WORLDWIDE
ASSET MANAGEMENT

AMAZONIFICATION

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Amazonification

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The term 'Amazonification' is the latest buzzword in the investment world, as Amazon continues to make headlines – whether it is the acquisition of Whole Foods and therefore much tougher grocery competition, announcements of an imminent entry into pharmacy or the continuous roll-out internationally, with entry into the Australian market and now also speculation over the company's entry into Scandinavia. Whereever Amazon pops up, competitors tremble. According to FactSet, Amazon has replaced Google as the corporate boogeyman. Amazon was mentioned 2,090 times in the year to October 2017 on publicly available corporate conference calls in the US, up 11 percent from last year. Alphabet was mentioned in about 1,500 company conference calls, down 19 percent from 2016. The times when Amazon was just a book store has long passed, and it is now more and more recognized as a tsunami - potentially hitting all sectors of the economy. Why is this and what will end the dominance of this behemoth?

E-commerce is in an acceleration phase around the world. E-commerce sales in the US in the third quarter 2017 jumped 15.5 pct. from a year ago, to $115 billion according to the Commerce Department – figure 1. This also includes online sales by brick-and-mortar retailers. Over the same period, total retail sales increased 4.3 pct. and retail sales without e-commerce – an approximation for brick-and-mortar sales - ticked up only 3.1 pct., barely keeping up with nominal GDP growth. As a result, third quarter e-commerce share of total retail sales increased to 9.1 pct. up from 8.2 pct. a year ago.

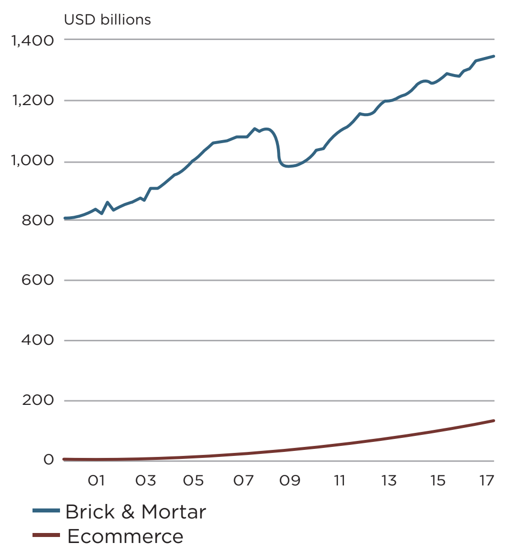
E-commerce is still dwarfed by brick-and-mortar sales, so is the "crushing" effect on brick-and-mortar overblown?

Not quite. There are several large brick-and-mortar sectors that are still not affected much by the onslaught of e-commerce. They can fence off online competition because of the physical nature of their merchandise, ingrained consumer preferences, and other factors. Home improvement and building materials comes to mind, where Home Depot for example has done very well over recent years.

But more broadly, consider that new-and-used-vehicle dealers and auto-parts retailers are 21 pct. of total retail. Or that Grocery and beverage stores are 12.6 pct. of total retail. While unlikely to stay so, online grocery sales remain minuscule in the US, accounting for only about $20 billion in 2016, or about 1 pct. of sales at

Figure 1

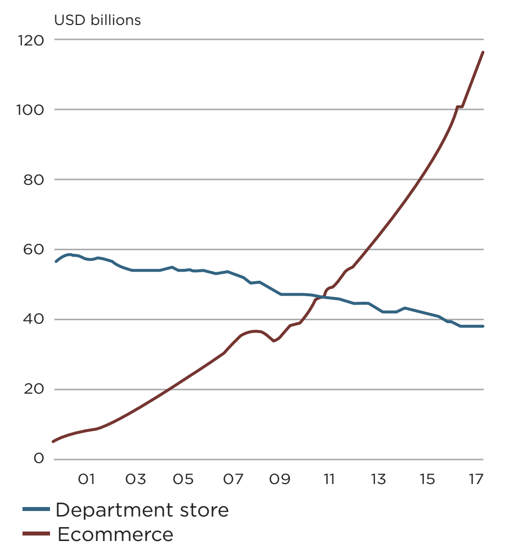
Brick-and-Motar Sales v. E-Commerce Sales



Source: US Commerce Dept., WOLFSTREET.com, September, 2017.

