Amazon.com and its Effect on the Retail Market and Employment

By

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Table of Contents

Abstract

Amazon.com is one of the fastest growing companies in the US and its expansion threatens the continuance of brick and mortar stores. As we see an increase in the number of department store shutdowns, e-commerce is seen to be at the center for blame. However, that may not be true as Amazon is becoming a large contributor in the job market by providing more positions with better wages. Additionally, other sectors including warehousing and courier services are complement industries and they might see a positive growth in employment as a result of the expansion of the e-commerce giant.

I: Introduction

Consumption is an essential part of life, and it continues to expand. People purchase products daily, whether it be food, clothing, furniture, or other miscellaneous items. Following this increase in real per capita demand, there has also been an increase in the number of retailers both physical and online. But the latter is taking a toll on the former as the latter grows larger due to its ease of access and wide variety of products offered. Customers are now able to find and purchase whatever they need with the push of a single button and have the item delivered to their doorstep. They no longer need to waste their time and effort on leaving their house, finding the corresponding store and searching through the aisles for what they are looking for. Although some might find it difficult to buy an item without holding it physically, in most cases there is no need to do so. Thus, there is no difference in purchasing that item online versus in-store. This has a negative effect on business for department stores which, in turn, will affect employment. The two are direct substitutes and the latter is growing stronger by the year. As brick and mortar stores see a decline in traffic, they resort to closing their doors; by August 2017, over 30 retailers announced the closure of 6,375 stores (Peterson, 2017). Although there are other reasons leading to this decision, for example RadioShack filed for bankruptcy in March 2017 for the second time after 2015 (RadioShack, 2017), foot traffic has been declining as people started to opt out of going shopping in brick and mortar stores.

My thesis explores the possible effects of the expansion of e-commerce, specifically Amazon.com, on the retail market in terms of employment. I compare yearly employment statistics and net sales to determine if there is a correlation between the two different types of retail and to see if the future of traditional retail is on the brink of extinction. The paper is divided into four sections, starting with the introduction. Section II will review relevant literature, and Section III

will give an overview of current trends in the retail industry with analysis of different sectors and factors that affect it. Finally, Section IV will analyze these trends in more detail as I look at the specific case of Amazon.com, Macy's, and the Ascena Retail Group. The hypothesis that I am suggesting is that the expansion of online retailers has a negative effect on employment levels of department stores and of the general retail market. Section V concludes.

II: Literature Review

As the expansion of online retailers such as Amazon.com and eBay.com is a relatively young phenomenon and the process is still ongoing, it is hard to keep up with the trend. Research completed more than two years ago does not yield the same results as one conducted recently. The size of retailers changes continuously, whether it be increasing or decreasing. However, the latest trend shows that closures exceed openings for brick-and-mortar stores, while Amazon.com continues to grow. There are several scholarly articles and papers that look at the effects, especially within the last decade, of e-commerce on employment in department stores and that have helped shape my thesis.

Mandel (2017a, 5) notes the rapid growth of jobs within the technology industry and highlights the fact that "Amazon became the fastest American company to reach 300,000 workers" which happened within 20 years of it becoming a public company. This estimate does not include temporary or contract workers which could drive the number higher. Other major companies that reached this milestone were Walmart in 21 years, American Telephone & Telegraph in 27 years, and General Motors in 32 years. This phenomenon is evident in other tech giants such as Apple and Google as well, which contradicts the popular belief that the evolution of and advancements in technology are resulting in a job-loss for many people. In a second report, Mandel (2017b) found

that the e-commerce sector added 355,000 jobs within the last decade (2007-2017) while general retail lost 51,000 jobs. Additionally, average salaries are higher for those who work in online retail with about a 26% premium for production and nonsupervisory workers, 10% for mid-skill positions such as office and administrative support, and 12% for maintenance and repair workers in a research conducted in 2016 (Mandel, 2017b, 22). The highest difference is for those who work in sales and related occupations with hourly wages ranging from $12.28 for general retail workers to $20.75 for e-commerce employees, resulting in a 69% premium for the latter. In a case study focusing on retail employment in Kentucky, Mandel (2017b, 15) found that those who work in e-commerce have a higher living standard than those who work in traditional retail. That is, their average annual pay of $39,575 versus $21,534 for a general retail employee was closer to the median household income of $45,215. So, in addition to being attractive to consumers, online retailers seem to offer a better choice for workers as well. And adding to the fact that e-commerce created more jobs than was lost goes to show that this industry may not have as large a negative effect than is depicted.

Hortaçsu and Syverson (2015) explore the changes undergone by the retail sector and factors that influenced its course. The main factors that affected this sector were the rise of e-commerce and of warehouse clubs and supercenters. Although the latter is irrelevant to the topic of my study, it is interesting to see how market demand has shifted within the last 20 years. Between 2000 and 2013, US sales of Amazon rose by $38 billion, while Costco's – the largest warehouse club chain – increased by $50 billion, followed by a $32 billion contributed by Sam's Club, a division of Walmart (Hortaçsu and Syverson, 2015, 101). The study also looks at product-specific e-commerce as a share of product total sales and found that music and videos are mostly sold online with 79.6% of all sales conducted through e-commerce. Books and magazines are next

at 44.2%, followed by computer part and toys at 32.9% and 28.8%, respectively. Hortaçsu and Syverson (2015, 100) speculate that music and videos will be sold completely online, while the other items, with the addition of drugs, health, beauty and food & beverages, will "hit 50% e-commerce shares by 2024". Although there is not enough data at this moment to predict to what extent e-commerce retail will expand to, it is highly likely that most items will be traded online.

Amazon.com has an interesting pricing strategy – they minimize the ratio of annual income to profits in lieu of investing in technology and innovations. According to Reimers and Waldfogel (2017), investors understand that their patience will be rewarded with higher returns in the future. They analyze the dynamic pricing strategy of the e-commerce giant by comparing the prices of e-books and physical books to see the direction in which Amazon.com is headed in. In 2007, the company introduced Kindle Fire, an e-book device that is specifically designed to give the same feel as a printed book while offering thousands of novels, biographies and textbooks through their marketplace. E-books are a direct substitute to physical books, and the convenience of the Kindle could have a great effect on the demand and prices of these two types of books. However, Reimers and Waldfogel (2017, 870) found that prices for both have been "fall[ing] substantially short of the static profit maximizing level two decades after Amazon's launch". They predict that Amazon's prices will stay at the low levels they are currently at and to generate higher returns, costs might decrease. I will be taking this into consideration as I look at factors that contribute to the rising net sales of the online retailer and if this will be another reason contributing to the demise of some department stores.

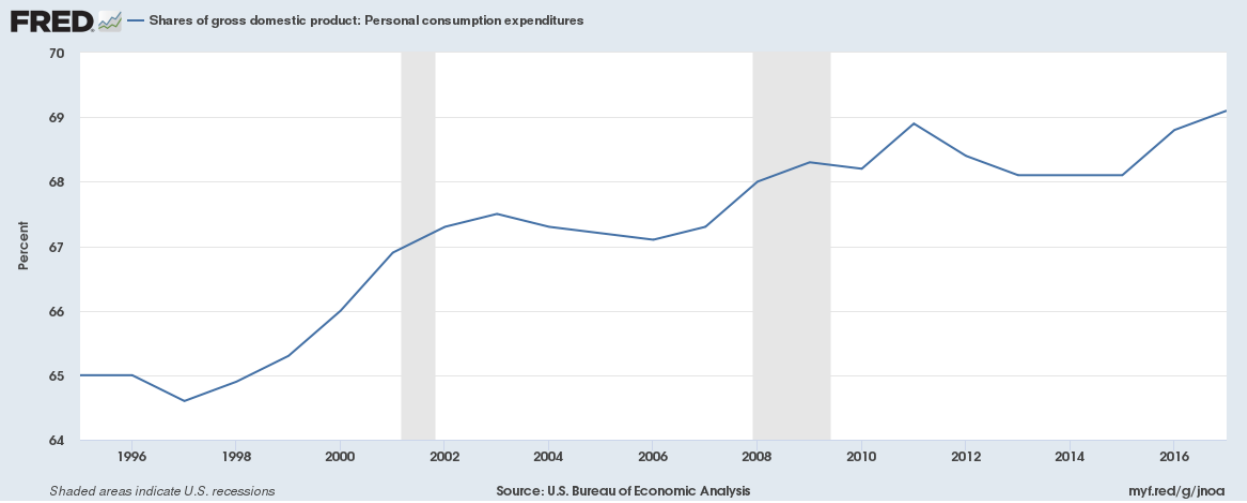
III: Overview of the Retail Industry

A. Consumption

Before we look at the effects of online shopping on retails markets, it is important to address why this industry has gained such a popularity. One of the reasons for the rapid expansion of retailers is the constant increase in personal consumption expenditures. There are many competing companies in industries that produce items such as clothing, appliances and technology, and they constantly introduce new products. There are also an increasing number of independent sellers and start-up companies that contribute to the economy. Personal consumption expenditures on non-durable goods have more than doubled within the last two decades as shown in Figure 1. I have specified non-durable goods which have a life expectancy of less than 3 years, and includes items such as clothing, makeup and food. The share of GDP of all personal consumption expenditures have increased from 65% in 1995 to 69% in 2017 as shown in Figure 2. Specifically, within the last 22 years, it has grown by 4.1%. In December 2017, spending on non-durable goods was $2.9 trillion and total PCE was $13.8 trillion.

