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**Focus Report: Amazon Aggregators**

In this Issue




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# Amazon Aggregators: A Profile of Risk and Return from the Digital Frontier

## Executive Summary

### Amazon eCommerce Dominance.

Amazon is the world's largest eCommerce platform hosting 40% of all U.S. online sales. The ease of doing business on Amazon has attracted many third-party (3P) sellers who collectively account for roughly 60% of gross merchandise value (GMV) sold on Amazon.

### COVID-19 Accelerated Online Sales Trends.

Online sales growth has outpaced total retail sales growth by over 3.5x over the past decade as consumers have continued to gravitate toward the convenience, selection, and value of online shopping. The pandemic accelerated this trend as online sales increased to over 15% of total U.S. retail sales in the fourth quarter of 2020.

### 3P Sellers Flourish on Amazon.

Amazon is leveling the playing field for small and medium-sized businesses, who are flocking to the online marketplace to sell products. Most 3P sellers can launch a business within 4 months with as little as $5,000 in start-up costs.

### The Emergence of Amazon Aggregators.

Because success factors are similar for most Amazon 3P sellers (primarily market reach and fulfillment efficiency), their businesses can be acquired and aggregated into portfolios by well capitalized buyout firms focused on the space. Given the standardization of selling parameters on Amazon, outsized returns can be achieved in a short period of time through a concept we denote as 'platform arbitrage'.

### Aggregator Capital Raises are Sizable.

Aggregators have raised approximately $11B over the past two years in both debt and equity, primarily from venture capital firms. Later stage investors are also deepening involvement with aggregators given the attractiveness of returns. However, investments are not without risk, and returns can erode quite rapidly.

### Amazon Aggregator Risk and Return.

We highlight six key risks to the Amazon aggregator business model: (1) an immediate post acquisition shock to a portfolio company; (2) execution risk; (3) high degree of financial leverage; (4) Amazon platform risk; (5) economic slowdown; and (6) shifts in consumer spending (durable goods vs. services). The first 3 risks are company-specific while the last 3 apply to all aggregators. Additionally, we compare hypothetical aggregator returns to other investment classes and discuss the driving motivation behind recent industry growth.

### Summary & Market Outlook.

We believe that the rapid growth of Amazon aggregators in many ways resembles that which took place in the hedge fund industry in the 1990s. Just as some early-stage hedge funds eventually ran into trouble, some aggregators will likely do the same. However, any short-term consolidation or capital reallocation shouldn't derail long term industry growth. Ultimately, investment flows into aggregators should continue unabated, given the attractive spread between 3P seller acquisition multiples and publicly traded consumer products companies (CPG's), which aggregators will increasingly resemble.

Sharpen Your Perspective

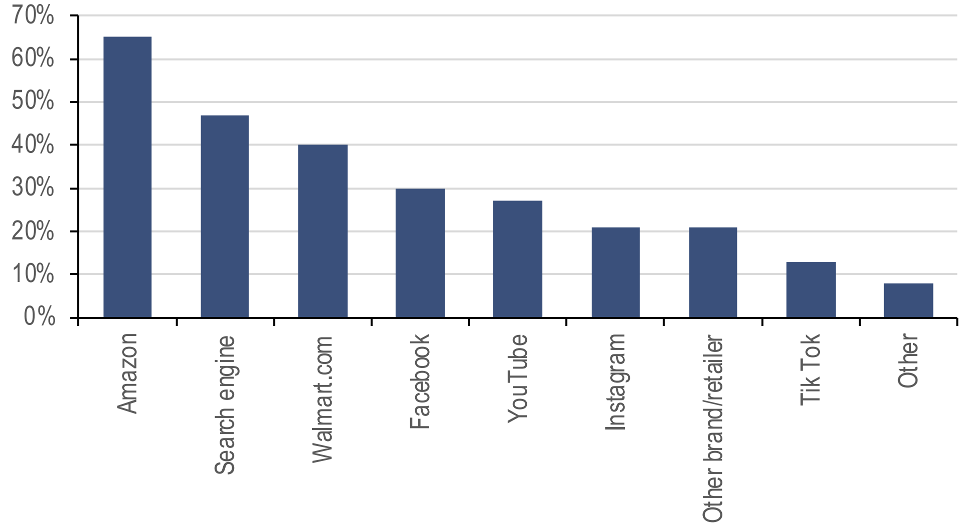
# Amazon Inc.'s eCommerce Dominance

Amazon is the world's largest online marketplace for consumer goods, offering over 350 million products across 28 different categories. Every day, over 300 million customers worldwide visit Amazon.com to search for and browse through an enormous range of products to find those which will meet their specific needs. Moreover, most consumers start their online searches for products on Amazon.com, which makes Amazon the de facto starting point for online shopping **(Exhibit 1)**.

The company is both a retailer which buys products from suppliers and sells them directly to customers (first party or 1P), as well as a platform where third-party sellers (3P) can offer products to Amazon customers. For eCommerce businesses, Gross Merchandise Value sold or GMV is a useful comparative measure. In 2020, an estimated $495B in GMV was sold on the Amazon marketplace, comprised of $188B in 1P GMV and $307B in 3P GMV **(Exhibit 2).** By comparison, GMV sold through Shopify was $120B, eBay GMV was $100B and Walmart.com GMV was an estimated $60B **(Exhibit 3)**.

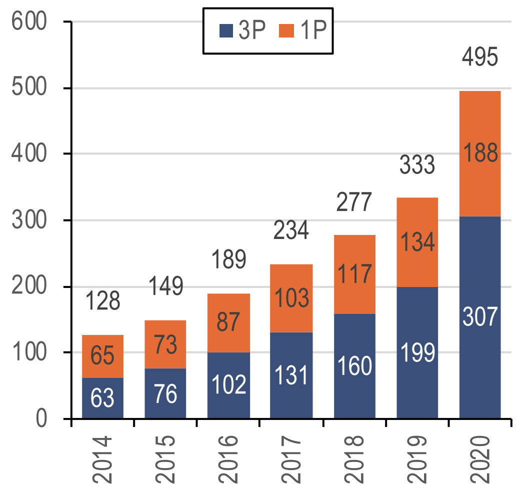
Amazon dominated online sales in 2020 with a 39% share of total U.S. eCommerce and is expected to increase that share to over 40% in 2021 **(Exhibit 4)**, according to eMarketer. Amazon's 3P business has grown from 34% of total company GMV in 2010 to an estimated 62% in 2020.

**EXHIBIT 1.**
**Where Do Consumers Start Their Search for a Product Online?**



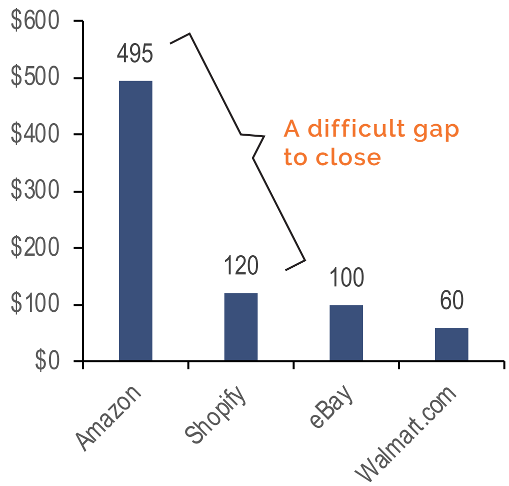

Note: Search engine includes Google, Bing, etc.
Source: Jungle Scout 3Q:21 Consumer Trends Report; GWA

**EXHIBIT 2.**
**Amazon Gross Merchandise Value** (GMV) $ Billions



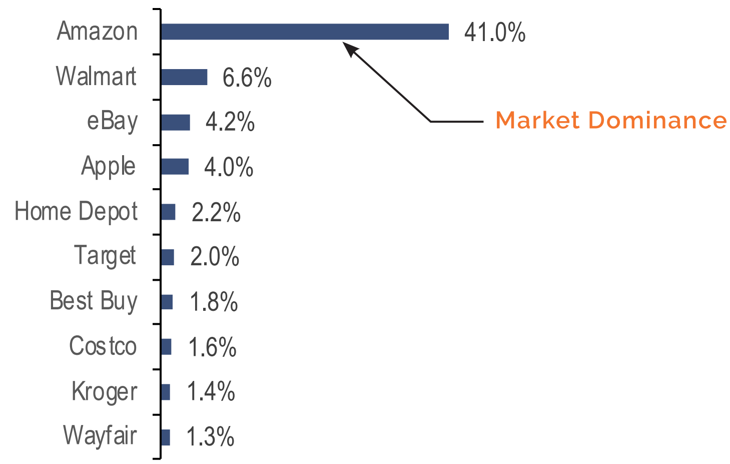

Source: Company filings; GWA estimates

**EXHIBIT 3.**
**Amazon, Shopify, eBay and Walmart.com 2020 Worldwide GMV** ($ Billions)




Source: Company reports; Webretailer; GWA

**EXHIBIT 4.**
**2021 Top 10 U.S. Retail eCommerce Sales Share, by Company**




Notes: YTD U.S. eCommerce market share through October 2021.
Source: eMarketer, GWA