Figure 2

E-Commerce Sales v. Department Store Sales



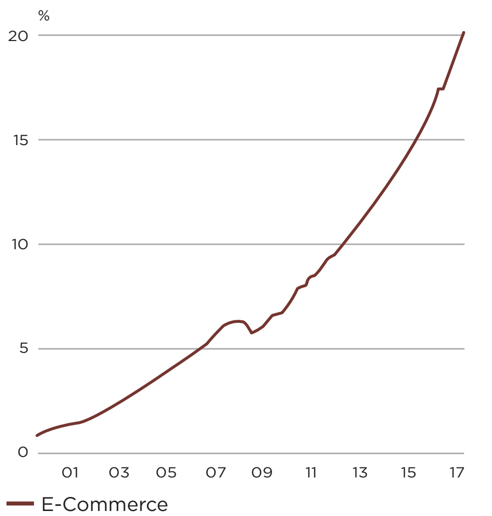
Source: US Commerce Dept., WOLFSTREET.com, September, 2017.

grocery and beverage stores . Furthermore, gasoline stations are 8 pct. of total retail sales, and restaurants and bars are 12 pct. of total retail sales. Combined, these resilient sectors account for about 54 pct. of total retail sales. It's the remaining sectors that are under attack - and those "under attack" retailers are typically the stores that populate the malls – figure 2. Department stores, typically the anchor tenant in malls, have got crushed by e-commerce, with sales down 35 pct. since 2001.

E-commerce sales have now reached 20.4 pct. of retail sales that are exposed to significant online competition – figure 3.

Figure 3

E-Commerce as % of "Under-Attack" Brick & Mortar



Source: US Commerce Dept., WOLFSTREET.com, September, 2017.

So today, the pressure from e-commerce is focused on less than half of total retail sales. This will change in the years ahead, as e-commerce becomes a stronger force in many more verticals, e.g. groceries. Amazon recently acquired Whole Foods in the US, and at the same time grocery retailers such as Walmart, Target, Costco, etc. invest significantly in online channels. Furthermore, countries like China, South Korea and the UK have up to 8 times higher groceries sales online relative to the US, and it is likely that the US will catch up in the longer-term. Therefore, more verticals and a larger and larger share of total retailing will continue to move online in the years ahead.

We see at least two dominant factors behind this, namely smartphone penetration and Amazon Prime. Smartphones are important drivers in that they facilitate easy and spontaneous transactions. In the "old days" a few years ago, to transact online one had to start up the PC, and typically the payment functionality was cumbersome. Not so today, where purchases are only one click away on the smartphone. This accelerates migration to online transactions.

Amazon Prime – much more than free shipping

Another, and most likely the dominant force behind the accelerating e-commerce growth is Amazon with its Prime Subscription. Amazon initiated the Prime Subscription in the US back in 2005, and it is estimated that 64 pct. of US households in the summer of 2017 had signed up for the $99-a-year Prime program. Prime is also growing internationally with the offering in UK, Germany (where Amazon is 40 pct. of the online market), France, Spain, Italy, Mexico, Australia and India just to mention the most important ones. Prime is said to have reached 80 mn subscribers in the US over the summer of 2017, up from 63 mn a year earlier, and adding the prime members from international markets most likely lifts the total close to 100 mn subscribers today (Amazon does not disclose the number of Prime subscribers).