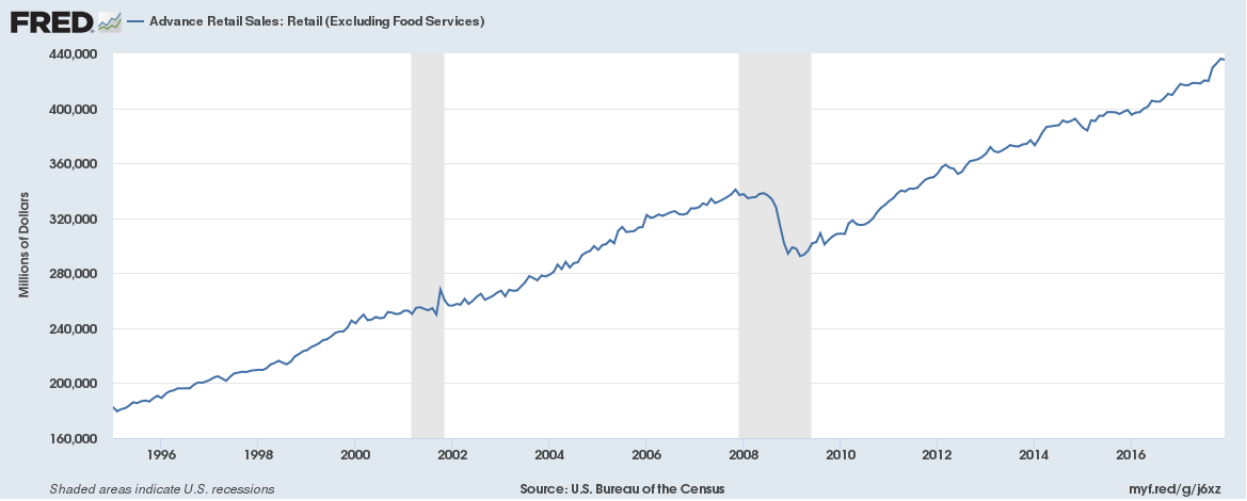
Figure 1

Figure 2



Additionally, changes in advance retail sales (Figure 3) correspond to the increase in consumption. Advance retail sales include goods and services such as clothing, appliances, technological items, and exclude food services. Although retail sales took a large dip during the Great Recession, it continues to grow rapidly.

Figure 3



Basic economic theory of equilibrium suggests that as demand increases, the quantity supplied will follow and the market will shift to satisfy the needs of the consumers. Thus, retailers

work to find any way to attract and satisfy customers. They seek to create a constant customer-base – that is, they make complement goods to what they currently have, sell items individually or offer subscription services. There are many companies (such as Apple) that have succeeded in this industry by following these business strategies. I will be focusing only on e-commerce companies, disregarding other large retailers and I will be taking into consideration their net sales as a share of total retail sales. Online shopping gained the level of popularity it currently has because it offers customers ease of access and convenience. People no longer need to search multiple stores to find what they are looking for and can compare similar brands in an instant. Note that as online retail is a relatively new concept, with the launch of both Amazon and eBay in 1995, the available data for e-commerce start in 1999. The total amount of e-commerce sales does not take up as high a percentage of total sales as would be expected, with just about 10% at the end of 2017 as shown in Figure 4a, but it has been steadily rising. This reflects the slow expansion of online retail and the slow fading out of brick and mortar stores rather than the "retail apocalypse" feared by many. Consumers are not giving up their traditional way of shopping all at once, but are slowly shifting towards the more convenient platform.

Figure 4a

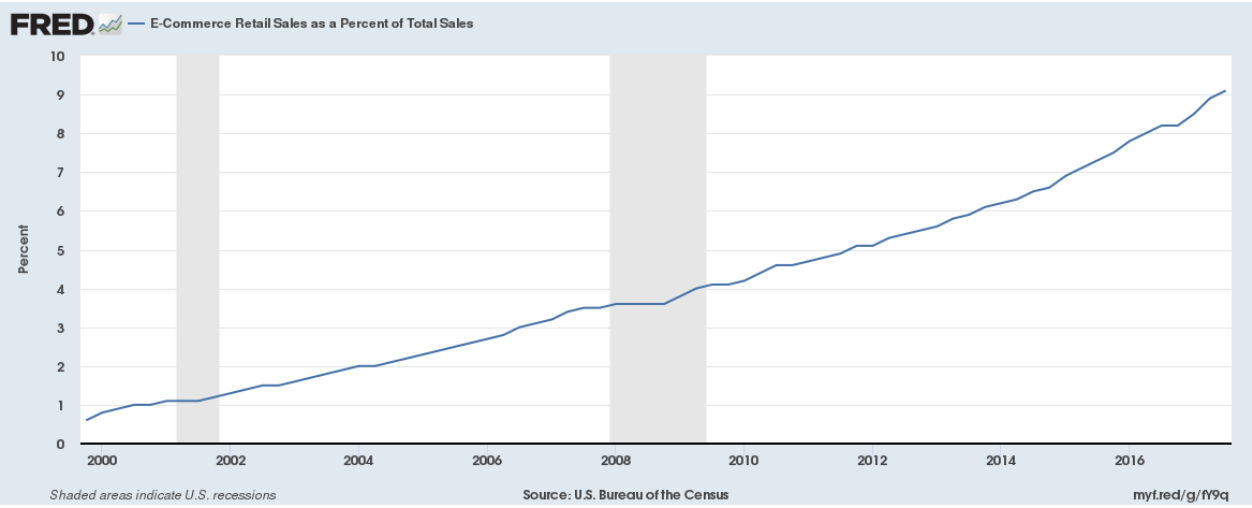
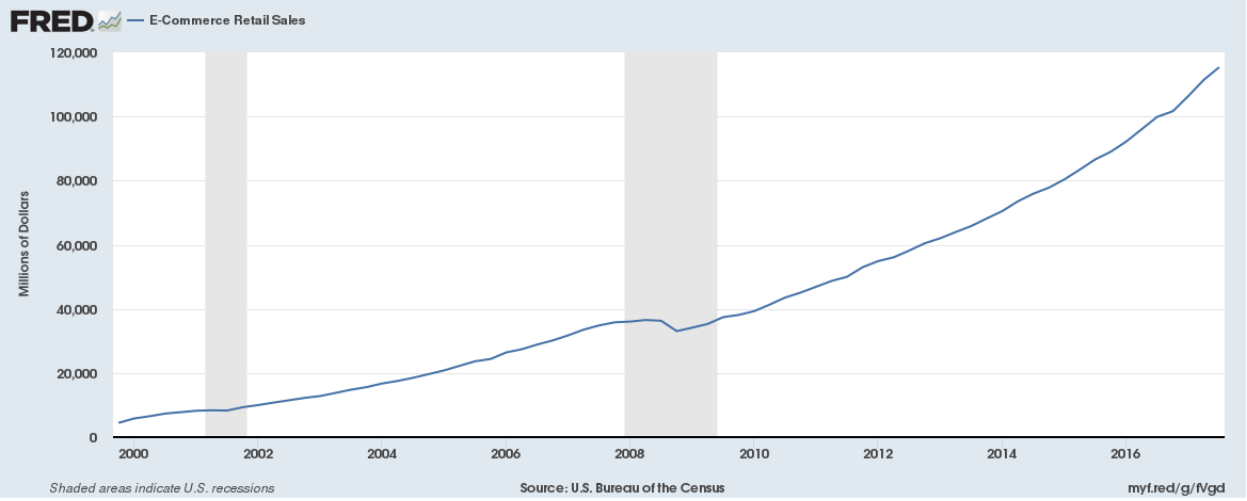


Figure 4b shows total e-commerce sales in millions of dollars. It is interesting to note that this sector, contrary to total retail sales, did not take as large of a hit during the Great Recession. That is, the decrease in sales in 2009 is smaller compared to that of total retail sales as pictured in Figure 3. This continuing expansion of online retailers has instilled fear in many of a "retail apocalypse". This is a term that was created by the media and picked-up sometime in November 2017 by popular publications such as Bloomberg (Townsend, 2017), Forbes (Baird, 2018), and BBC (Levinson-King, 2018). Its popularity spread due to the large number of stores that have closed since 2015 and continue to do so, but they hyped "the troubles of a few well-known chains as proof of a systematic meltdown" (Townsend, 2017). Although e-commerce continues to rise, there is still a long way to go before it takes over the traditional retail market.

Figure 4b



B. Employment

On the opposite side of consumers are the employees who are affected by the expansion of e-commerce. This includes the workers employed by department stores and online retailers such as salespeople and supervisors. Retail employment follows the cycles and trends of total

employment in the country and is unstable. That is, there is a significant period of lay-offs and unemployment during recessions and an increase in the following years (Figure 5). Retail employment constitutes to about 11-12% of total nonfarm employment and the share has not changed significantly from year to year, despite a decline in the growth rate of the former and a rise in the levels of the latter following the Great Recession (Figure 6).