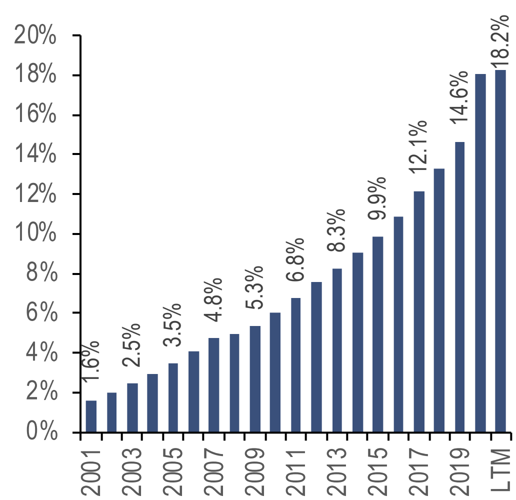
# COVID-19 Accelerated eCommerce Growth

Prior to the pandemic, eCommerce sales were growing at a brisk 15% annual rate. Despite this growth, eCommerce represented just 12% of total U.S. retail sales in 4Q19. In 2020, eCommerce sales grew 32%, over 2x the previous annual rate, to reach 15% of total U.S. retail sales in 4Q20. Because of the pandemic, older consumers discovered the safety and convenience of online shopping, many brick-and-mortar retailers were forced to temporarily close, the service sector of the economy was put on hold and as a result online consumer spending exploded **(Exhibit 5)**.

Amazon was the primary beneficiary of these new, pandemic driven sales trends and the company grew units sold by 45% y/y. This outpaced overall U.S. eCommerce sales growth by roughly 40%. Market share gains were also driven by the addition of over 200K new 3P sellers (+45% y/y).

Impressively, U.S. online sales continued to grow through the first half of this year despite lapping outsized 2020 comps and are up nearly 60% vs. 2019. While we expect online sales to decelerate in the second half of the year, annualized growth will likely just return to its previous brisk pace of 15% **(Exhibit 6)**.

**EXHIBIT 5.**
**U.S. eCommerce Market Penetration**



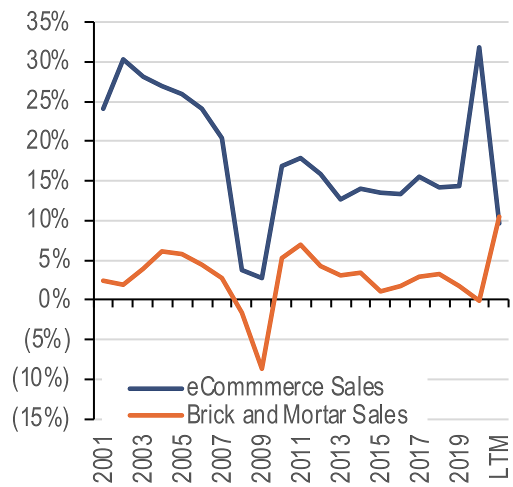

Note: eCommerce Market Penetration is defined as eCommerce sales as a percentage of retail sales excluding new auto sales and gasoline purchases. Including gasoline station and new car sales, eCommerce represented 14% of retail sales in 2020.
Source: Bureau of Labor Statistics; GWA

# Amazon Levels the Playing Field

Amazon's 200M Prime subscribers along with the ease of doing business on the platform have resulted in a rapid expansion of 3P sellers. Sellers can leverage Amazon's transportation and shipping buying power (as a part of the Fulfilled by Amazon [FBA] offering), which generates a 30% savings compared to non-FBA shipping options, effectively leveling the playing field with many multinational corporations.

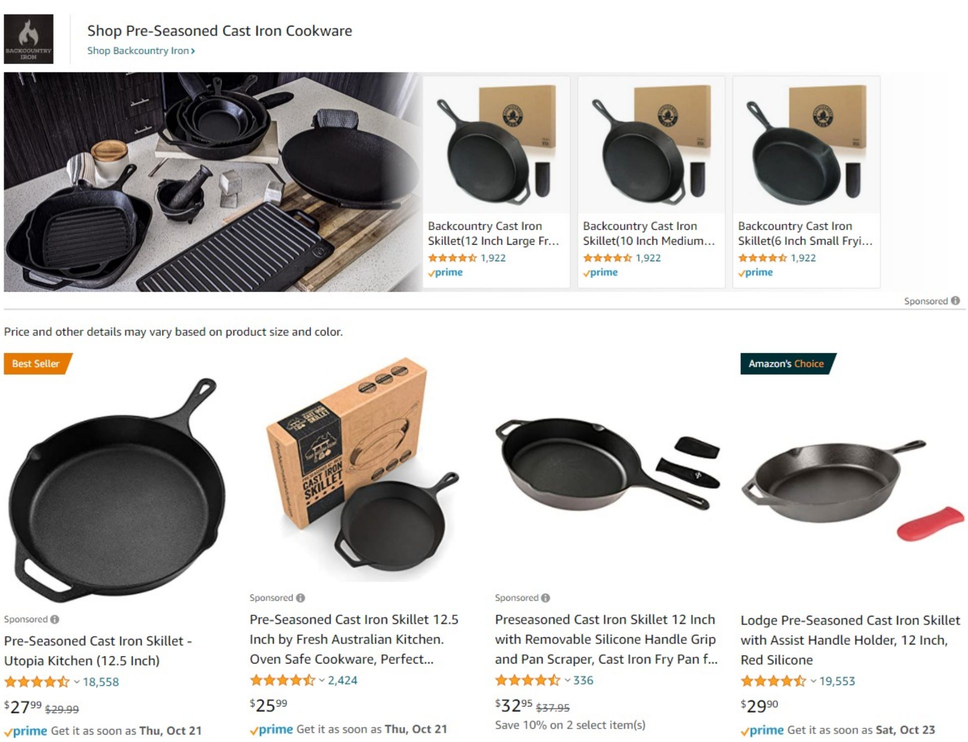
Since consumers are tactical buyers who search for a specific product (vs. a brand), smaller 3P sellers can also achieve an advertising advantage on the Amazon platform. A typical Amazon consumer purchases a product based on price, rating, product photos, and description which satisfies certain search parameters (i.e. air fryer, cast iron pan, 6' leather dog leash, etc.). As illustrated in **Exhibit 7** below, a sample search for a "12-inch cast iron skillet" produced 712 results and highlighted 4 smaller sponsored cast iron brands before showing the much larger, well branded Lodge. A similar search on Williams Sonoma, a high-end kitchen website, produced just 11 results from four large brands including: Lodge, Le Creuset, Staub, and FINEX.

## EXHIBIT 6.
## U.S. eCommerce vs. Brick-and-Mortar Retail Sales Trends (Y/Y)




Note: Brick-and-mortar retail sales are defined as retail sales less eCommerce sales.
Source: Bureau of Labor Statistics; GWA

## EXHIBIT 7.
## Amazon.com 12" Cast Iron Skillet Search Result (10/19/2021)



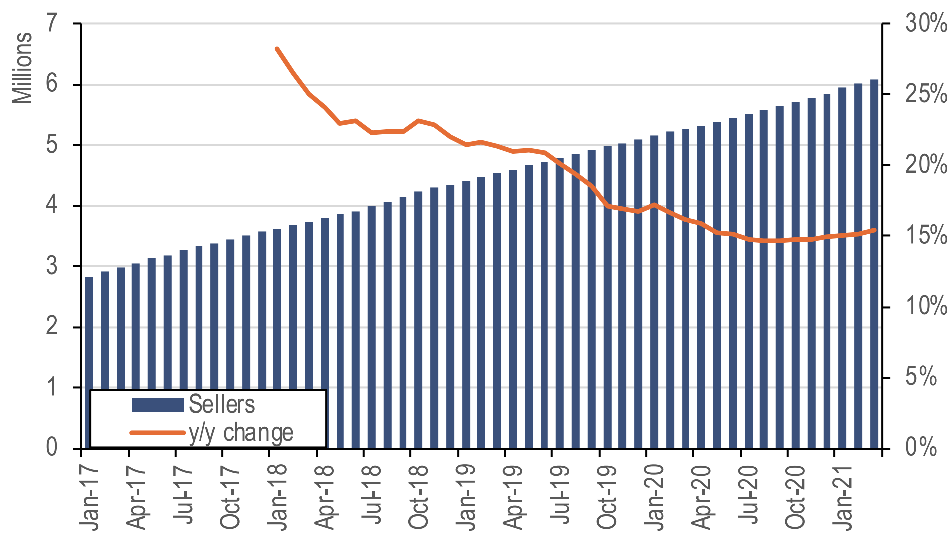

Source: www.amazon.com

# 3P Sellers Flock to Amazon's Online Marketplace

Not surprisingly, sellers have flocked to the platform, more than doubling over the past 4 years to 6M unique accounts **(Exhibit 8)** as of March 2021, up from 3M in 2017 (a 19% 4-year CAGR). In 2020, 1.3M new sellers joined the Amazon Marketplace according to Statista and 480K new sellers have joined so far in 2021.