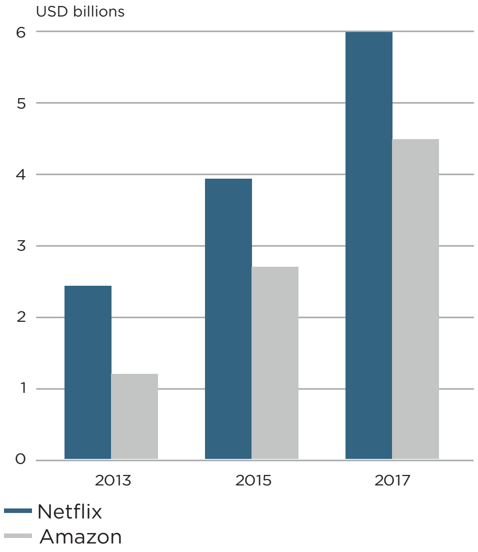
The cornerstone of the Amazon Prime membership has long been fast and free shipping. Two-day free delivery on millions of items remains paramount, but the program has moved into different territory and expanded the scope of existing benefits, enhancing the overall value. For instance, Amazon Prime offers Sunday delivery, free same-day service on hundreds of thousands of products for customers in many urban centers, and even faster delivery of groceries, restaurant meals, electronics, and various household items—within an hour or two, on purchases above $35.

Besides cheap, fast and frictionless delivery Amazon has also included cloud storage services, streaming music and video services in the subscription. In music, Amazon has created a pretty good service with more than 2 million songs and thousands of playlists. And while it doesn't yet stack up to the service of a Spotify, it's probably good enough for most, and its included in the subscription cost of $99 a year. Spotify alone costs $9.99 per month in the US.

With the online retailer's video service, the difference between it and Netflix remains large, but it has shrunk and will get smaller since Amazon is set to spend around $4.5 billion on video content in 2017, according to analysts at JPMorgan, a figure that would put the internet giant much closer to rival Netflix, who is guiding for 2017 investments of $6 billion – figure 4. Amazon now offers some award-winning, highly regarded shows as well as The Grand Tour, a very popular show from the people behind Top Gear (BBC). And again, just like the music offering, Amazon Video is part of the overall offering, while a similar Netflix premium subscription costs $14 per month.

Figure 4

Estimated Annual Video Content Budgets



Source: 2013 & '15, IHS Markit; 2017, Netflix & JPMorgan (for Amazon).

Overall, the broker JP Morgan has valued the Prime offering at more than $700 per subscriber in the US, 7 times the cost of $99. As Founder of Amazon Jeff Bezos in his 2016 letter to shareholders highlighted "We want Prime to be such a good value,

you'd be irresponsible not to be a member – please be responsible – join Prime."

But why is it that Amazon gives away so much value almost for free? The answer lies in changed consumer habits. Once a consumer becomes a Prime member most of the shopping online is done on Amazon. Prime members in the United States are today estimated to spend on average about $1,200 per year, compared to about $600 per year for non-members, according to data from Consumer Intelligence Research Partners (CIRP). However, spend per Prime member varies a lot depending on the "vintage" of the member, and as it is with good wine, so it is with prime members – they get better with age. Morgan Stanley analysts think that over time, Amazon Prime behaviour modification causes people to shop more frequently and in more categories, and believe that some more mature Prime members (7-10 year members) spend as much 10X+ more than non-Prime members.

Retail subscription fees – which is a good proxy for Prime Subscription growth rose 59 pct. yoy in Q3 2017, and these new Prime Members lifted their purchases on Amazon, driving an overall growth in e-commerce sales of 26 pct. yoy, which can be compared to the overall e-commerce growth of 15 pct. as mentioned above. According to GBH Research Amazon is expected to capture as much as 50 pct. of all online Christmas holiday sales.

Alexa – the digital assistant

As Natural Language Processing with the use of artificial intelligence has improved over recent years, there has been a gradual shift in our interface to the internet away from written text with the use of a keyboard to natural voice. Today, more than 20 pct. of google searches in the US are done by voice. As a result, there is a fierce battle between many of the internet and technology giants of the world. Amazon's weapon in this fight is the Alexa enabled speaker Echo. Alexa is the A.I voice assistant of Amazon. The number of Americans using a voice assistant device is forecast to more than double in 2017 to 36 million. Survey data

from Edison Research found that Amazon Alexa-enabled devices have 82 pct. market share compared to just 18 pct. for Google Home. eMarketer forecasted 2017 Amazon Echo market share to be about 71 pct. with Google Home claiming 24 pct. by year end with the remainder going to Apple HomePod, Harman Kardon Invoke and other devices.

