other retailers selling CPG products have largely been exempted, but even grocery shopping has changed under new regulations on store occupancy and hours. Add in the crowds, long wait times and frequent outof-stocks, and many shoppers are rethinking their weekly grocery shopping patterns. What new consumer behaviors are emerging?

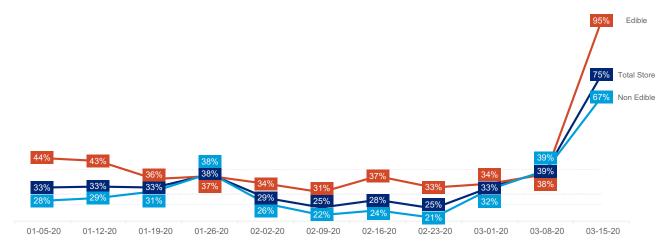
Online Sales Have Increased Significantly

Many consumers who want to avoid store visits altogether are shopping online. Since the coronavirus outbreak, online CPG sales have skyrocketed. Incredibly, 1.7 million new households shopped online in March alone, and average monthly spend increased by 17%. In February, U.S. shoppers spent \$2.2 billion online each week. By the end of March, weekly spend had increased 40% to \$3.1 billion. While e-commerce has been on the rise for years, its ability to facilitate social distancing is acutely in demand right now. As a result, both national brands and private label are experiencing strong order activity across direct to consumer and retailer.com sites, and through e-commerce fulfillment methods such as click and collect, last mile delivery and fresh delivery. It is becoming clear that a local on-shelf presence, as well as a diversity of suppliers, carriers and delivery agents, all provide CPG producers relative advantages as the crisis plays out.

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Exhibit 12 - E-Commerce Growth

U.S. E-Commerce Growth Rates Accelerated Significantly in Past Weeks



Total E-Commerce Growth Rates, Dollar % Change vs. YA

Source: IRI eMarket Insights Model, Total Store is an aggregate of the 204 releasable eMarket Insights categories, Baseline is based on L26 Weeks Ending 3/22/2020

Consumer adoption of e-commerce shopping for CPG products has likely reached an inflection point whereby the channel is now a material driver of revenue, profitability and long-term value creation for CPG companies. Going forward, this channel is likely to be preferred by a segment of the population and will be an important avenue to generate consumer loyalty.

Physical Retail Has Outperformed E-Commerce Options

Despite the acceleration of online shopping in the COVID crisis, e-commerce actually lost share relative to brick-and-mortar in the last four weeks. This is primarily due to consumer panic buying and their lack of comfort that e-commerce will fulfill items that have been vulnerable to stock outs. Consumers have fretted, "If I cannot touch my groceries and put them in my cart and bring them home, how will I know if I will actually get the products I need?" Consumer adoption of e-commerce shopping for CPG products has likely reached an inflection point whereby the channel is now a material driver of revenue, profitability and long-term value creation for CPG companies.

Exhibit 13 - CPG E-Commerce Sales Performance Trend

E-Commerce Share has Decreased Due to Higher Brick and Mortar Growth



Note: Brick & Mortar defined as IRI-measured MULO. CPG defined as 216 IRI eMarket Insights releasable categories. Source: IRI eMarket Insights, data ending March 22, 2020. IRI Growth Consulting Analysis



Consumers' quarantine shopping provides a unique window for retailers and manufacturers seeking to grow their e-commerce business. Traditionally, retailers and brands have been challenged to incent online trial among in-store shoppers, though this crisis is converting many consumers to online options. Savvy CPG and retail executives will recognize that the sales bump during key COVID-19 weeks might not be sustainable; however, the opportunity to establish new online shopping habits and build loyalty can be the primary benefit to retailers and brands when the crisis is over.

The COVID-19 pandemic presents the opportunity to catalyze mainstream consumer adoption of online shopping for CPG products and introduce consumers to the idea of pantry management and subscriptionbased ordering solutions. Meanwhile, physical retailers must also continue to find ways to use their stores and workforce to address certain consumer preferences for in-store pickup, deli and grocerant services and other value-added services.