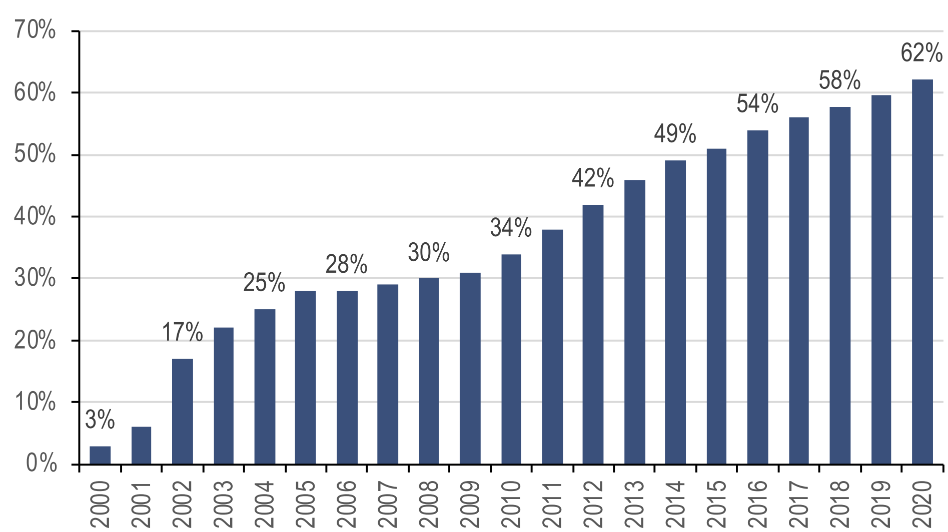
Amazon actively encourages the proliferation of 3P sellers because this business is much more profitable for the company than its own direct retail operation. Most sellers utilize Amazon FBA, which generates storing, packing, shipping and customer support fees for the company; services which have higher profit margins than direct product sales. Today, 3P sellers generate an estimated 62% of Amazon's GMV, up from just 34% a decade ago and 3% in 2000 **(Exhibit 9)**.

**EXHIBIT 8.**
**Amazon Global 3P Marketplace Sellers Have Grown at a 19% 4-Year CAGR**




Source: Marketplace Pulse; GWA

**EXHIBIT 9.**
**Amazon 3P Gross Merchandise Value** (% of Total)



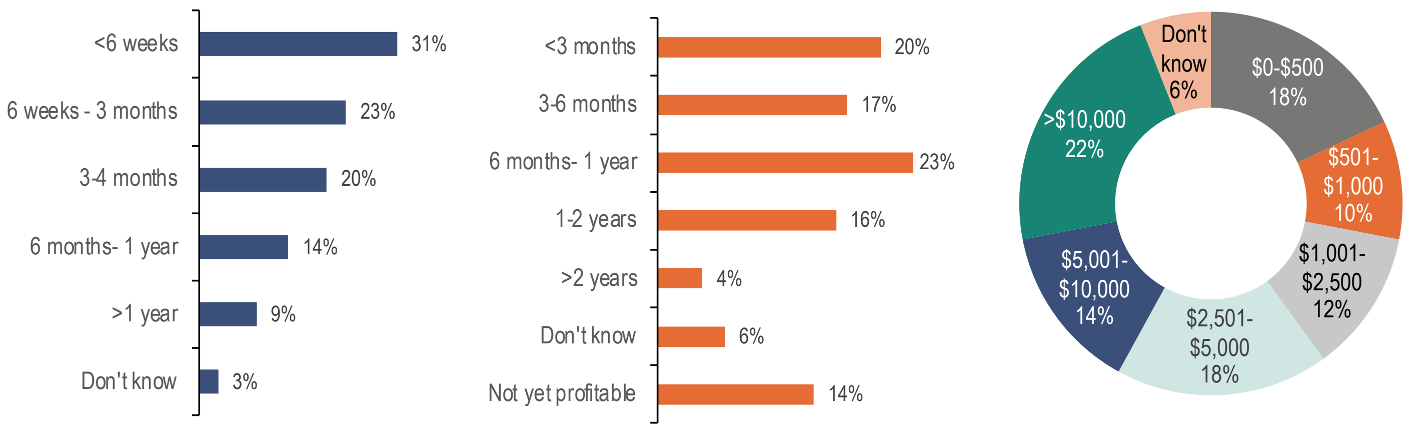

Source: Company filings; GWA estimates

# Amazon Accelerates Product & Brand Speed-To-Market

Amazon fosters lightning-fast product launches with the majority of sellers starting a new business in 3 months or less. Sellers can bring product ideas to market in such a short period of time because they are primarily funding all startup costs with personal savings and fully outsourcing production and transportation. Incredibly, most Amazon businesses are profitable within a year and require $5K or less in capital to start **(Exhibit 10)**, according to Jungle Scout's 2021 State of the Amazon Seller survey.

### EXHIBIT 10.
### Amazon Startup: Time and Money

**Time It Takes Sellers to Launch a Business on Amazon** **Time It Takes to Turn a Profit** **Money Sellers Spend to Start a Business on Amazon**




Source: Jungle Scout - The State of the Amazon Seller 2021; GWA

# A Hypothetical 3P Seller

Most sellers on the Amazon platform start with small, straightforward product concepts and navigate their way through product development, manufacturing, and sales optimization processes to create young brands with consumer appeal. The typical seller will start with one or two product stock keeping units (SKUs) and add additional products and related SKUs as sales increase. The original products usually become the primary revenue generators – or "hero SKUs." Hero SKUs typically receive the most attention from sellers in so far as advertising spend and SEO (search engine optimization) and can scale quite rapidly.

Below is an Income Statement for a hypothetical Amazon-based business which also generates some product sales through Walmart.com and their own website (direct-to-consumer or DTC) **(Exhibit 11)**.

### EXHIBIT 11.
### Hypothetical Founder-Owned Amazon Business Income Statement ($)

**Income Statement**

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|
| **Revenue** | | | | | |
| **Amazon Sales** | $ 100,000 | $ 250,000 | $ 500,000 | $ 1,000,000 | $ 2,900,000 |
| **Walmart Sales** | $ - | $ - | $ 25,000 | $ 100,000 | $ 500,000 |
| **Website Sales** | $ - | $ - | $ 25,000 | $ 50,000 | $ 200,000 |
| **Total Revenue** | $ 100,000 | $ 250,000 | $ 550,000 | $ 1,150,000 | $ 3,600,000 |
| **Cost of Goods Sold** | $ 30,000 | $ 75,000 | $ 165,000 | $ 345,000 | $ 1,080,000 |
| **Gross Margin** | $ 70,000 | $ 175,000 | $ 385,000 | $ 805,000 | $ 2,520,000 |
| **Operating Expense** | $ 50,000 | $ 125,000 | $ 275,000 | $ 575,000 | $ 1,800,000 |
| **EBITDA** | $ 20,000 | $ 50,000 | $ 110,000 | $ 230,000 | $ 720,000 |

Source: GWA

In our example, Total Revenue is $3.6M and EBITDA is $720,000 after 5 years of operation. 64% of Total Revenue is assumed to come from 2 primary product SKUs (out of a total of 10). Some Amazon sellers with more successful products can scale faster, but on average most reach $3M to $4M in sales within 5 years based on our experience. According to Jungle Scout, roughly three-quarters of Amazon sellers are profitable within 2 years and 60% of business are in the black within 1 year. Sellers typically add other marketplaces such as Walmart.com and a DTC company website after a product concept is proven on Amazon.

**Underlying assumptions:** We have assumed over 100% annual sales growth, COGS represents 30% of sales, Variable OpEx of 35% (inclusive of FBA fees of 30%), fixed OpEx (which includes fixed ad spending, salaries, warehouse, accounting, etc.). This equates to a 20% EBITDA margin. It should be noted that some businesses in the space are materially more profitable, and some less so – but a 20% profit margin is typical **(Exhibit 12).**

### EXHIBIT 12.
### Hypothetical Founder-Owned Amazon Business Assumptions

| | |
|---|---|
| Sales growth CAGR | 105% |
| COGS (% Sales) | 30% |
| Gross Margin (% Sales) | 70% |
| Variable OpEx (% Sales) | 35% |
| Contribution Margin | 35% |
| Fixed OpEx (% Sales) | 15% |
| **EBITDA Margin** | **20%** |

Note: We have assumed OpEx is 70% variable and 30% fixed, representing 50% of sales at the start of the period, though the fixed OpEx mix will decrease/(increase) as sales rise (fall).
Source: GWA

# Seller Profitability is Driven by Hero SKUs

As illustrated in **Exhibit 13** below, the profitability of our hypothetical business is driven by the performance of its top two stock keeping units (SKUs). While the company generates $3.6M of revenue in Year 5 on 103,235 units sold at an average sale price of $23.48, nearly 65% of sales and Gross Profit are generated from the two hero SKUs. Although the remainder of the SKUs generate Gross Profit dollars, they are largely unprofitable after operating expenses (including FBA fees) are allocated. These laggard products may or may not contribute to future profitability but are an important part of the product innovation and brand evolution process.