Figure 5

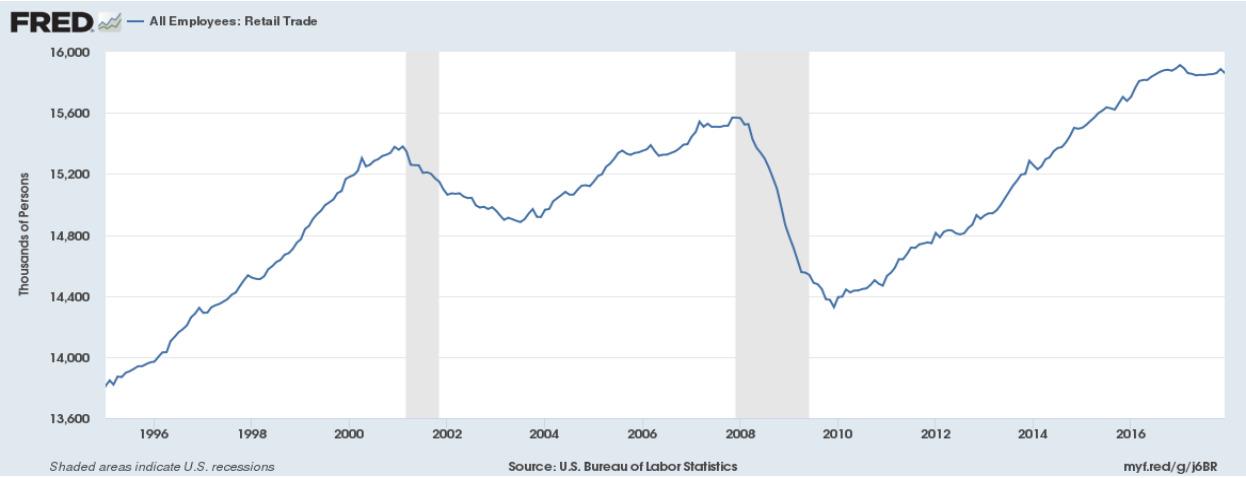
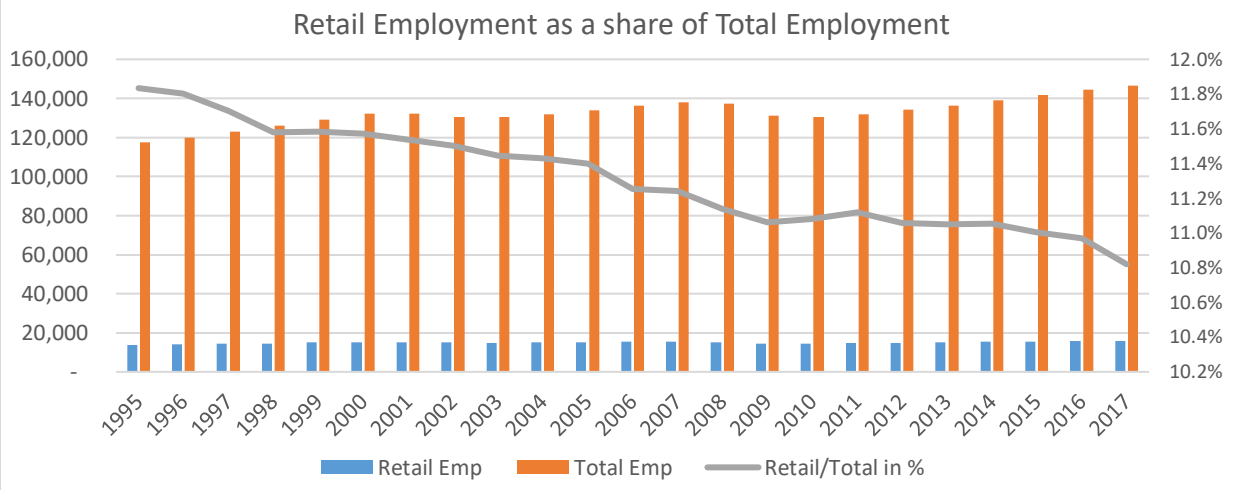


Figure 6



Source: U.S. Bureau of Labor Statistics

However, there is a strong contrast between the trend in employment at department stores and at non-store retailers. As brick and mortar stores see a significant decline in traffic, they start to lose profit and lay-off workers. Online stores, on the other hand, have increased their number of employees in warehouses, salespeople and office workers as reported by the Bureau of Labor Statistics. Also, there has been a small increase in the number of independent sellers on websites such as Etsy which has 1.9 million sellers as of February 2018 (Etsy, 2018). The graphs in Figures 7 and 8 show the monthly employment statistics of the two industries. Non-store retail employment has been on a steady rise, averaging an annual 4.4% growth rate following the recession with a peak of 6.5% in 2014. Department store employment, on the other hand, has been declining by an average of 2.2% within the same period. It reached the lowest point of -7.4% in 2013. It is evident that after the Great Recession, especially since 2012, the two have been moving in completely opposite directions. This is related to the rapid technological advancements and the expansion of online retailers and the closing-down of many physical stores.

Figure 7

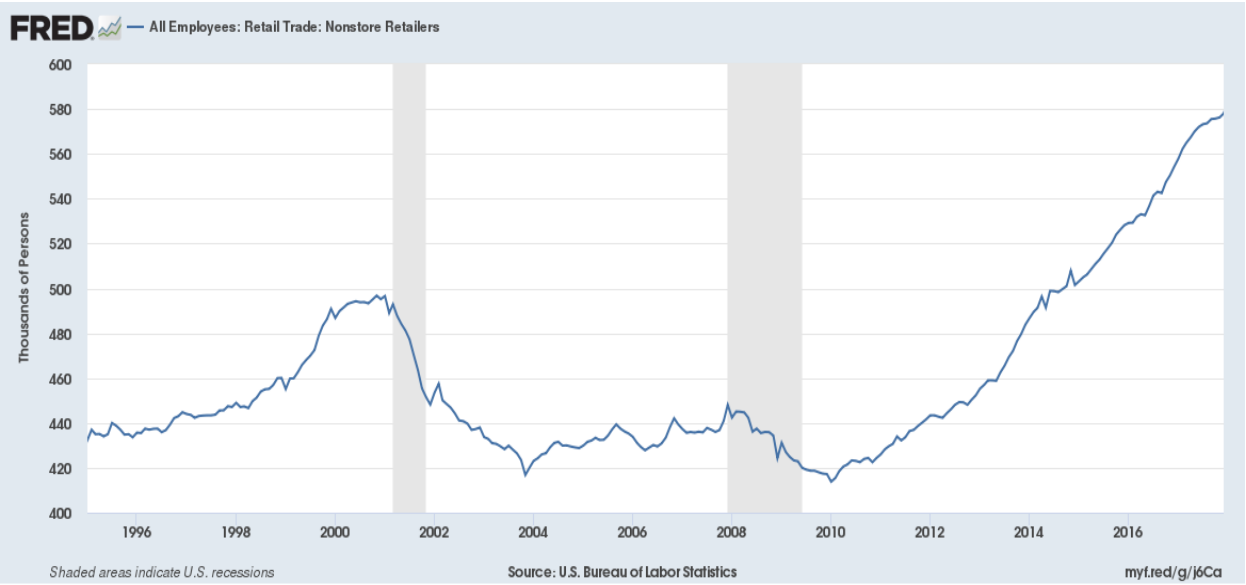


Figure 8

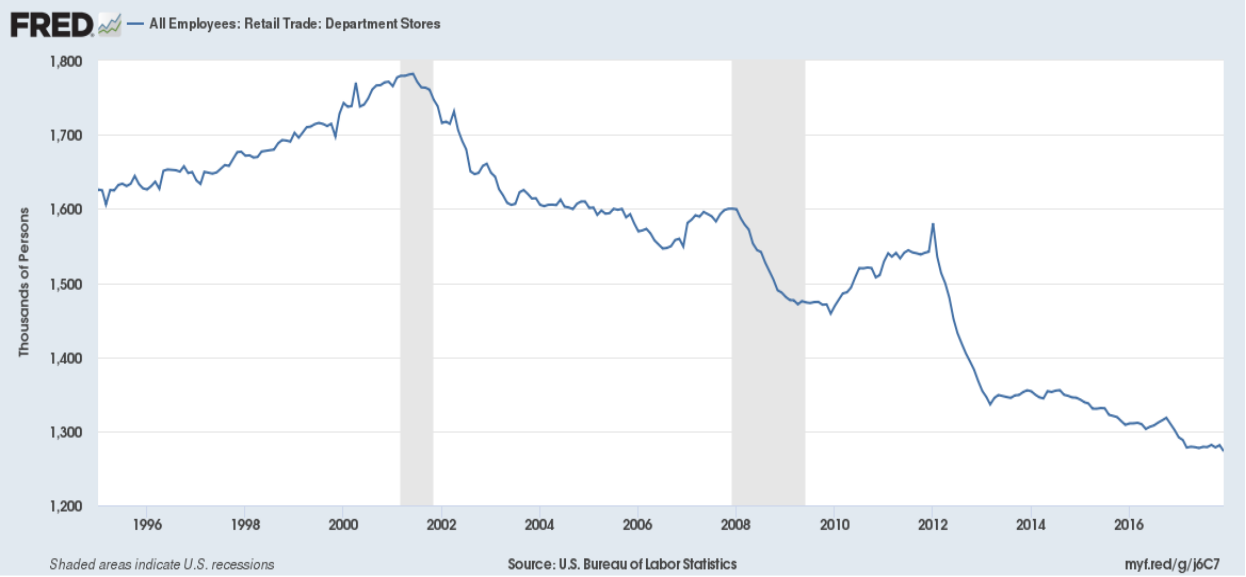
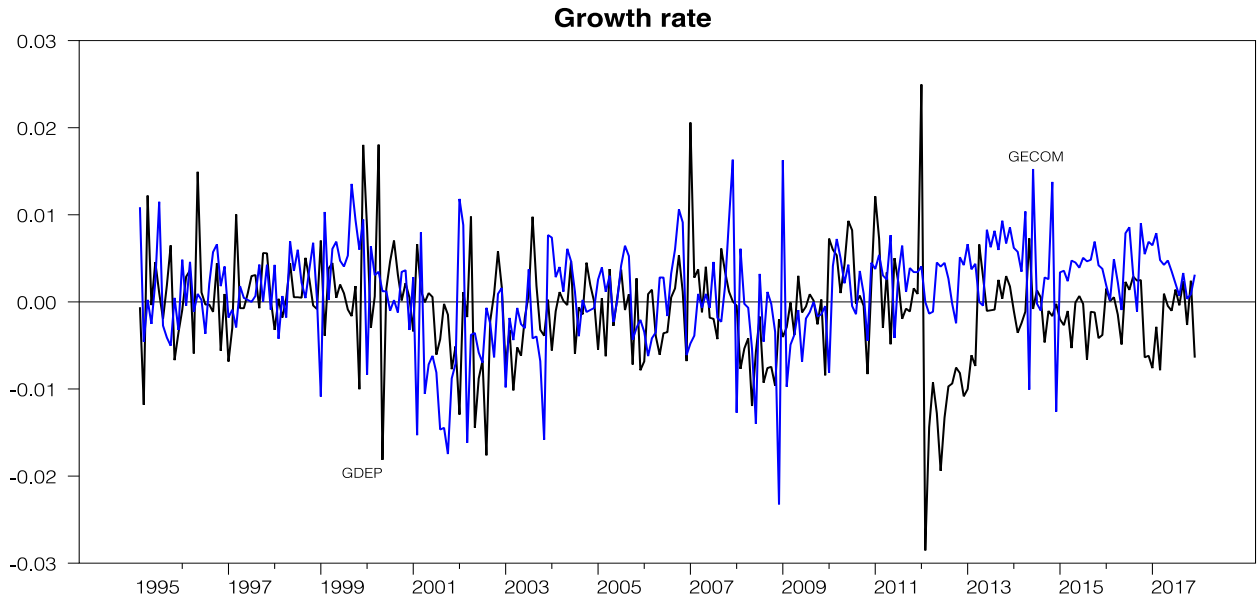