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Buying items on Amazon is now even easier than pressing a button since One-click purchase becomes no-click purchase, and as the smartphone was an accelerator of e-commerce, so will the digital assistants be an accelerator too, since it is another step towards the absolute frictionless purchase, where one speaks to the computer, and the order and delivery is done more or less instantaneously. One of the skills the Echo has is Amazon's Choice, a feature that will allow the unit to automatically order items in response to a voice command. When you tell the device you need batteries, it'll dig through your Amazon order history to see which brand you've ordered before. If it sees you've ordered Duracell, it'll send you more Duracell. Otherwise, it will suggest a brand of Amazon's choosing.

That second option is particularly interesting. How does Amazon determine which product it will recommend? What makes Echo more inclined to offer one brand versus another? It is not clear, but it is a fact that Amazon Private Label batteries today have the highest online market share in the US with 31 pct. according to 1010data.com.

Alexa will be very important in the future because "she" can influence consumer behavior in the longer term and have a significant impact on brands. When we shop on Amazon today, we literally get the "infinite shelf", when we search products. Amazon might have ranked the products on the search result, but we get to choose. Not so with Alexa, who will only offer us a very narrow range, and often only one product. In the future, brands will have to either beef up their advertising spend on Amazon or face much tougher competition from Private Label brands, often Amazon's own. The power in retailing is shifting away from the producers to the retailer, and retailers are becoming brands in their own right. Subscription models further shift customer relationships from brands to the retailer.

How will it End?

Amazon is one of history's most successful companies ever. In addition to being a retailer, it is a marketing platform, a delivery and logistics network, a payment service, a credit lender, an auction house, a major book publisher, a producer of television and films, a fashion designer, a hardware manufacturer, and a leading provider of cloud server space and computing power, with a market share of 34 pct. according to Synergy Research Group. It has succeeded because of an extreme focus on consumer satisfaction and a willingness to take very long-term investment decisions – and rapidly adapt when things change, see also Jeff Bezos' 2016 letter to shareholders. And this has been rewarded with dominant market positions and continuous high growth and valuation of the business. We think the most likely longer-term challenge to the Amazon model will not be competition, but regulation.

> **Alexa will be very important in the future because "she" can influence consumer behavior in the longer and have a significant impact on brands.**

Since the beginning of the early 20th century, when Standard Oil was broken up under the Sherman Act in 1911, antitrust legislation has changed dramatically, most recently under the influence of Attorney General and Judge Robert Bork, Chicago Law School, during the Regan era. The current framework in US anti-trust –specifically its pegging competition to "consumer welfare," defined as lower prices – does not consider market dominance as a problem per se. However, there is a sense that we are at the beginning of a lengthy discussion on whether current doctrine underappreciates the risk of predatory pricing and how integration across distinct business lines may kill competition. Bestselling books like Jonathan Taplin's "Move fast and Break Things" or a recent much quoted study by Lina Khan, Yale Law School, on the "Amazon AntiTrust Paradox" has hit a nerve.

The anti-competitive problems of online platforms are two-fold. First, the economics of platform markets create incentives for a company to pursue growth over profits, a strategy that investors have rewarded with zero-cost of capital (infinite p/e) for dominant companies like Amazon. Under these conditions, predatory anti-competitive pricing becomes rational, because successful platforms are potential winner-take-all companies. Second, online platforms like Amazon's Marketplace and its AWS Cloud Business control essential infrastructure on which Amazon's rivals depend. This dual role also enables a platform to exploit information collected on companies using its services to undermine them as competitors.

Antitrust law will probably change with glacier-like speed – after all it took decades to unwind the Sherman Act, but the longer-term outcome most likely will involve either restoring traditional antitrust and competition policy principles by breaking up platform companies with very diverse operations or regulating platforms, on which competitors build their business models, like utilities. And while the prudent investor should recognize these longer-term challenges we still believe it's too early to factor in a tougher regulatory environment in the assessment of platform companies.

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