### EXHIBIT 13.
### Founder-Owned Amazon Business Product Level Contribution

| Year 5 | Units Sold | Price | Sales | COGS | Gross Profit | Attributed Unit OpEx | Unit Profitability | |
|---|---|---|---|---|---|---|---|---|
| Product SKU 1 | 25,000 | $ 49.00 | $ 1,225,000 | $ 367,500 | $ 857,500 | $ 435,899 | $ 421,601 | Hero SKU |
| Product SKU 2 | 22,000 | $ 49.00 | $ 1,078,000 | $ 323,400 | $ 754,600 | $ 383,591 | $ 371,009 | Hero SKU |
| Product SKU 3 | 17,000 | $ 29.00 | $ 493,000 | $ 147,900 | $ 345,100 | $ 296,411 | $ 48,689 | |
| Product SKU 4 | 12,000 | $ 27.00 | $ 324,000 | $ 97,200 | $ 226,800 | $ 209,231 | $ 17,569 | |
| Product SKU 5 | 12,000 | $ 23.00 | $ 276,000 | $ 82,800 | $ 193,200 | $ 209,231 | $ (16,031) | |
| Product SKU 6 | 5,000 | $ 18.00 | $ 90,000 | $ 27,000 | $ 63,000 | $ 87,180 | $ (24,180) | |
| Product SKU 7 | 5,000 | $ 13.00 | $ 65,000 | $ 19,500 | $ 45,500 | $ 87,180 | $ (41,680) | |
| Product SKU 8 | 2,760 | $ 10.00 | $ 27,600 | $ 8,280 | $ 19,320 | $ 48,123 | $ (28,803) | |
| Product SKU 9 | 1,775 | $ 9.00 | $ 15,975 | $ 4,793 | $ 11,183 | $ 30,949 | $ (19,766) | |
| Product SKU 10 | 700 | $ 7.75 | $ 5,425 | $ 1,628 | $ 3,798 | $ 12,205 | $ (8,408) | |
| Total | 103,235 | $ 23.48 | 3,600,000 | 1,080,000 | 2,520,000 | 1,800,000 | 720,000 | |

| | |
|---|---|
| Top 2 Products Sales | $ 2,303,000 |
| % of Sales | 64% |

Source: GWA

Though SKU counts will vary considerably among 3P sellers, this is a typical profile for most Amazon based businesses. Profitability is usually concentrated in a few popular products, while 'tail' products are being developed and tested on Amazon in the hopes of leveraging the original success of hero SKUs.

# The Emergence of Amazon Brand Aggregation

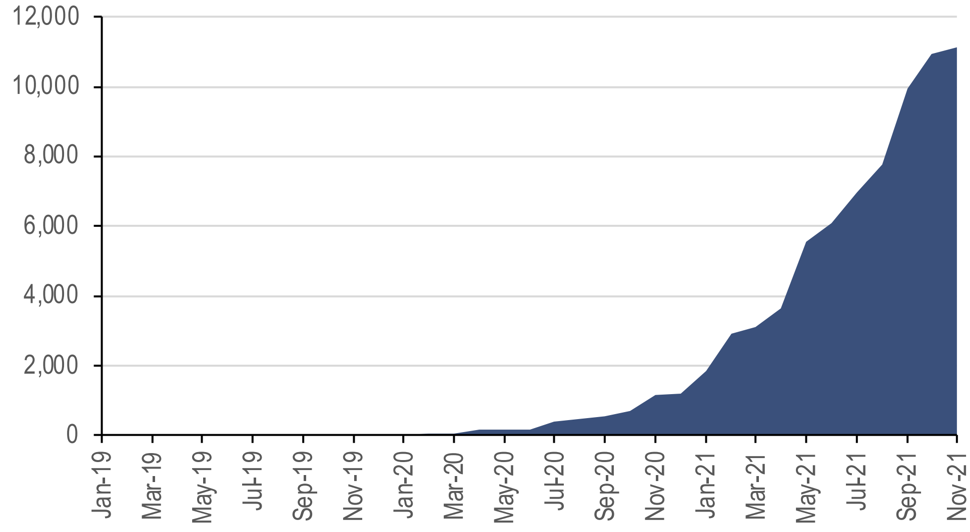
The profitability and scalability of 3P sellers has led to a unique buyout concept – Amazon seller aggregation. Amazon aggregators are firms that acquire multiple 3P sellers and consolidate their products into one portfolio. The business model in a way emulates large consumer package goods (CPG) companies like Proctor & Gamble and Clorox, where a variety of category-leading products and brands are centrally managed, allowing for internal specialization and department level economies of scale.

Amazon aggregators have raised $10B YTD, up nearly 8x from $1.3B raised in 2020 as shown in **Exhibit 14.** Thrasio is currently the largest Amazon aggregator having raised $3.4B while Berlin Brands Group and Perch are also raising funds at a rapid clip, having both raised over $900M. Approximately 30 aggregators have raised at least $100M. In **Exhibit 15** we highlight the 10 largest aggregators based on capital raised to-date.

## Aggregator Funding Sources

Aggregator funding has come from a combination of debt and equity capital raises. Based on company announcements and published interviews of aggregator executives, we believe a moderate to high level of financial leverage has been used by many aggregators to enhance returns. Equity funding has largely come from venture capital firms, high net worth individuals, founders, or has been issued in kind to sellers in lieu of cash consideration for their brands. Traditional private equity is also starting to invest in aggregators. For example, Bain Capital invested in Berlin Brands Group; Silver Lake invested in Thrasio; Blackrock and Fortress invested in Razor Group; and Tiger Global has invested in Mensa Brands, GOAT Brand Labs, and Branded. Below, we have listed the ten largest aggregators (based on capital raised), their respective debt to equity mix, and a synopsis of their investor base **(Exhibit 16).**

**EXHIBIT 14.**
**Cumulative Amazon Aggregator Capital Raise – A Gold Rush Since 2H:20** ($ Millions)




Source: Pitchbook; Company websites; GWA

**EXHIBIT 15.**
**Largest Amazon Aggregators** ($ Millions)

| Rank | Company | Capital Raised |
|---|---|---|
| 1 | Thrasio | $3,395 |
| 2 | Berlin Brands Group | 940 |
| 3 | Perch | 910 |
| 4 | Razor Group | 595 |
| 5 | Merama | 385 |
| 6 | Boosted Commerce | 380 |
| 7 | Elevate Brands | 375 |
| 8 | Unybrands | 325 |
| 9 | SellerX | 265 |
| 10 | Heroes | 265 |

Note: Data is rounded to the nearest $5M.
Source: Pitchbook; Company websites; GWA

## EXHIBIT 16.
## Aggregator Capital Sources and Key Investors

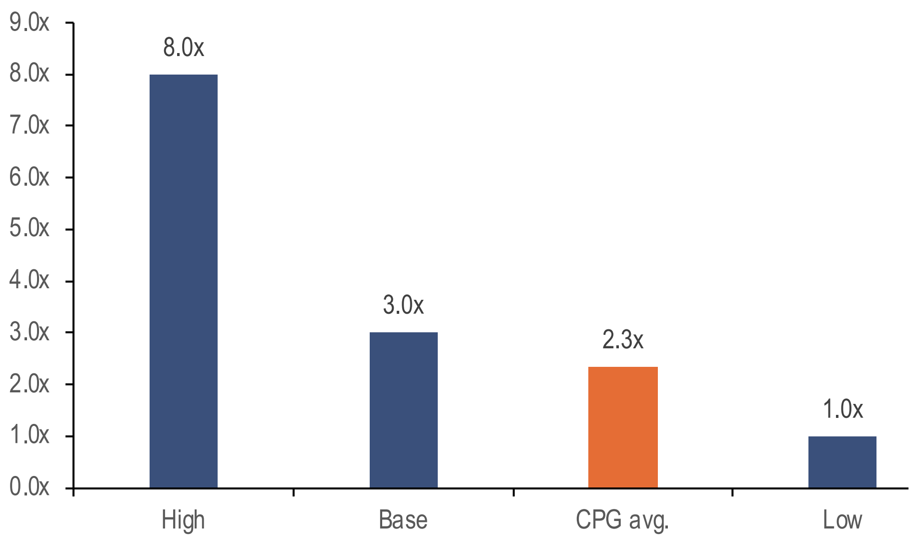
| Rank | Company | Debt | Equity | Venture Capital | Fixed Income | Private Equity | Investors |
|---|---|---|---|---|---|---|---|
| 1 | Thrasio | 35% | 36% | x | x | x | Peak6, Upper90, WTI, JPMorgan, Goldman Sachs, Oaktree, Advent International, Silver Lake, RBC |
| 2 | Berlin Brands Group | 26% | | x | x | x | UniCredit Group, Deutsche Bank, Commerzbank, Bain Capital |
| 3 | Perch | | 99% | x | | | Spark Capital, Tectonic Ventures, SoftBank, Victory Park, Boston Seed Capital |
| 4 | Razor Group | 66% | 29% | x | x | x | Redalpine, GFC, Victory Park, BlackRock, 468 Capital, Fortress, Presight Capital |
| 5 | Merama | 26% | 74% | x | x | | Valor Capital, Monashees, Balderton Capital, Advent International, SoftBank, Globo Ventures |
| 6 | Boosted Commerce | | 22% | x | x | | Torch Capital, Crosscut Ventures, Spencer Rascoff |
| 7 | Elevate Brands | | 33% | x | x | | FJ Labs, Novel TMT, NordStar Capital, Acceleprise, Upper90, Soroban Capital, Oaktree |
| 8 | Unybrands | 92% | 8% | x | x | | Crayhill Capital Management, Nordstar, DIA Management, 166 2nd Financial Services |
| 9 | SellerX | | 43% | x | x | | Cherry VC, Felix Capital, TriplePoint Capital, 83North, L Catterton, Sofina |
| 10 | Heroes | 75% | | x | x | | 360 Capital, Fuel Ventures, Upper90, Crayhill Capital Management |