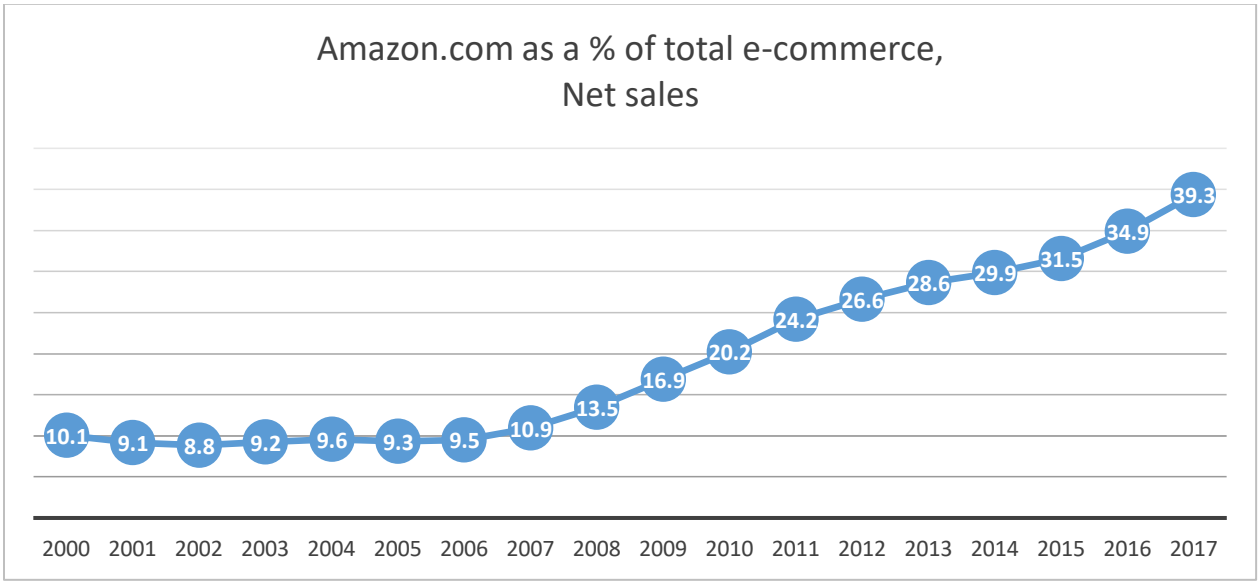
Figure 9 shows the change in employment trends at these two types of retailers, with GECOM representing the growth rate of e-commerce employment and GDEP that of department stores. The figure graphically depicts the fact that they off-set each other at about the same rate after 2012. Before that, they followed about the same trend, but this could be due to the fact that e-commerce was at an early stage and thus did not have enough power or the resources necessary to have a relevant effect on employment in department stores. Much of the increasing rate of growth for e-commerce employment can be explained as a result of the expansion of Amazon.com. As of 2017, the net sales of Amazon.com held almost 40% of total e-commerce sales as shown in Figure 10 which is the largest share of any online retailer according to *Forbes* (Gensler, 2017). As its popularity increased amongst consumers, Amazon has gained the resources needed to expand their services and hire more people. As will be discussed later, the growth in Amazon's level of employment is the fastest in US history and had a giant leap in 2017.

Figure 9



Source: U.S. Bureau of Labor Statistics

Figure 10



Source: U.S. Bureau of the Census and Amazon.com Annual Reports

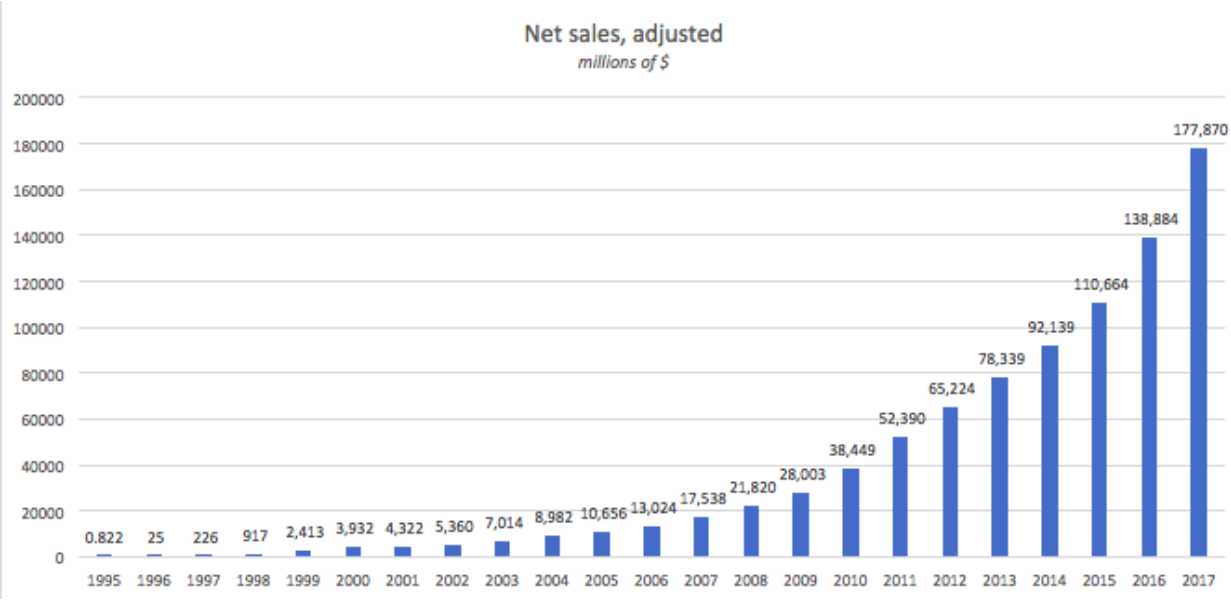
IV: Amazon.com, A Case Study

A. Background

The CEO of Amazon, Jeff Bezos, founded the website in 1994, launching it the following year. At first, the platform was an online book-selling service which eventually spread to include other types of products. The website was one of the first in the e-commerce industry, with eBay also launching in 1995 (Commerce Land, 2008). Although traffic was not strong in the first few years, it slowly gained popularity as the website started to offer a larger variety of products (Amazon, various years). Bezos's main focus is on customer service and on providing everything for their satisfaction and not so much on the maximization of profits, at least in the short-term, even though net sales have sky-rocketed since the launch of the company. Granted, with the ever-increasing pace of the company, workers have a hard time keeping up with Bezos's demands. But today there are 542,000 part- and full-time employees which *Forbes* notes is more than Iceland's current population (Olson, 2017).

Twenty-three years after its founding, Amazon.com is now the world's largest online retailer and the third-largest retailer of any kind, surpassed only by Wal-Mart and CVS (Gensler, 2017). Within a mere 22 years of operation, their net sales rose from $511 thousand in 1995 to $177 billion in 2017 as shown in Figure 11, adjusted for inflation and expressed in 2017 dollars. Their success is, of course, based on the popularity of their services and the wide variety of goods offered. Namely, Amazon Prime – the subscription service that offers free 2-day shipping among other benefits – has reeled in more customers and contributed to the success of the company that is unrivaled by any other e-commerce company, including eBay which had a net sale of only $9 billion in 2016 (eBay, 2017).