Omnichannel Grocery and Mass Retailers Have Taken Online Share From Amazon

For the moment, the pandemic is chipping away at Amazon's strong hold on CPG e-commerce. Omnichannel retailers like Walmart, Kroger and Target have outperformed during the coronavirus period, and newly won market share could define a new status quo after the pandemic has ended. To deal with this uptick in demand, brick-and-mortar retailers have been building automated miniwarehouses inside their stores and opening "dark stores" – locations that look like supermarkets but are closed to customers – to make deliveries and prepare pickup orders. While the crush of demand in the wake of COVID-19 has overwhelmed grocers' delivery and pickup networks, retailers have been quick to try to resolve this, including adding web servers to help process increased demand and offering more windows for customers to pick-up their orders or receive delivery.

This shift to online during the crisis may reshape the supermarket industry by helping large grocers consolidate their share. This could also mean consolidation in warehouse/DC networks as well, with CPG manufacturers shipping to fewer distribution points and less associated pipeline inventory over the longer-term.

Amazon's performance over the last month has raised questions in consumers' minds, with the e-commerce giant receiving considerable attention for broad-based out-of-stocks and delivery delays stretching a week or more. A number of leading and opportunist resourceful retailers have used this crisis to convert consumers to their e-commerce platforms.

Multiple Online-Enabled Offerings are Rewarded by the Consumer

Consumers will stay loyal to the retailers that best meet their unique needs, and delivery preferences are a key need. Shoppers want to choose the delivery terms that best suit them. During the last month, in-store pickup has grown from 16% to 19% share of all e-commerce sales. In recent years, Walmart and Kroger have made significant online investments to introduce in-store pickup nationwide, often accessible through convenient drive-through lanes. On the other hand, Amazon has prioritized its traditional dotcom business and expanded home delivery through Amazon Fresh and Prime Now. These traditional dotcom investments are not paying off in the current environment, and consumers have gravitated to click and collect systems from traditional grocers. In total CPG, home shipment has lost 5 share points in the last month. (Exhibit 14)

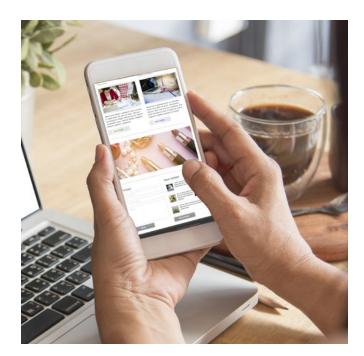
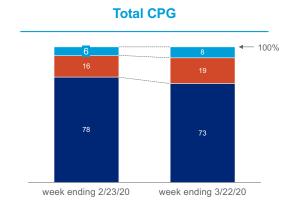
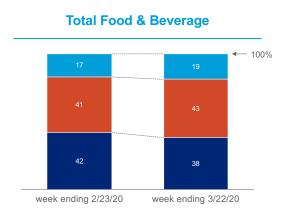


Exhibit 14 - E-Commerce Delivery Models

Home Delivery and In-Store Pickup Have Increased Share of E-Commerce Sales

CPG E-Commerce Share by Delivery Model (%)





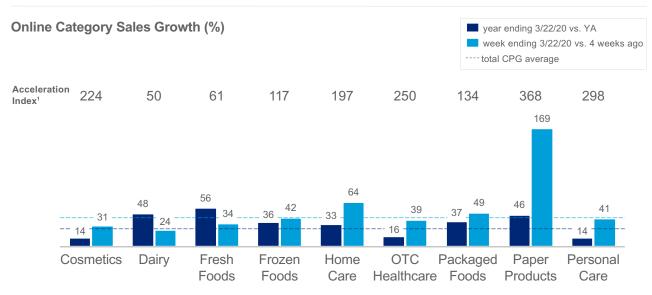
Home Delivery In-Store Pickup Home Shipment

Source: IRI eMarket Insights, data ending March 22, 2020. IRI Growth Consulting Analysis.