Note: Not all capital raised will add up to 100% due to debt and equity raises that did not detail the mix of the combined capital. Our investor lists are not comprehensive. Nearly all aggregators are privately held.
Source: Company websites; Pitchbook; TechCrunch; GWA

## Aggregators Rely More Extensively on Debt Than Traditional CPG Companies

Since virtually all aggregators are privately held, a representative capital structure cannot be built with any real precision. However, in analyzing Aterian's public filings, we can infer 3 hypothetical capital structures that aggregators use to fund acquisitions – high financial leverage, base case financial leverage and low financial leverage as illustrated in **Exhibit 17** and compared them to average CPG financial leverage.

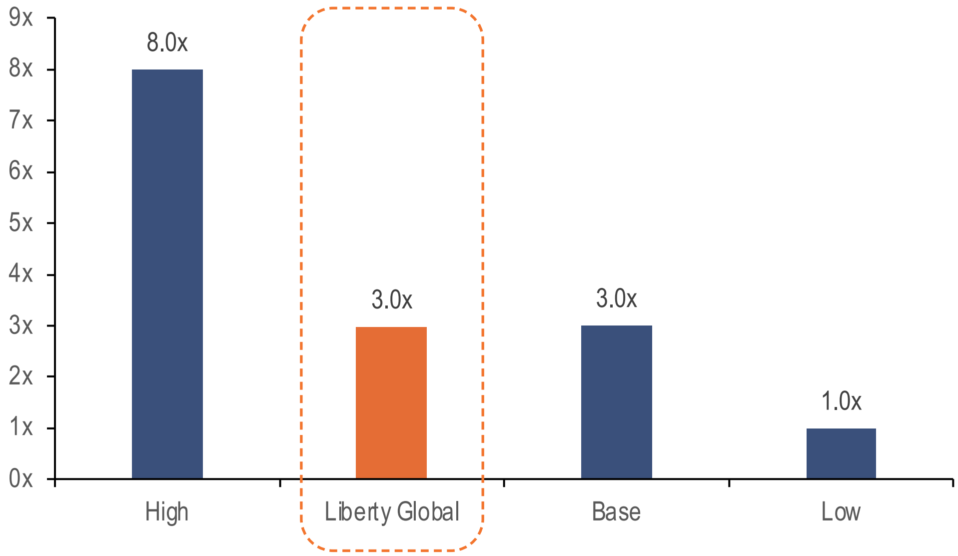
## EXHIBIT 17.
## Hypothetical Financial Leverage (Debt to Equity)




Note: CPG composite includes Clorox, P&G, and Unilever.
Source: GWA; Company filings

We believe aggregators in general can afford to use a moderate degree of financial leverage to fund acquisitions given the profitability of 3P sellers. Heroes co-founder Giancarlo Bruni noted in a recent Financial Times article that the reason his company had access to debt capital was ultimately because they were buying profitable businesses. Prior to founding Heroes, Mr. Bruni worked in corporate finance at telecom giant Liberty Global. For some perspective, Liberty Global had a debt-to-equity ratio of 3.0x in 2016 in the last full-year Mr. Bruni was at the company. This implies aggregators may be using more financial leverage than our hypothetical base case implies **(Exhibit 18)**.

### EXHIBIT 18.
### Are We Contemplating Enough Financial Leverage?




Source: Company filings; GWA

# Aggregator Investment Model

Most aggregators are category agnostic and instead aim to build internal economies of scale across all acquired seller companies by optimizing ad spend, improving gross margins and lowering operating cost, which in turn increases portfolio level EBITDA. This can be thought of as a form of Amazon platform arbitrage, where focused specialization in various aspects of the Amazon 3P seller value chain can be leveraged across acquired companies to improve operating results well beyond what could otherwise be achieved by a standalone 3P seller.

In acquiring numerous brands, aggregators are generally looking for a few breakout winners, much the way venture capital thinks about early-stage investment (many investments eventually yield a few home runs). Aggregators typically do not overhaul the brands they acquire, but rather focus on improving operating metrics as previously described, which takes less time to accomplish.

In general, aggregators prefer to acquire Amazon sellers with accelerating revenue, stable profit margins, fewer product SKUs and 1 or 2 hero SKUs. They also prefer sales to be generated largely from the Amazon platform. This business profile is easier to manage and more cost effective to scale in a portfolio setting.

**Exhibit 19** is the same hypothetical Amazon based business Income Statement presented earlier, but now acquired by an Amazon aggregator at the beginning of Year 6 and carried forward into the next 5 years.

EXHIBIT 19.
## Hypothetical Brand Post Aggregator Acquisition at the Beginning of Year 6

| | Year 6 | Year 7 | Year 8 | Year 9 | Year 10 |
|---|---|---|---|---|---|
| **Revenue** | | | | | |
| **Amazon Sales** | $ 5,075,000 | $ 8,881,250 | $ 11,989,688 | $ 14,387,625 | $ 12,948,863 |
| **Walmart Sales** | $ 875,000 | $ 1,531,250 | $ 2,067,188 | $ 2,480,625 | $ 2,232,563 |
| **Website Sales** | $ 350,000 | $ 612,500 | $ 826,875 | $ 992,250 | $ 893,025 |
| **Total Revenue** | $ 6,300,000 | $ 11,025,000 | $ 14,883,750 | $ 17,860,500 | $ 16,074,450 |
| **Cost of Goods Sold** | $ 2,016,000 | $ 3,307,500 | $ 4,167,450 | $ 5,000,940 | $ 4,500,846 |
| **Gross Margin** | $ 4,284,000 | $ 7,717,500 | $ 10,716,300 | $ 12,859,560 | $ 11,573,604 |
| **Operating Expense** | $ 3,465,000 | $ 4,961,250 | $ 5,953,500 | $ 7,144,200 | $ 6,429,780 |
| **EBITDA** | $ 819,000 | $ 2,756,250 | $ 4,762,800 | $ 5,715,360 | $ 5,143,824 |
| **Multiple of Original EBITDA** | **1.1** | **3.8** | **6.6** | **7.9** | **7.1** |

Source: GWA

In the first two post-acquisition years (denoted as Year 6 and Year 7), Total Revenue grows by 75% aided by increased marketing spend and improved SEO. Top line growth decelerates in Years 8 and 9, growing 35% and then 20% before declining by 10% in Year 10, reflecting brand maturity. Not all brands mature this quickly, and a broader sales channel focus (i.e. Walmart, website or brick and mortar retail) can certainly preserve, or even enhance, the original sales trajectory. But growth eventually pauses for most brands due to increased competition, albeit at a higher, post-acquisition level.

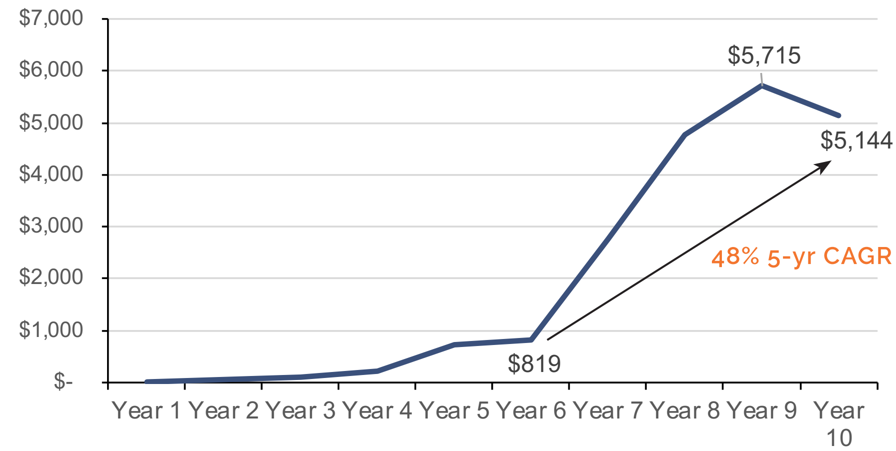
In this hypothetical example, Cost of Goods Sold as a percentage of Total Revenue is assumed to increase in Year 6 to 32% of Total Revenue, moderate to 30% in Year 7 and 28% in subsequent years. Operating expense initially increases to 55% of Total Revenue as costs are incurred to better position the acquired company for growth, but moderates to 45% of Total Revenue in Year 7 and 40% in subsequent years through increased operating efficiency.