Figure 11

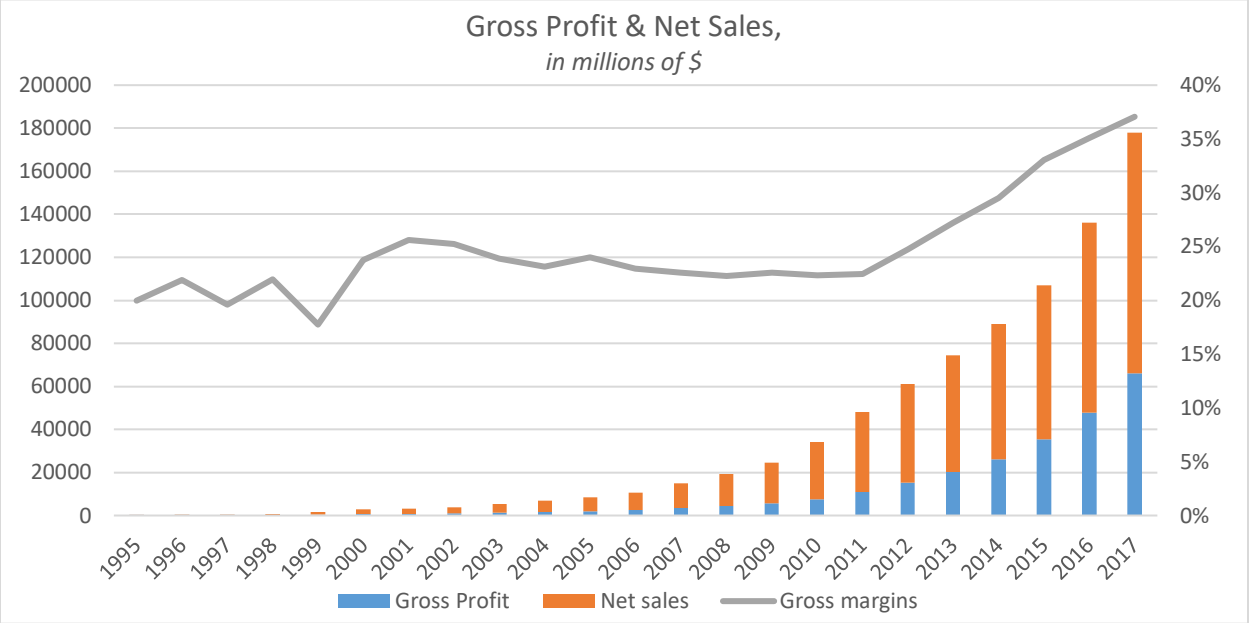


Source: Amazon.com Annual Reports

Gross margins, the ratio of gross profits to net sales, have stayed below 35% as shown in Figure 12, because the company heavily invests in innovation and research of "AWS (Amazon Web Services), expansion of new and existing product categories and offerings, and initiatives to expand [their] ecosystem of digital products and services" (Amazon, 2016). As described in their annual reports, Amazon's strategy is set to give smaller returns now in favor of maximum returns in the long-term (Amazon, various years). CEO Bezos wanted the site to be "an everything store" and constantly looks for new and innovative ways to deliver products in the shortest amount of time possible, even coming up with concepts such as the Amazon Key which will allow couriers to leave packages inside the customer's house. The company is also expanding into other industries, as shown by the recent purchase in August 2017 of Whole Foods, an organic grocery store chain. The merger resulted in a decrease in grocery prices of the chain as Amazon's priority is to offer affordable products to their customers. In one month, Whole Foods "contributed $1.3

billion to the quarter's revenues," making it a sound investment for the e-commerce retailer (Olson 2017).

Figure 12



Source: Amazon.com Annual Reports

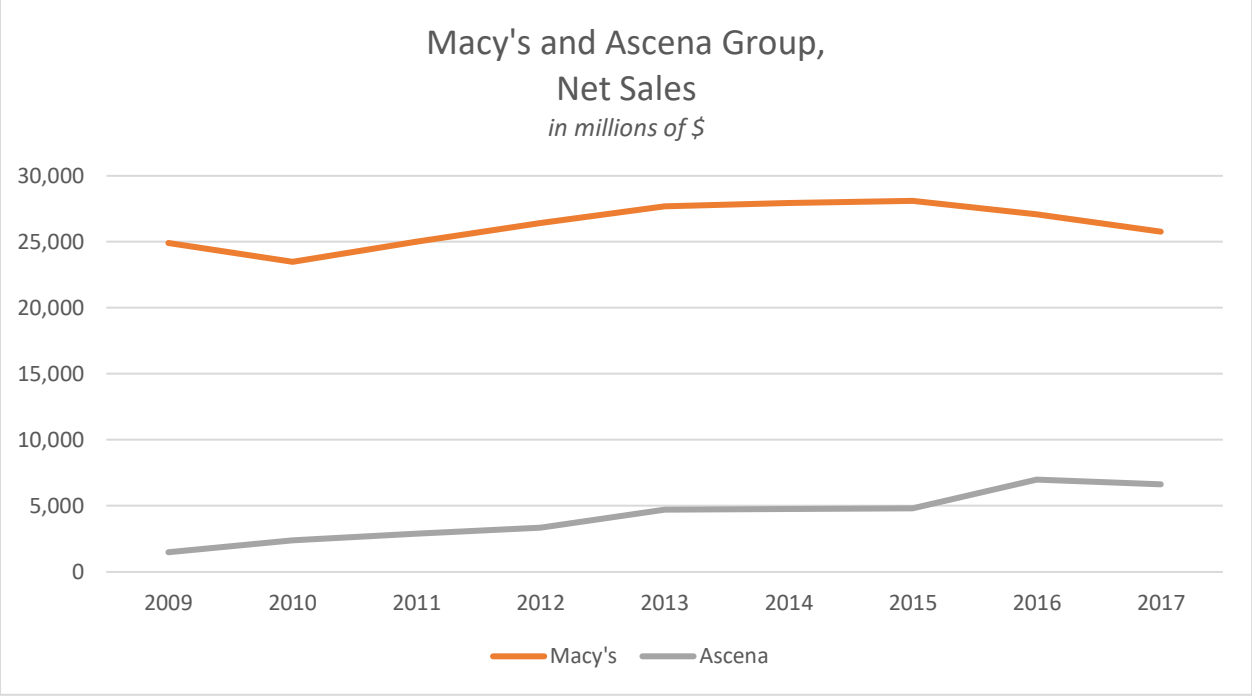
B. Amazon vs Department Stores

1. Sales

A direct sales comparison between department stores and Amazon.com is not appropriate because the former specializes mostly in clothing, cosmetics and jewelry while the latter sells all types of goods. In May 2016, Amazon and Amazon Marketplace carried 353 million products, 33.4 million of which was clothing, shoes and jewelry (Market Track, 2016). Although Amazon itself only had 12 million products at the time of this data, Amazon Marketplace contributed to most of its sales. The Marketplace is a platform for third-party sellers that includes both companies and individuals. Additionally, in 2016 the net sale of apparel totaled $1.2 billion which is quite

large considering only "28% of global shoppers purchased all or most of their clothing and footwear online" in the same year (PwC, 2017). Figure 13 graphs the net sales of Macy's and the Ascena Group (which includes eight clothing brands such as Dressbarn, Ann Taylor and Loft) from 2009 to 2017. Macy's has seen a significant decline over the last few years, while the Ascena Group has experienced some growth. Although the latter contradicts the general trend of department stores, there is a downward shift that appears to begin in 2016.

Figure 13



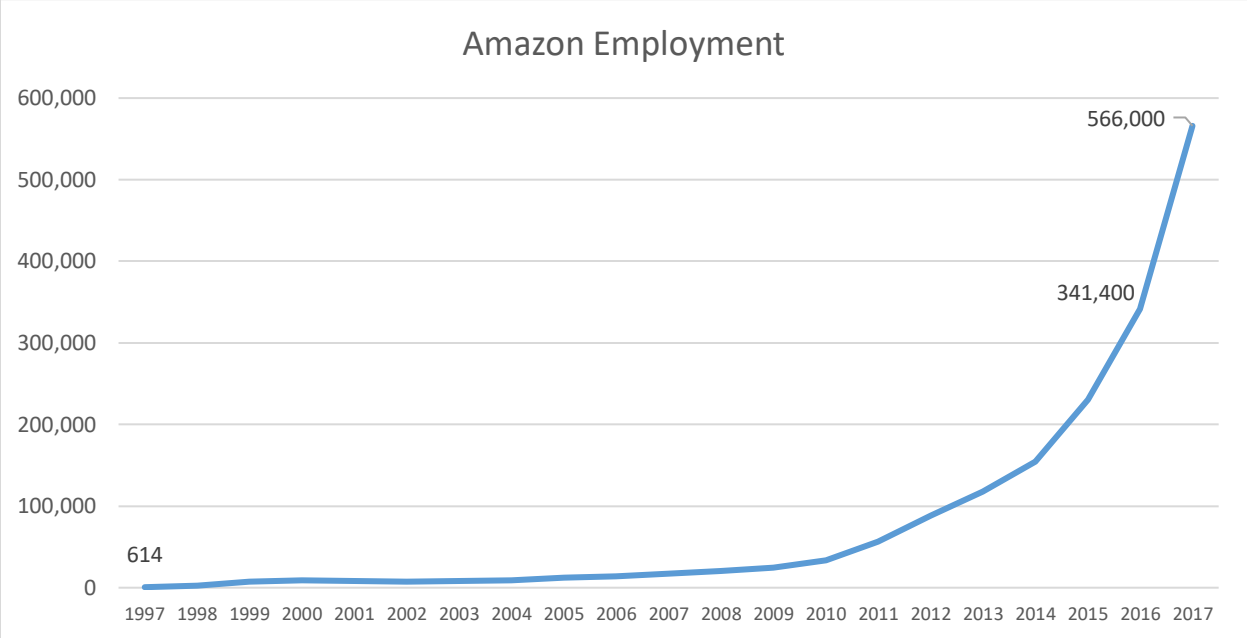
Source: Annual Reports from Macy's and the Ascena Retail Group