Long Shelf-Life Categories Surge While Fresh Decelerates

Not surprisingly, the fastest-growing CPG categories online have been traditional stock-up products, such as home care supplies, paper products and packaged foods. Frozen foods and personal care products have also fared well online. Shoppers are keen to avoid the race for limited stock in-store and have found online shopping a comfortable way to buy in bulk. Outside of these categories, cosmetics and OTC healthcare online sales have accelerated rapidly, growing in the last four weeks at double the pace of last year's average. Non-essential business closures have restricted access to health and beauty store chains, and online offers a more diverse assortment relative to traditional grocery and drug stores. Unexpectedly, while edible online purchases have accelerated, sales of perishable food products have decelerated in the last month. The ability to select one's own meat or produce and consumer preference for freshness have limited online adoption in perishable categories, and only recently have online retailers improved delivery and pickup service infrastructure to overcome the barriers for many shoppers. Here, a stockup preference for long shelf life categories has likely hampered growth. (Exhibit 15)

Exhibit 15 - Online CPG Category Performance



Categories Such as Paper Products Have Exploding Growth Online, While Fresh Foods Have Decelerated

1. L4W vs. prior period growth indexed to L52W vs. YA performance. Source: IRI eMarket Insights, data ending March 22, 2020. IRI Growth Consulting Analysis.

Home-care and self-care products have fared well online as consumers sought out hard to find items. (Exhibit 16)

Exhibit 16 - Online CPG Category Performance

Accelerated Growth Rates Across Health Care, Cleaning, F&B Stock-Ups Highlight Continued Shifts in E-Commerce Purchasing Behavior in Response to Virus Fears

% Chg vs. YAG // Health Care, Cleaning, Stock Up Categories // Total E-Commerce // eMarket Insights Model Ranked by \$ Delta

Categories		Dollars			Units		
Highest Accelerating Categories	Pre-Period*	Post- Period**	Delta	Pre-Period*	Post- Period**	Delta	
Total Store	23.5%	30.7%	7.3	39.6%	41.2%	1.7	
CANNED JUICES - SS	43.3%	100.9%	57.7	47.6%	54.7%	7.1	
SLEEPING REMEDIES	13.7%	49.2%	35.5	37.2%	51.5%	14.4	
BAKING MIXES	15.3%	48.9%	33.6	51.3%	67.7%	16.4	
NASAL PRODUCTS	11.1%	43.9%	32.8	18.5%	49.9%	31.3	
HOUSEHOLD CLEANER CLOTHS	41.0%	73.3%	32.3	37.5%	75.6%	38	
BABY NEEDS	26.2%	57.9%	31.7	30.6%	59.0%	28.4	
INTERNAL ANALGESICS	9.0%	38.7%	29.6	16.1%	53.8%	37	
BABY FORMULA/ELECTROLYTES	25.0%	53.2%	28.1	15.4%	38.7%	23.3	
ASEPTIC JUICES	75.0%	100.3%	25.3	102.3%	104.7%	2.5	
BOTTLED WATER	41.3%	66.1%	24.8	62.1%	71.4%	9.3	
RICE	33.7%	58.2%	24.5	46.6%	64.9%	18.4	
HOME HEALTH CARE/KITS	6.8%	29.2%	22.4	6.6%	28.9%	22.3	
DRY PACKAGED DINNER MIXES	36.9%	59.3%	22.4	63.0%	64.9%	1.9	
COLD/ALLERGY/SINUS TABLETS	36.9%	59.3%	22.4	54.0%	76.9%	22.9	
DIAPERS	23.3%	45.0%	21.6	32.1%	55.9%	23.8	

Note: *Pre-Period is 8/5/2019-1/19/2020. **Post-Period is 1/20/2020-3/8/2020 Source: IRI TSV eMarket Insights Model



Long-Term Impacts of a Recessionary Environment

The COVID-19 pandemic is posing an unprecedented and unknown risk to the global economy. Most countries, having to choose between the economy and the health of citizens, have chosen the latter, shuttering businesses and restricting residents' movement. It is unclear how deep and long the impending recession will be.

Manufacturers and retailers are struggling to get their arms around this issue and to prepare for what is almost certainly going to be a major downturn. They are therefore looking at the Great Recession of 2008-2009 to see what lessons could be learned from that period. During that time, we observed the following general changes in consumer behavior:

- Switching to brands providing greater perceived value
- Increasing preference for private label offerings
- Cost prioritized over convenience
- Shift in spending to value channels (e.g., mass, club and discount)
- Decreased spending in foodservice settings and increased dining at home

These patterns are likely to recur in the near and medium term, particularly if high levels of unemployment persist. We will also be closely observing consumer behavior as shelter-in-place orders are lifted. We expect consumers will generally maintain higher levels of CPG products in their pantries, freezers and medicine cabinets as a precautionary measure and as consumers continue to focus on hygiene and selfcare. These trends should inform strategic priorities for brands, manufacturers, distributors, retailers and private equity investors.