The net result is a significant increase in EBITDA, which peaks 4 years after acquisition at $5.7M, or 7.9x the transaction closing EBITDA of $720,000. This produces a 48% five-year CAGR in Year 6 through Year 10 **(Exhibit 20)**. This is a somewhat stylized example designed to highlight the Amazon aggregator opportunity – which accelerates post acquisition profit growth through the optimization of Amazon selling parameters. The ability to make these fast improvements largely stems from internal specialization as previously noted. In effect, the product homogeneity created by the Amazon platform produces an arbitrage like opportunity for aggregators, which can be exploited in as little as 2 years.

# Aggregator Modeled Returns Look Great, What Could Go Wrong?

We see six key risks to the aggregator business model which could materially impact investment performance: (1) an immediate post acquisition shock to a portfolio company before operating metrics can be improved, (2) execution risk as it pertains to finding suitable acquisition targets, successfully integrating acquisitions into a portfolio and managing growth (3) a high degree of financial leverage, (4) Amazon platform risk (5) economic slowdown and (6) consumer spending shifting from goods to services. The first three risks are largely company-specific, while the last three will impact all aggregators.

### EXHIBIT 20.
### Hypothetical Brand EBITDA Performance
($ Thousands) Pre- and Post-Aggregator Acquisition in Year 6




Source: GWA

### 1. Exogenous Shock to a Brand Following Acquisition

We believe that a significant risk factor for aggregators is an unexpected, exogenous shock to an acquired brand shortly after it has been purchased from a 3P seller. After onboarding a new portfolio company, cost efficiencies may not immediately materialize (and in many cases costs initially increase). An abrupt decline in sales during this period can materially impact earnings and cash flow as illustrated below.

**Exhibit 21** shows the impact to our hypothetical company of a 10% across the board decline in units sold. We are assuming this decline occurs in the first year following acquisition (Year 6). Under this scenario, EBITDA declines by 42% y/y to $421K.

### EXHIBIT 21.
### Earnings Sensitivity to 10% Decline in Units Sold Shortly After Brand Acquisition

| Year 6 | Units Sold | Price | Sales | COGS | Gross Profit | Attributed Unit OpEx | Unit Profitability |
|---|---|---|---|---|---|---|---|
| Product SKU 1 | 22,500 | $ 49.00 | $ 1,102,500 | $ 352,800 | $ 749,700 | $ 431,540 | $ 318,160 |
| Product SKU 2 | 19,800 | $ 49.00 | $ 970,200 | $ 310,464 | $ 659,736 | $ 379,755 | $ 279,981 |
| Product SKU 3 | 15,300 | $ 29.00 | $ 443,700 | $ 141,984 | $ 301,716 | $ 293,447 | $ 8,269 |
| Product SKU 4 | 10,800 | $ 27.00 | $ 291,600 | $ 93,312 | $ 198,288 | $ 207,139 | $ (8,851) |
| Product SKU 5 | 10,800 | $ 23.00 | $ 248,400 | $ 79,488 | $ 168,912 | $ 207,139 | $ (38,227) |
| Product SKU 6 | 4,500 | $ 18.00 | $ 81,000 | $ 25,920 | $ 55,080 | $ 86,308 | $ (31,228) |
| Product SKU 7 | 4,500 | $ 13.00 | $ 58,500 | $ 18,720 | $ 39,780 | $ 86,308 | $ (46,528) |
| Product SKU 8 | 2,484 | $ 10.00 | $ 24,840 | $ 7,949 | $ 16,891 | $ 47,642 | $ (30,751) |
| Product SKU 9 | 1,598 | $ 9.00 | $ 14,378 | $ 4,601 | $ 9,777 | $ 30,639 | $ (20,863) |
| Product SKU 10 | 630 | $ 7.75 | $ 4,883 | $ 1,562 | $ 3,320 | $ 12,083 | $ (8,763) |
| Total | 92,912 | $ 23.48 | 3,240,000 | 1,036,800 | 2,203,200 | 1,782,000 | 421,200 |

Top 2 Products Sales $ 2,072,700

% of Gross Profit 64%

EBITDA lower by 42%

Source: GWA

This is a function of profitability being concentrated in 2 products, there not being enough time to drive operational efficiencies, and high fixed costs ahead of expected sales growth (we assume Total Operating Expense is still at 55% of Total Revenue). With enough time, the investments will typically generate sales lift, but a stumble out of the gate can be quite painful. This example assumes that tail SKUs are not jettisoned, or post acquisition costs curtailed, which as corrective measures could in fact mitigate some of the lost EBITDA.

## 2. Execution Risk

Aggregators do not have long track records. Many were established in the past 1-2 years and have benefited from massive tailwinds including a big step-up in eCommerce spending during the pandemic. Competition among aggregators has increased as money continues to flood into the space, which in turn has increased acquisition multiples. Aggregator business models face execution risk if they fail to find attractive acquisition targets, are unable to make meaningful post acquisition improvements, overpay for brands, or are unsuccessful at integrating acquired businesses into a portfolio where economies of scale can be generated.

Scaling too quickly can also lead to an outsized increase in general and administrative cost (G&A) relative to portfolio revenue as operating leverage is increased ahead of expected growth. Should sales unexpectedly slow, as was the case across much of the sector this past summer, high G&A can create negative cashflow. Rightsizing G&A usually entails staff reductions, which could impair an aggregator's ability to execute profitable acquisitions going forward.

## 3. Financial Leverage

Aggregators tend to use financial leverage to enhance returns. Should portfolio companies not produce enough cashflow from earnings to cover annual interest expense, a liquidity problem could emerge. As we have previously illustrated, modest declines in the unit sales of a portfolio company can lead to significant declines in EBITDA. Larger shocks could wipe out EBITDA if operating costs cannot be meaningfully reduced. Debt payments would make matters worse, even before aggregator general and administrative (G&A) expenses are contemplated.

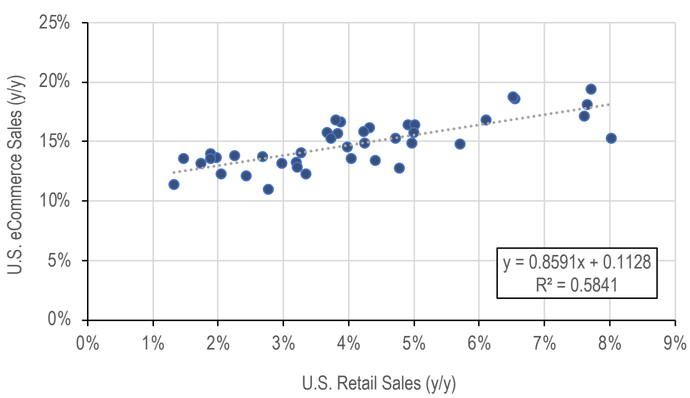
## 4. Amazon Platform Risk

As companies are acquired, company specific risks can be somewhat ameliorated given diversification across various brand products. This risk is not fully eliminated however, due to underlying Amazon platform risk which spans all acquired companies. Just as the Amazon marketplace creates the aggregator opportunity, it also standardizes a certain level of risk. For instance, if overall Amazon fulfillment capacity is constrained, all sellers are impacted. Supply chains and manufacturing sources are also similar for most sellers. Moreover, changes in Amazon algorithms could destroy SEO competitive advantages. Finally, Amazon could launch a successful private label competitor, which could reduce hero SKU demand, earnings, and cash flow.

## 5. Economic Slowdown

Retail sales are closely tied to U.S. GDP (99% correlation) so any slowdown in economic growth will also weigh on U.S. eCommerce sales. Online sales represent around 15% of total U.S. retail sales, and 18% of addressable retail sales (which excludes new automobile and gasoline purchases since they're rarely purchased online). Retail sales represent about 40% of U.S. personal consumption expenditures (PCE), which comprises over two-thirds of U.S. GDP output. U.S. eCommerce sales move in tandem with retail sales (+76% correlation) so any slowdown in economic activity will also weigh on online sales **(Exhibit 22)**.