2. Employment

Employment at Amazon.com ranges from tech-jobs, to warehouses workers, to delivery persons with many more positions offered in between. People are even allowed to work remotely as a customer service representative or as an individual delivery driver, with a system similar to

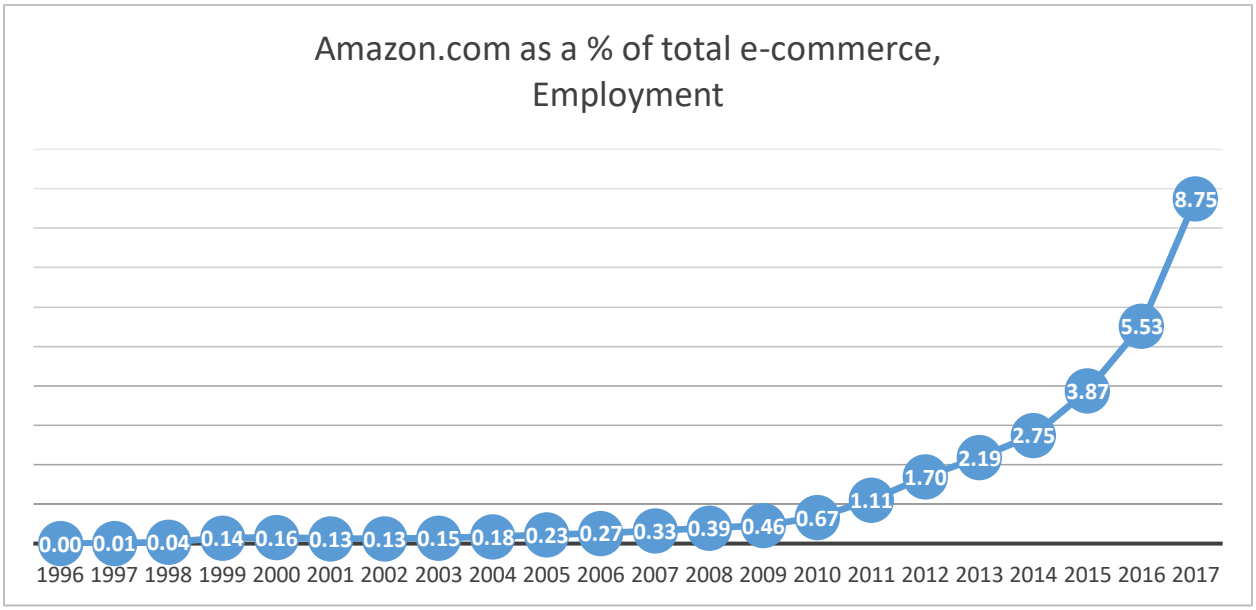
Uber and Lyft. Mandel (2017a, 5) found that in 2016, at its 20th year anniversary as a public company, "Amazon became the fastest American company to reach 300,000 workers". Around the time when this paper was published, Amazon had released a statement promising to create 100,000 more jobs by the end of 2017. I completed a similar analysis to that of Mandel (2017a) to account for this. Per my calculations, Amazon did manage to fulfill that promise and created almost 125,000 positions by the end of the year. Figures 14a and 14b graph the growing workforce of the online retailer, with the latter depicting its share of total e-commerce employment. Although Figure 7 showed that the entire non-store retail employment fluctuated between 400,000 and 500,000, this seemingly exponential growth of Amazon.com has contributed greatly and they hold a greater share of the market today than does any other online retailer.

Figure 14a



Source: Amazon.com Annual Reports

Figure 14b



Source: U.S. Bureau of Labor Statistics and Amazon.com Annual Reports

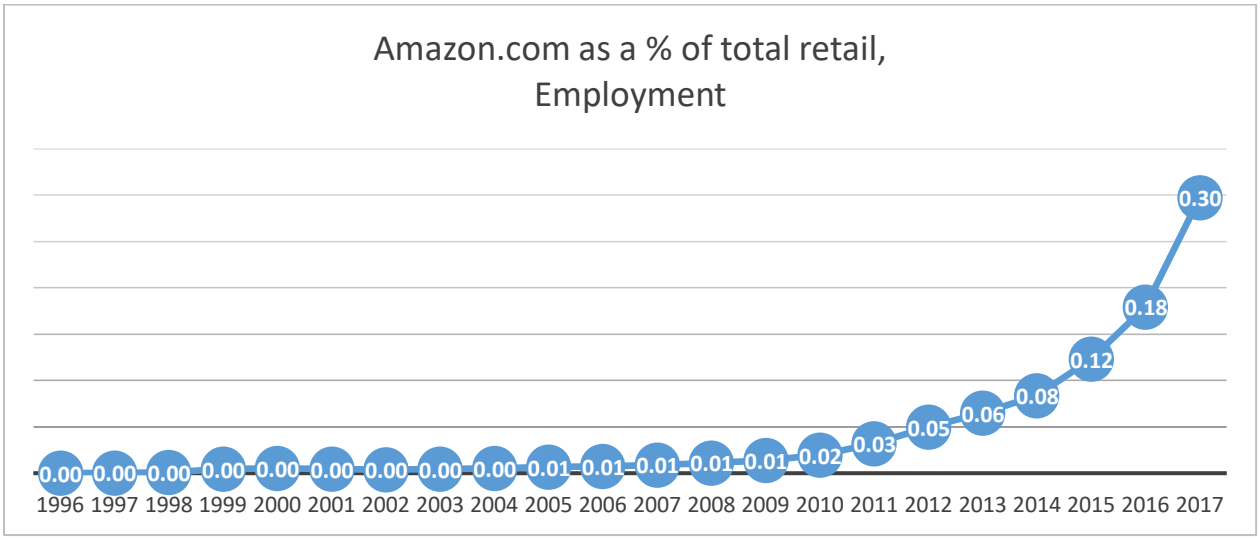
Although there is significant evidence that Amazon.com has created more jobs than those that have been lost in retail stores, it is still a debatable topic. The people that were hired by Amazon are not necessarily those that were laid off from traditional stores. The reality is that the workers living in some states benefit more due to their geographic location. In this sense, working in e-commerce is similar to the mining sector phenomena of the late 20th century. The jobs will bloom in places where there is an abundance of human capital, high-population density, and convenient geographic features.

Currently, Amazon.com is searching for a second headquarter and have narrowed down their choice to 20 cities from an initial list of 238 applicants. If chosen, the new HQ city is expected to receive 50,000 high-paying jobs and over $5 billion in investment (Amazon, 2018). What is interesting is that Amazon did not set out on an active search, but merely asked for proposals on why the new HQ (or HQ2 as they call it) should be built in that particular community. The *Wall*

Street Journal reported that this is "likely to set off a frenzy among state and local governments eager to recruit the retail juggernaut to their areas by offering the right mix of tax incentives and allowances" (Stevens et al., 2017). The current HQ is in Seattle, and between 2010-2017 has gained over 40,000 employees, underwent a capital investment of $3.7 billion in buildings and infrastructure, and according to a statement from Bezos, estimates that an additional $38 billion of investments were generated in the local economy due to direct investments by the company, much like a positive externality (Amazon, 2018).

Figure 14c shows the growth rate of Amazon.com employees as a share of total retail employment. Although it is a very small proportion, it has been increasing significantly. Even in the largest scale, Amazon.com is increasing its influence at the same rate as its growth.

Figure 14c

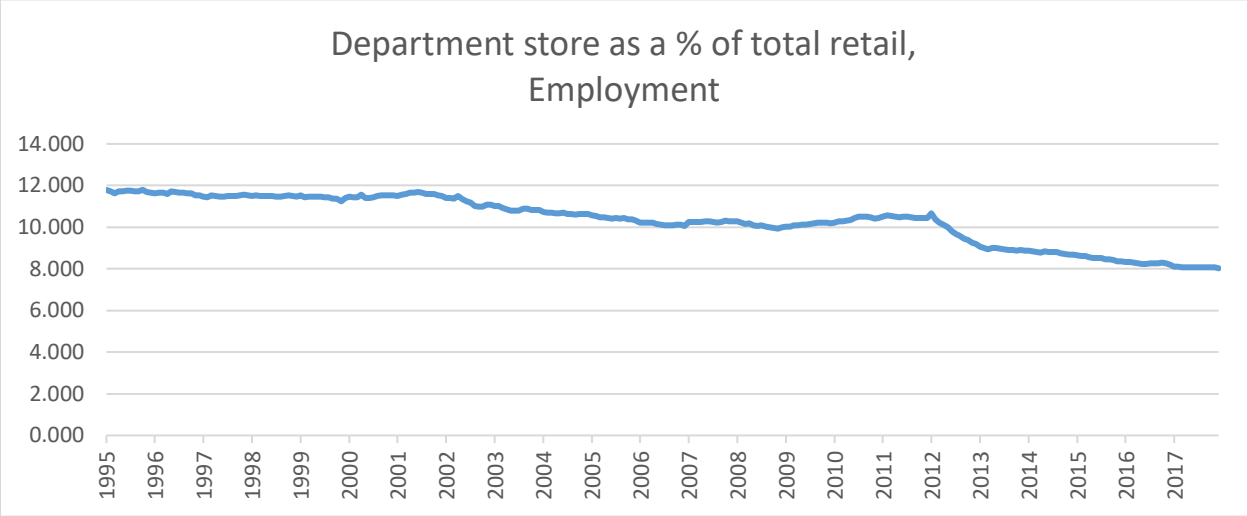


Source: U.S. Bureau of Labor Statistics and Amazon.com Annual Reports

Figure 15 shows the growth rate of employment in department stores as a share of the total retail workforce. The decline is steady, and within a little more than two decades, it decreased by

4 percent, from 12% to 8%. This trend follows that of the growth of Amazon's share in the market and comes as no surprise.