> Consumers will generally maintain higher levels of CPG products in their pantries, freezers and medicine cabinets.



Recessionary Impact Across Retail Segments

During the Great Recession, we observed a slowdown across all retail segments. In aggregate, the dollar sales growth rate for U.S. retail fell from 4.2% to negative 4.3% a decline of 8.5%. This figure includes sales from all retail sectors (e.g., automotive parts). Consumer demand for products essential to daily living tends to be less elastic. Thus, retail stores carrying these essential products tend to fare better during periods of economic downturn.

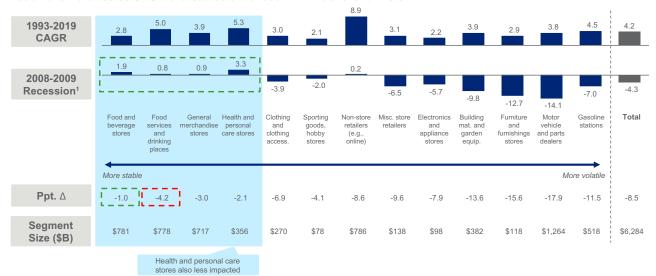
In particular, consumer staples such as food and beverage, general merchandise, health and personal care all grew during the past recession (Exhibit 17). So did food services and drinking places, all of which gained dollar sales during that period. The primary reason for the sustained dollar sales growth of the food and beverage segment is that consumers ate out less frequently and cooked at home more often. Additionally, retailers were able to offset declines in volumes through price/mix growth. An important lesson for manufacturers across all categories is to revisit their price pack architecture and investigate opportunities to tailor their product portfolio to the changing marketplace.

Food and beverage, general merchandise, health and personal care all grew during the past recession.

Exhibit 17 - Growth of Retail Segments

In the Last Recession, Foodservice Was Impacted Significantly. F&B and Health Stores Impacted Least vs. Other Types of U.S. Retail Stores

U.S. Retail Segments Recession vs. Average Growth 1993-2019 Dollar Sales CAGR and Standard Deviation in Annual Growth Rate



1. CAGR 2007-2009. Source: U.S. Census Retail Trade, data ending February 2020. IRI Consulting analysis

Dispersion of Performance Across CPG Categories

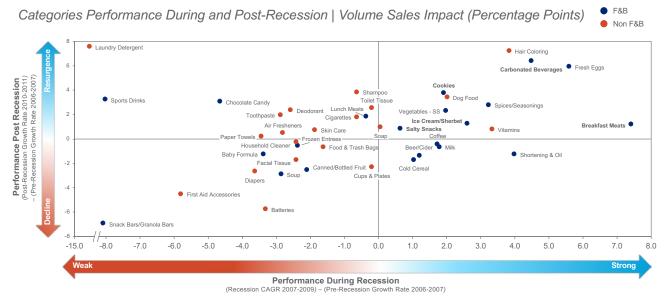
Another key question relates to how different CPG categories perform during as well as after the recession. Specifically, which categories rebound quickly after a downturn and which categories do not?

Exhibit 18 below provides an assessment of these categories. Comfort snacking categories in food and beverage, such as ice cream, cookies, carbonated beverages, salty snacks and breakfast meats, had strong performance during and after the recession. Comfort snacks are an allowable indulgence and consumers are willing to pay for a treat, regardless of the overall economic climate. Companies focused on providing consumers with permissible indulgences like ice cream are poised to perform well during a longer-term economic downturn.

Furthermore, categories related to health and cleanliness remained relatively insulated from recessionary pressures. Toilet tissue, paper towels, vitamins, soap, shampoo and hair coloring all performed well during and after the recession. With the spread of COVID-19, these categories command an increasingly important share of consumer spending. Hence, we expect these categories to fare well in a recessionary environment.