### EXHIBIT 22.
### U.S. eCommerce Sales are Closely Tied to Retail Sales (+76% Correlation, 0.58 R-Squared) 1Q:10-1Q:21



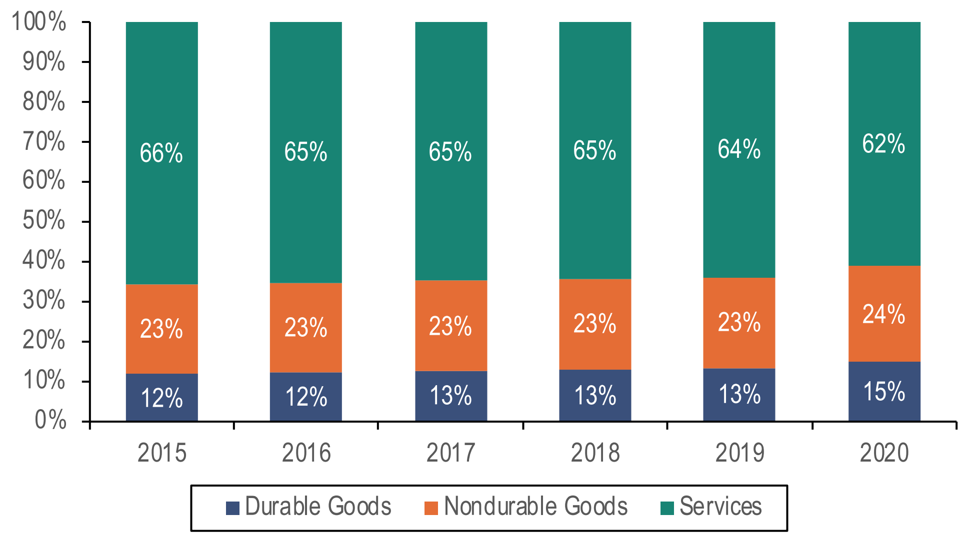

Note: We excluded COVID-19 impacted periods (2Q:20-2Q:21), which distort the historical relationship between retail sales and online purchases. Source: Census Bureau; GWA

### 6. Consumers Shifting Spending from Goods Back to Services

Consumer spending comprises the lion's share of U.S. real GDP (69% in 2019 and 70% YTD) and includes both the purchase of goods and services. Goods include both nondurable items (clothing, food, gasoline, etc.) and durable goods (automobiles, appliances, furniture, etc.). Services include such things as sporting events, eating out at a restaurant, going on a vacation, etc. Historically, services represent ~65% of consumer spending and goods represent approximately 35% as illustrated in **Exhibit 23**.

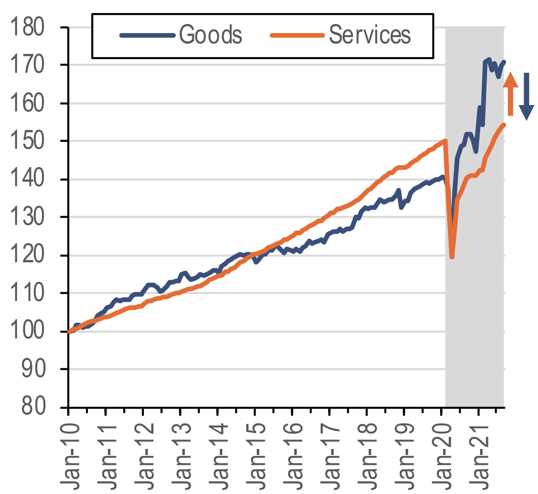
There was a dramatic shift to more goods spending in 2020 though the trend has been starting to reverse YTD. Since the onset of the pandemic, goods spending is up over 20% while service spending has increased just 3% over the same period. Since peaking in April 2021, goods spending has declined 1% through September (latest data), while services increased 5% over the same period **(Exhibit 24)**. Every 1% increase in service spending represents nearly $145B of annual spend, which would otherwise go toward the purchase of goods.

**EXHIBIT 23.**
**Breakdown of U.S. Real Personal Consumption Expenditures**
(% Total Real PCE)




Source: Bureau of Economic Analysis; GWA

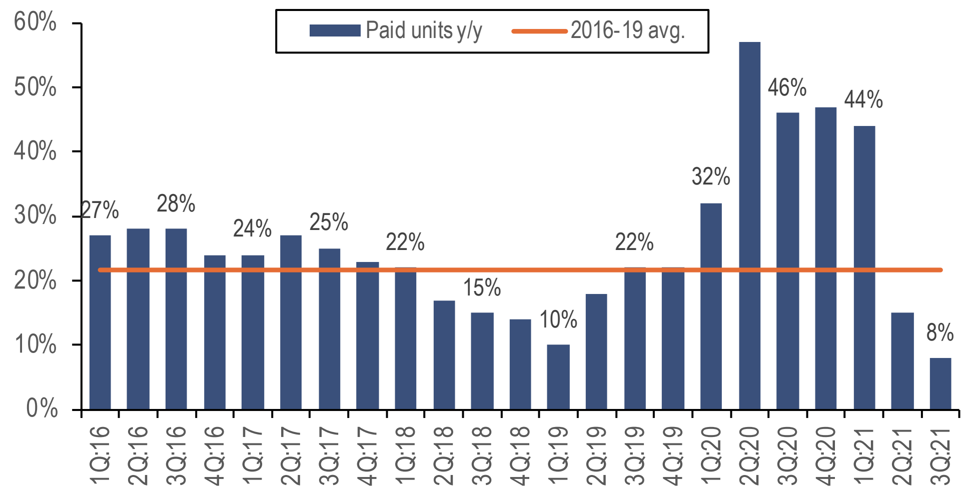
**EXHIBIT 24.**
**Historically, Service Spending Grows Faster Than Goods – But Consumer Behavior Changed in Response to COVID-19, and Could Be Starting to Normalize**




Note: shaded area represents post-pandemic goods and services sales trends.
Source: Bureau of Economic Analysis; GWA

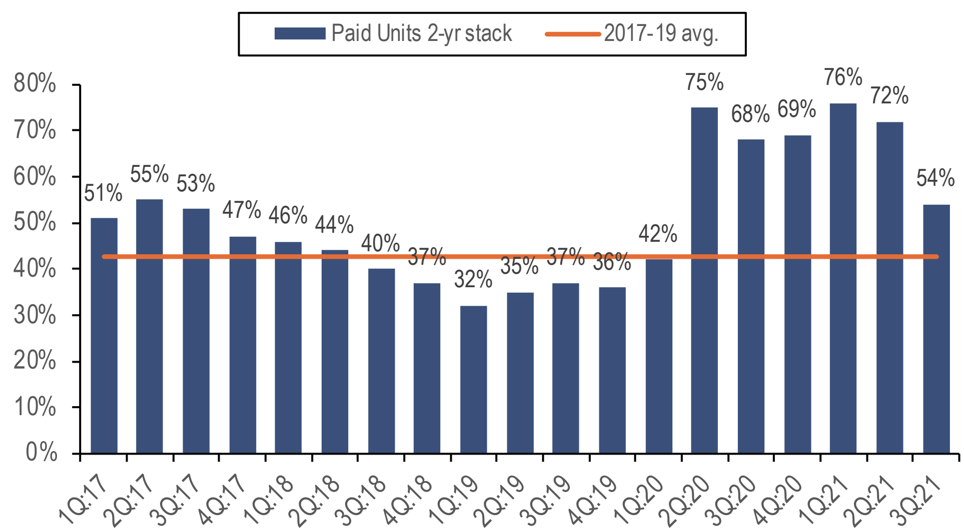
Amazon's 3Q:21 earnings report highlighted the risk of spending normalization. As illustrated below in **Exhibit 25**, Amazon's paid unit growth slowed to +8% y/y in 3Q:21 from +15% and +44% the 2 previous quarters. The company is lapping some staggering comps from 2020, but its 2-year stacked comp (which normalizes for 2020 growth) slowed to +54% from +72% and +76% the 2 prior quarters **(Exhibit 26)**. Though consumers spending is increasingly favoring services, we do believe some of this slowdown was tied to shipping challenges and continued capacity constraints at fulfillment centers.

**EXHIBIT 25.**
**Amazon Paid Unit Growth is Slowing (Y/Y Change)**




Source: Company reports; GWA

**EXHIBIT 26.**
**Amazon Paid Unit Growth 2-Year Stacked Growth Also Decelerating**

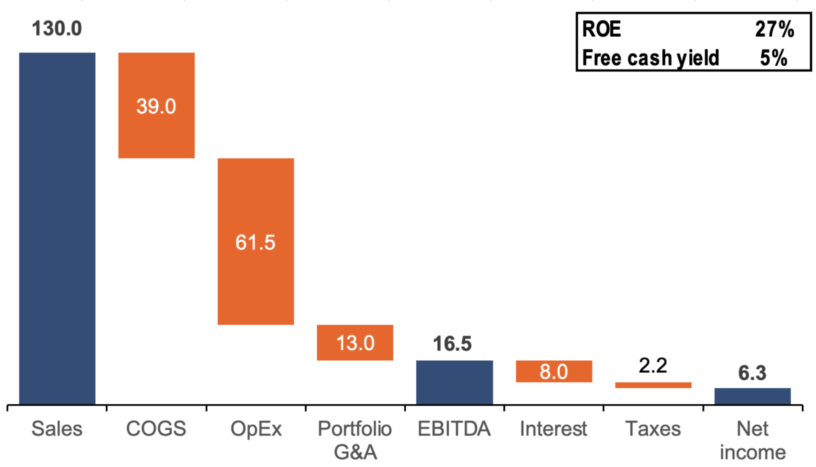



Source: Company reports; GWA

# Aggregator Portfolio Return

In **Exhibit 27** below, we have illustrated the return profile of a hypothetical aggregator portfolio which generates $100M in Sales and then grows 30% (double normalized eCommerce growth of 15%) over a 1-year holding period. Both Return on Equity and Free Cash Flow Yield are compelling at 27% and 5% respectively. Portfolio G&A in our example is a modest 10% of Sales and probably too low for a rapidly scaling early-stage company. Interest on outstanding debt is 6% of Sales which is also modest. Doubling G&A or Interest wipes out return and cashflow, which highlights points we made earlier about risk. However, our hypothetical example shows that reasonable outperformance with an appropriately sized cost structure can generate solid returns.