Figure 15



Source: U.S. Bureau of Labor Statistics

To see what effects factors such as GDP, unemployment levels, consumption expenditures, and national trade balances have on employment at department stores, I ran the regression shown in Table 1 and in the form of a function in Equation 1. At the 90% confidence level, unemployment and consumption are not significant enough to be considered for the analysis. This means that the declining growth rate of employment in department stores is not tied to national unemployment trends and it is influenced by other factors. Even when I took out these two variables, in case of collinearity with the other variables, and ran the regression again, it yielded almost the same results with a difference of only $1/100^{th}$ points. The same explanation can be used for consumption. Normally, the two variables are complements to each other, meaning if one goes up, so does the other. But this regression shows that consumption no longer has a strong influence on the success, or lack of in this case, of department stores. Consumption still continues to grow despite the decline

in the number of operating stores, because now people have the ability to make purchases elsewhere – online, or specifically on Amazon.com. It is surprising that GDP has a negative relation to department store employment, since the growth of the former allows for an increase in consumption and thus the bloom of the latter. However, it could be the case, as was in consumption, that preferences have shifted and as people demand more things, they seek out online retailers rather than brick-and-mortar stores. As for the coefficient on trade, it falls in line with current trends. If the balance-of-payments is positive, that is when exports are greater than imports, then it is production that benefits, not domestic merchandisers. Overall, this regression shows a shift in previously established trends and maybe even a decline in the market power of department stores. Although the change is slow, they could be replaced, or at least transcended by online retailers in the coming years.

Table 1

Regression of department store employment on GDP, unemployment level, consumption and balance-of-payments of the U.S. (Trade)

Variable	Coefficient	Standard error	T-statistics	Significance
Constant	2107.960338	60.467952	34.86079	0.00000000
GDP	-0.114028	0.065952	-1.72896	0.08736398
Unemployment	-0.000816	0.002487	-0.32799	0.74370567
Consumption	0.093119	0.092676	1.00478	0.31778958
Trade	-0.003438	0.000435	-7.90764	0.00000000

Equation 1

$$Dep.emp = 2107.96 - 0.114GDP - 0.0008Unemp + 0.093Consumption - 0.003Trade$$

The regression in Table 2, with a corresponding function in Equation 2, was completed to see how much the trend in employment in total retail affects department store employment. At a 95% confidence level, the independent variable is significant and has a negative relation with the dependent variable. This is surprising as the two should generally follow the same pattern and have a stronger correlation. Perhaps in the same way that the relation with consumption and GDP had opposite results compared to previous trends, most of the fluctuations in total retail employment is influenced by trends in the e-commerce sector and not so much in department stores.

Table 2

Regression of department store employment on employment in total retail

Variable	Coefficient	Standard error	T-statistics	Significance
Constant	3346.765751	232.053984	14.42236	0.00000000
Retail Emp.	-0.119847	0.015450	-7.75689	0.00000000

Equation 2

$$Dep.store\ emp = 3346.77 - 0.12 Retail\ emp$$

3. Complement industries

Department stores are substitutes for online retailers, as was graphically shown previously and the correlation has grown stronger since 2012. Complement industries, on the other hand, include couriers & messengers (NAICS 492), warehousing & storage (NAICS 493) and companies that place advertisements online. The first two are more relevant to the topic and have had a direct impact from the growth of e-commerce. A simple regression of transport & warehouse employment on e-commerce employment shows the relationship between the two in numerical form (Table 3, Equation 3). The coefficient on e-commerce employment shows that there is a

strong positive relation between the two. Unless another method of delivery and storage becomes available, this trend is most likely to continue.

Table 3

Regression of transport & warehouse employment on e-commerce employment

Variable	Coefficient	Standard error	T-statistics	Significance
Constant	1400.0642413	129.9132345	10.77692	0.00000000
E-commerce Emp.	6.5063681	0.2817940	23.08909	0.00000000

Equation 3

$$Transport\ \&\ Warehouse\ emp = 1400.06 + 6.51 Ecommerce\ emp$$

As Figure 16a shows, employment at these 2 sectors have followed a similar trend to that of non-store retailers, with continuous growth starting around 2012.

Figure 16 a

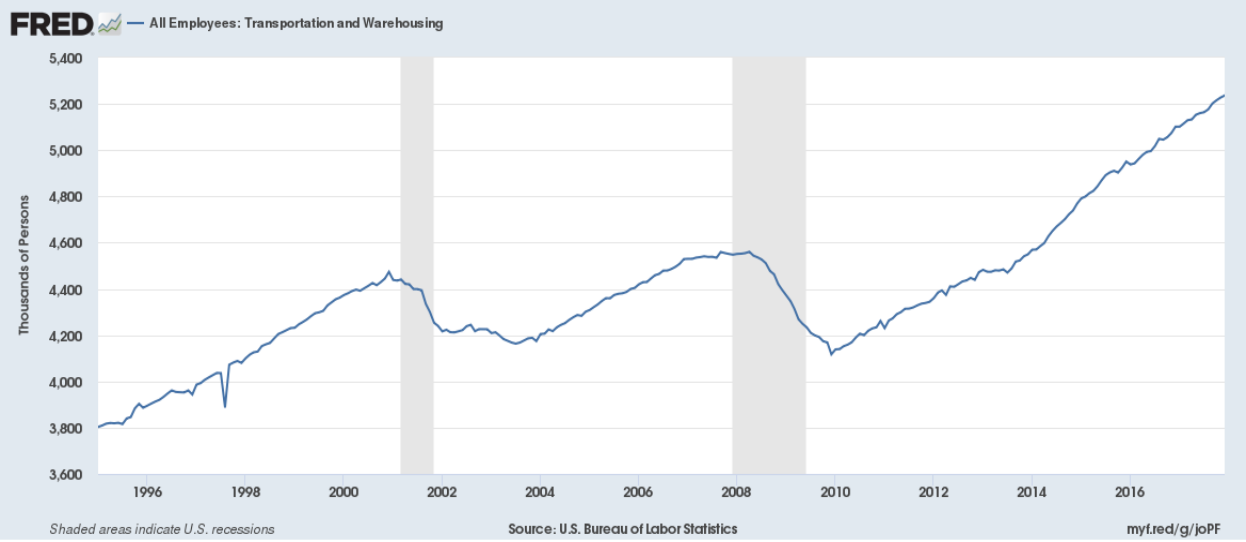
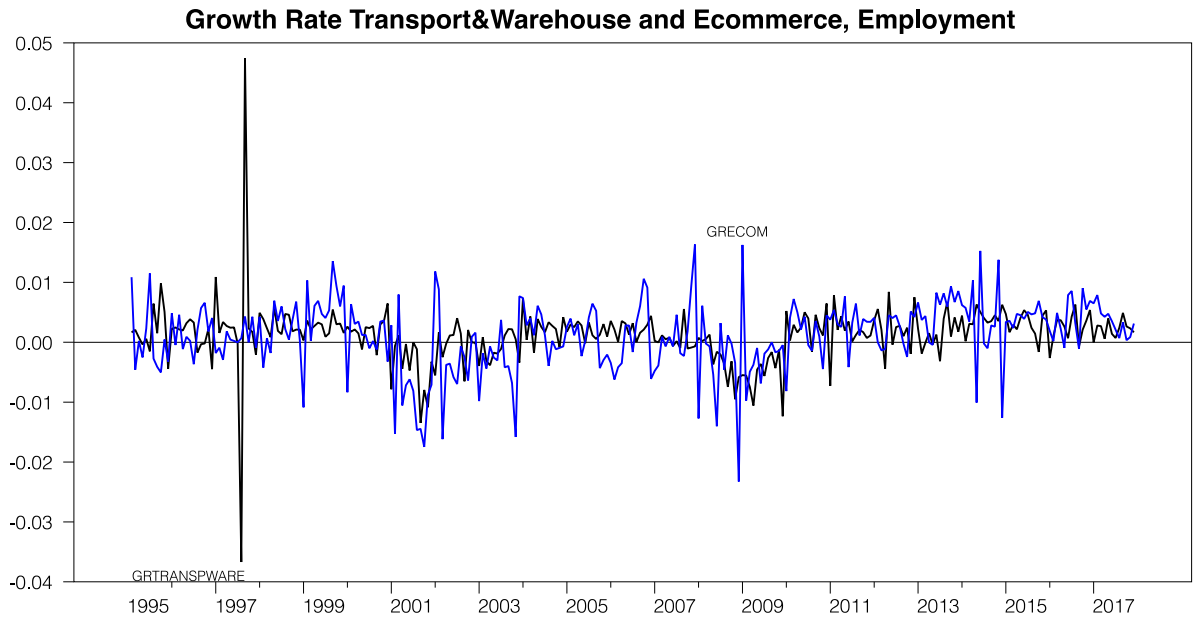


Figure 16b graphs and compares the growth rate of these two industries, with GRTRANSPWARE depicting the growth rate of employment in transport & warehouse

employment and GRECOM – in e-commerce. They generally follow the same pattern at almost similar rates in recent years.