Exhibit 18 - Category Performance

Spending During, After Recession Shows Consumers Gravitate to Comfort and Personal Indulgence; Likely to Repeat in COVID-19-Induced Recession and After



Source: IRI POS archived data FDMx (Food, Drug, Mass excluding Walmart). CY 2006-2011. IRI Consulting analysis.

Expected Growth in Private Label

The impending slowdown of the economy will not only impact the performance of various categories, but it is also likely to encourage greater consumption of private label offerings. Private label market share is about 19% in the U.S. today. This market share has increased over the last few years, including the most recent 12 weeks, and remains significantly lower than the 40%+ levels in Europe. The convergence of several factors–including increasingly value-conscious consumers, retailer differentiation and profit-optimization objectives, and enhanced producer operating capabilities–should help drive the development of the private brand market in the U.S. With private brand quality perceptions higher, retailers looking to expand their offerings to new segments, and manufacturer capabilities continuously improving, premium offerings across CPG categories present an attractive opportunity for private brands.

Private brand market share in CPG has increased at an average annual rate of about 30 basis points over the past decade. Assuming CPG industry growth in the low single digits and store brand market share gain in line with the aforementioned historical arc, the incremental U.S. store brand market opportunity could be \$20 billion over the next several years. This would push private brand market share to a percentage in the low 20s, which we believe is not unrealistic given the historical trend and store brand market share in Europe.



Summary

This unprecedented time is applying pressure on all constituents of the CPG industry. Effectively navigating the rush of new consumer data, category shifts and economic challenges will be challenging for even the most tenured leaders.

IRI and William Blair are committed to helping leaders to process critical data and draw actionable recommendations. We believe the current environment will create opportunities for many brands, manufacturers, distributors, retailers and investors. Some common themes of our recommendations stemming from COVID-19 include:

Revisit and Update Your Strategy

Every business will be impacted differently by COVID-19 in the short term. It is important for leaders to have an updated strategy that considers the impact on their sector, consumers, channel partners and product portfolio.

Forward-thinking leaders will assess the need for new or advanced capabilities to address the future needs of their consumers and channel partners. This will lead to a "buy vs. build" decision for new capabilities— to leverage an existing strength, to fill a gap in capability or expand into new channels. This exercise should go beyond the scope of a traditional need assessment (e.g. physical capabilities, distribution, scale, new brands) and critically evaluate the less tangible, but ever important, capabilities that drive a company's success (e.g. human capital, innovation, consumer engagement).

Capitalize on Trial From New Consumers

Whether through stock outs or desire for alternatives, consumers have engaged a wide variety of brands and products for the first time. It will be critical for CPG producers to assess the difference between a) incremental demand pulled forward from existing consumers and b) new users that are trialing product. To the extent producers are attracting new consumers, it will be critical to assess their profile and how they differ from existing consumers. An analysis of whether these consumers are attractive, profitable and sticky will inform changes to product and marketing strategy - including line extensions, new formulations and consumer engagement - to align with the needs of these new consumers.

Enhance Your Consumer Engagement Strategy

During COVID-19, consumers have accelerated their access to brands across channels, whether by need or desire. Given the impact the pandemic has had on consumers, there is an enhanced receptivity and opportunity to influence through effective marketing messages. The consumer, now more than ever, is receptive to messages that focus on product benefits and solution orientation – clean household, better-foryou, diet and nutrition, indulgence and convenience, among others.

Now is the time to capitalize on owning and building a direct relationship with both existing and new consumers. This includes educating the consumer on product benefits utilizing the power of content to help pull demand through traditional retail and online channels.

Remember That Not Everything Has Changed

While this report highlights many new facets of consumer behavior, it is unlikely that many common and long-running evolutions in consumer preference have occurred. While it is tempting to solely focus on the changes in recent consumer behavior, leaders should be reminded to stay grounded and assess what has remained the same, what has simply happened sooner than expected and what has fundamentally shifted as a result of the COVID-19 pandemic.

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William Blair is the premier global boutique with expertise in investment banking, investment management, and private wealth management. We provide advisory services, strategies, and solutions to meet our clients' evolving needs. As an independent and employee-owned firm, together with our strategic partners, we operate in offices worldwide.

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