### EXHIBIT 27.
### Portfolio with 30% Topline Growth Over a Holding Period




Source: GWA

In **Exhibit 28**, we show our underlying portfolio assumptions over the holding period, which we believe will likely be in line with longer-term, median aggregator performance.

### EXHIBIT 28.
### Portfolio with 30% Topline Growth Over a Holding Period

| | |
|---|---|
| Sales growth CAGR | 30% |
| COGS (% sales) | 30% |
| Gross Margin | 70% |
| Variable OpEx (% Sales) | 35% |
| Contribution Margin | 35% |
| Fixed OpEx (% Sales) | 12% |
| Portfolio G&A | 10% |
| **EBITDA Margin** | **13%** |

Note: We have assumed OpEx is 75% variable and 25% fixed, representing 50% of sales at the start of the period, though the fixed OpEx mix will decrease/(increase) as sales rise (fall).
Source: GWA

In **Exhibit 29**, we take our hypothetical example a bit further by stress-testing the portfolio to show the impact of different top-line growth rates, assuming no fixed cost changes. In 2020, growth rates for many aggregators were probably close to 50%, but are now moderating and likely somewhere in the lower half of our sensitivity table.

Comparing our hypothetical aggregator return profile to the returns offered by other asset classes we see that modeled investment performance is roughly in line with average returns across various classes. We assume no portfolio asset appreciation meaning that cash flows are valued at acquisition multiples. This return comparison is represented by the solid bars in **Exhibit 30**.

From the standpoint of diversification, aggregator returns offer a somewhat uncorrelated investment alternative to more traditional asset classes, though they will probably track Amazon returns over both medium-term and long-term holding periods (there isn't enough available data at present to know). However, alternative investment performance is not the driving factor behind the industry's explosive growth.

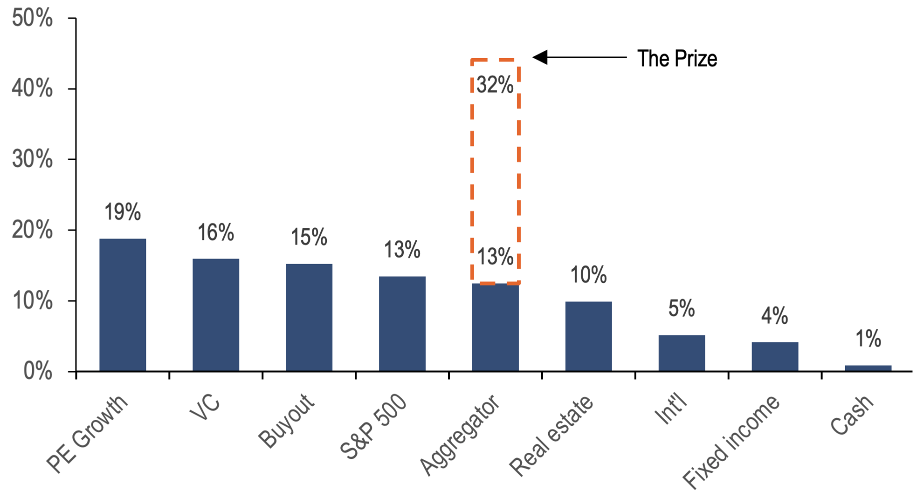
The *raison principale* an aggregator exists is to acquire a large enough portfolio of assets to eventually execute a public securities transaction. In so doing, portfolio valuation skyrockets and expected return triples. The dashed line incorporates this private to public valuation surge where the use of a publicly traded CPG multiple of approximately 15x is used to calculate total return. This is effectively the prize that all aggregators are pushing toward. Eventually, a transaction of this type will be executed, and the dashed bar will become solid, effectively reordering return expectations for many investors.

## EXHIBIT 29.
## Portfolio Sensitivity to Different Sales Growth Rates

| Growth Rate | Corporate EBITDA | Net Income | ROE | Free cash yield |
|---|---|---|---|---|
| 50% | 23.0 | 11.1 | 43% | 7% |
| 30% | 16.5 | 6.3 | 27% | 5% |
| 15% | 11.6 | 2.7 | 13% | 2% |
| 5% | 8.4 | 0.3 | 1% | 0% |
| 0% | 6.8 | (0.9) | (5%) | (1%) |
| (10%) | 3.5 | (3.3) | (18%) | (4%) |

Note: ROE is calculated by dividing net income by shareholders' equity.
Source: GWA

## EXHIBIT 30.
## Successful Aggregator Returns Likely Approximate Other Asset Classes, but become Outsized when a Public Securities Transaction is Possible




Note: All asset classes except aggregators represent 2014-20 total return averages.
Aggregator total return is derived by applying a 5x multiple to EBITDA.
Source: BlackRock; Bloomberg; PitchBook; GWA

# Summary & Market Outlook

Aggregator growth has been unprecedented, and in many ways resembles the initial growth in the hedge fund industry in the early 90's. Outsized, early stage returns generated by hedge funds were predicated largely on finding and arbitraging market inefficiencies. Aggregators today are relying on a similar strategy, which we have identified as Amazon platform arbitrage. Early-stage arbitrage in any sector can be enormously profitable but returns can be quickly up-ended by unanticipated macro-level shifts. For hedge funds, unexpected market volatility typically caused the most problems. For aggregators, it is primarily slowing consumer goods demand and supply chain disruption – both of which are currently in play.

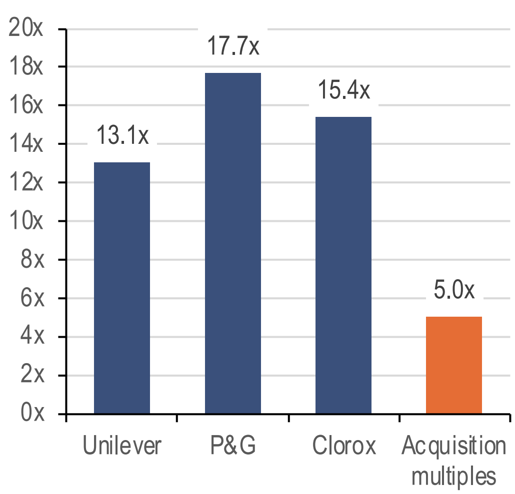
**Just as there were shakeouts of poor-performing hedge funds in the past which led to consolidation and capital reallocation to stronger funds, we suspect that some aggregators are facing a similar prospect today based on the following:**

- Consumer shopping habits are normalizing post COVID-19, and spending on goods is quickly shifting toward services.
- Aggregator use of costly debt funding was initially justified by high return and cash flow expectations, but slower growth is now likely stressing available liquidity.
- Many aggregators scaled too quickly, and operating expenses (G&A) are not being offset by portfolio cashflow, which is adding to liquidity stress.

Despite these factors, we do not see significant disruption in the space from weaker aggregators merging with better capitalized players or from the forced sale of portfolio assets. In fact, we believe some aggregators are successfully raising additional capital to take advantage of this opportunity.

Unlike most hedge funds, we believe aggregators are building portfolios with a sharp eye toward a public market exit. CPG multiples are quite high relative to current 3P acquisition multiples **(Exhibit 31)** and a CPG priced takeout would generate significant return (as previously illustrated in **Exhibit 30**).

EXHIBIT 31.
CPG EV/EBITDA Multiples vs. Aggregator Private FBA Business Acquisition Multiples




Note: Pricing as of November 1, 2021.
Source: Company filings; Bloomberg, GWA

Because of the disparity between CPG and acquisition multiples, many aggregators feel compelled to keep acquiring brands and building portfolios that have enough scale to merit some form of public securities offering, irrespective of any near-term cash flow concerns. Many capital providers currently backing aggregators share this view.

Aggregator evolution will likely track that of the CPG industry, where brand portfolios are built and scaled by management teams who are adept in brand development, but also have Amazon sales channel skills. Growth away from Amazon will probably increase through Shopify and Walmart.com.

3P acquisition multiples should adjust higher over time, compressing the current opportunity. Once a large aggregator secures a public take out and the aggregator investment thesis receives much more public attention, significantly more capital will flood into the space. Nothing attracts capital like investment success in a new idea. Because of the industry's probable trajectory, we do not view the amount of capital raised to date as meaningful (again drawing from our hedge fund analogy).

Thus, the aggregator phenomenon still has significant room to grow before it reaches some form of maturity. This should continue to support the development of Amazon centric brands and may very well reshape the very nature of the CPG space.

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