Figure 16b



Source: U.S. Bureau of Labor Statistics

An example of a complement company to Amazon.com is United Parcel Service, or UPS. Domestic shipments from Amazon are distributed through various services including USPS, FedEx and DHL, but most are done through UPS. *Bloomberg* reported that Amazon is responsible for 5-10% of the total revenue of UPS and 3% for FedEx (Soper, 2018). Although UPS and Amazon are complementary services, with positive correlation in terms of employment, the former does not share the success of the latter. They do not follow the same trend, as shown in Figures 17a and 17b. This could be because the current UPS workforce is sufficient enough to handle the increasing number of shipments. Recently, it has been speculated that Amazon.com is testing out its own delivery service, *Seller Flex*, that launched in India in 2015 and is being introduced to the

US this year (Bloomberg, 2018). If this is true, then the growth rate of UPS could see a downturn, as the e-commerce giant moves its business elsewhere.

Figure 17a

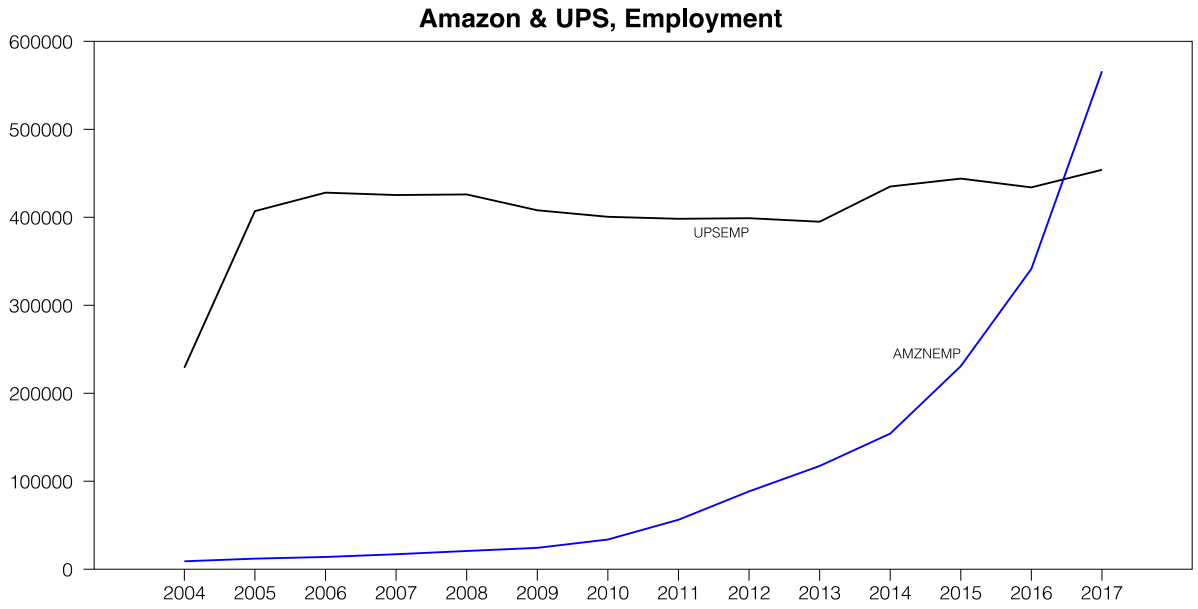
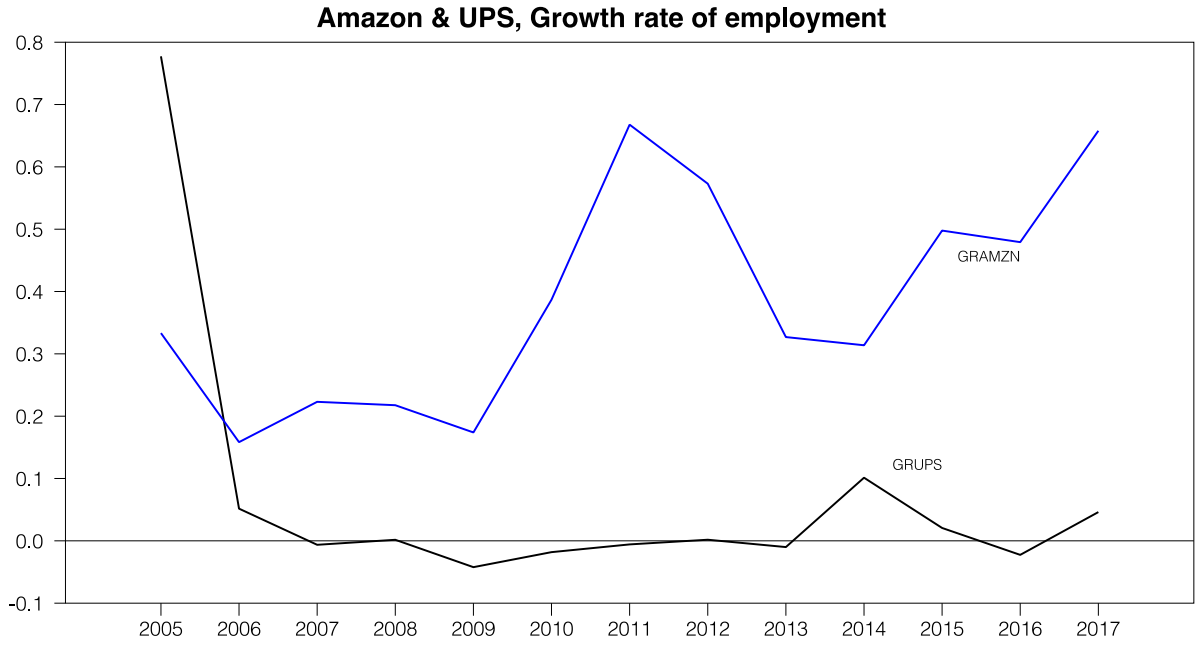


Figure 17b



Source: Amazon.com and UPS Annual Reports

V. Conclusion

Consumption is an essential part of life and an important factor in the growth of numerous companies. Net sales of retailers have continued to grow annually as personal consumption expenditures grew nation-wide. However, this increase in PCE did not affect the entire market; e-commerce sales bloomed while many physical stores either bankrupted or closed-down. The evolution of online shopping has been rapid and successful. This new method of retail gained popularity in a very short amount of time and is gaining more customers. People appreciate the convenience of having a wide range of choices and getting their items delivered straight to their doorsteps, with the click of a single button. This increase in the number of customers that shop online resulted in the closings of many brick and mortar stores and with it, the loss of thousands of retail jobs.

Although my hypothesis that the growth of Amazon.com has a negative effect on the employment levels of department stores has sufficient evidence to back it up, the effect on total retail employment is neutral. The fact that total retail employment stayed steady means that the jobs lost in department stores are balanced-out by those created in the e-commerce sector. Employment rates of non-store retailers have grown at almost the same rate as have their net sales. Even amongst talks about robots, drones, and other technological innovations that threaten to "steal" jobs, Amazon.com continues to increase its number of employees and expand its business, including plans of a new headquarters. This plan could bring in millions of dollars in investment in human capital and an overall growth in the local economy of the city in which it would be built. Even if the people who lost their jobs in a retail store do not live where the Amazon.com HQs are, thus lowering their chances of being hired at the substitute industry, there are other options available such as working remotely in a different industry, including delivery and customer

service. This could result in steady levels of employment at the national level. As for the department stores that have had to shut down, it was most likely a result of shifting preferences and the valuing of convenience by customers. Physical retailers will likely follow the business model of e-commerce companies by creating new websites or developing current ones to satisfy the needs of their customers, and this trend might continue until every store has a delivery service. This wave of migrating online does not have to be limited by clothing stores or beauty brands – people might buy all of their groceries online and have it delivered to their doorsteps someday.

Unemployment levels in other sectors and at the national level have not taken a toll as malls emptied-out, but delivery trucks increased. In addition to providing more jobs and better opportunities for retail employees, the results suggest that the expansion of Amazon.com has also had a positive effect on the warehousing and delivery transport industries; employment has grown in those sectors at almost the same rate as employment for e-commerce retailers. Despite UPS having a slower growth rate than Amazon.com, the entire industry has seen an upward trend in employment similar to that of the e-commerce giant. Although there is a possibility, and perhaps plans underway, for a delivery service developed by Amazon.com, it could be a while until it picks up and affects national courier services.

The expansion of online shopping is nowhere near slowing down, but its future course is hard to predict as there is no stable trend. The sector, especially companies such as Amazon.com, has been growing at such a fast pace that predictions of when it will level-off are difficult to make. The success could continue for at least another decade, as long as the process continues to stay convenient and accessible. Even if other physical retailers open up online services, Amazon.com would still be the largest e-commerce company for another couple of years. It takes time to build up an inventory of that size. Although Walmart, the largest retailer of any kind in the world

(Gensler, 2017), has the powers and resources available to overtake Amazon.com as the biggest online shopping company, their services are not as popular or as convenient as the e-commerce giant. Also, it is hard to predict whether every consumer will migrate their shopping needs online as new brick and mortar stores continue to open, albeit in smaller quantities than those that closed (Peterson, 2017). There might be certain items, including groceries, that are inconvenient to purchase online or there could be items that need to be used immediately. Thus, even with the rapid expansion of Amazon.com and the e-commerce sector, physical retailers and department stores would probably continue to operate, with at least some success, for the next couple of years or even decades.

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