

# E-commerce's relentless rise is rattling many traditional retail businesses

But the 'Amazon effect' has been less disruptive at an economy-wide level

Type [relentless.com](http://relentless.com) into a browser and where will you end up? At [amazon.com](http://amazon.com). When Jeff Bezos established Amazon as an online bookseller in a Seattle garage in 1995 he toyed with calling his venture to dominate retail 'Relentless' (among other options) before he named his company after the world's longest and greatest river.<sup>1</sup>

While the name [relentless](http://relentless.com) would be apt, Amazon is often known these days as the 'Everything Store'. That label identifies that Bezos's farsightedness wasn't just about selling books online. His genius was to see that retailing books on the internet would enable him to gather data on people's spending habits so that he could sell them many other things.

And Bezos sure is doing that. [amazon.com](http://amazon.com) has 373 million products listed for sale, in the latest count that includes items on 'Amazon Marketplace', where third-party sellers display their goods.<sup>2</sup> Shopping on the site is straightforward. Purchases arrive quickly – Amazon's logistical empire takes an average 3.4 days to deliver compared with 5.6 days for other US online sites.<sup>3</sup> The ease of online shopping enabled Amazon to sell US\$245 billion worth of goods through its website in 2016.<sup>4</sup>

Amazon's ascent is part of e-commerce's broader emergence in recent decades over which time online shopping sites multiplied and just about every consumer brand launched a website. In a compliment to Bezos's foresight, the term 'the Amazon effect' symbolises the disruption that e-commerce has inflicted on traditional, or store-based, retail across the globe. E-commerce is thriving the world over because shoppers like the convenience, greater choice, the ability to compare deals and people associate internet shopping with lower prices. Jack Ma's Alibaba, for instance, is sweeping through China's retail industry.

The disruption attributed to e-commerce raises social, economic and political issues that flow from shopping being a large part of household budgets and retail spending comprising a hefty share of economic output – retail sales were 22% of US GDP in 2016.<sup>5</sup> The 'retail apocalypse' as these connected drawbacks are termed include job losses in traditional retail that employs one in 10 in the US,<sup>6</sup> job displacement that keeps wages low and rising inequality linked to low wages growth and the loss of jobs. Another upshot is that e-commerce is judged among forces keeping inflation low. How the tech-driven changes in retail unfold across the industry, society and the economy could offer a guide to the broader benefits and disadvantages of technological advances overall. The surprise might be that the macro-level upheavals associated with e-commerce have – so far – been more muted than many might expect.

E-commerce has certainly caused some ripples – enough to remind people of past jolts to retail that include the appearance of supermarkets from the 1910s and the proliferation of 'big box' retailers based in suburban malls from the 1990s. It is too early to judge the full macro repercussions of e-commerce because sales over the internet are still to peak as a share of retail sales. For all the hype about the Amazon effect, e-commerce accounted for just 15% of US (adjusted) retail sales<sup>7</sup> and has a similar portion worldwide.<sup>8</sup> While e-commerce has nearly doubled its US share of retail sales in the past decade (from 8% in 2006 to 15% in 2016) without too much disruption at a macro level, online retail's market share could reach a 'tipping point' at which disruption to traditional retailing will accelerate. And there is no debate that e-commerce will expand – in the US, e-commerce surged 16% in the third quarter from a year earlier while total retail sales only rose 4.3%.<sup>9</sup> But at a macro level, the rise of e-commerce so far has come

<sup>1</sup> Book review. 'Selling as hard as he can. The everything store: Jeff Bezos and the Age of Amazon.' 28 October 2013.

[nytimes.com/2013/10/29/books/the-everything-store-jeff-bezos-and-the-age-of-amazon.html](http://nytimes.com/2013/10/29/books/the-everything-store-jeff-bezos-and-the-age-of-amazon.html)

<sup>2</sup> Scrapehero. 'Number of products sold on Amazon.com – June 2017.' [scrapehero.com/number-of-products-sold-on-amazon-com-june-2017/](http://scrapehero.com/number-of-products-sold-on-amazon-com-june-2017/)

<sup>3</sup> Slice Intelligence. 'Echo turns up the volume on Amazon's ambitions as audacious bets pay off.' 1 February 2016.

[intelligence.slice.com/blog/2017/echo-turns-volume-amazons-ambitions-audacious-bets-pay-off](http://intelligence.slice.com/blog/2017/echo-turns-volume-amazons-ambitions-audacious-bets-pay-off)

<sup>4</sup> Magellan estimate.

<sup>5</sup> US retail sales reached US\$4.1 trillion in 2016 when GDP was US\$18.6 trillion. 'Table 3. Gross domestic product: Level and change from preceding period.' Lines 1 and 3. US Bureau of Economic Analysis. News release. 'Gross domestic product: Third quarter 2017 (Advance estimate). 27 October 2017.

[bea.gov/newsreleases/national/gdp/2017/pdf/gdp3q17\\_adv.pdf](http://bea.gov/newsreleases/national/gdp/2017/pdf/gdp3q17_adv.pdf)

<sup>6</sup> US Bureau of Labor Statistics. 'Table 2.1 Employment by major industry sector, 2006, 2016, and projected 2016.' In 2016, 15.8 million were

employed in 'retail trade' in the US out of a workforce of 156.1 million. [bls.gov/emp/ep\\_table\\_201.htm](http://bls.gov/emp/ep_table_201.htm)

<sup>7</sup> US Census Bureau. 'Monthly & annual retail trade.'

[census.gov/retail/index.html](http://census.gov/retail/index.html)

Electronic shopping and mail-order houses sales in 2016 of US\$491 billion compared against retail sales, total (excluding motor vehicle, parts dealers and petrol) in 2016 of US\$3311 billion.

<sup>8</sup> That means Amazon, with its 43% share of US e-commerce, has less than 4% national market share and the company has little global presence. Walmart, with US\$481 billion in sales, is 3.5 times bigger than Amazon revenue-wise on 2016 numbers (and the retailer founded in 1962 is fighting back by boosting its online offering as are other traditional retailers).

<sup>9</sup> US Census Bureau. 'Quarterly retail e-commerce sales. 3<sup>rd</sup> quarter 2017.' 17 November 2017. Retail sales figures are unadjusted. [census.gov/retail/mrts/www/data/pdf/ec\\_current.pdf](http://census.gov/retail/mrts/www/data/pdf/ec_current.pdf)

without the disadvantages – and, perhaps, one advantage – that many associate with the rush to online shopping.

### **A jobs 'apocalypse?'**

The online retail world that Amazon pioneered entails much less human interaction than visiting a store. Shoppers visit a website, perhaps enticed by ads aimed at them by algorithms. People might talk to a robot as they scroll around a site before clicking to buy and pay online. Soon these items might be delivered by driverless transport, perhaps even a drone. Some humans will still oversee websites, monitor robots, build the smart warehouses and design clothes. But this less-peopled world appears to have social, economic and political implications.

Facts are easily found to support a case that times are dark for traditional retailers, if not wider society. Toys "R" Us is among the latest of mounting retail bankruptcies in the US. More than 20 big retailers including Payless and Radio Shack are shutting stores across the US. About one in four of the 1,200 shopping malls in the country is expected to close within the next five years as foot traffic drops. Despite favourable economic conditions, store closures are greater than that experienced in the 2008-09 recession.

Mall closures mean the US would lose many of its public squares, where community mixes with commerce, where the disabled and the elderly go on excursions and charities raise funds. While many malls will thrive by offering services – and there were probably too many malls anyway – the social costs of this are real but can't be quantified easily, especially for smaller towns.

The economic aspects of the retail apocalypse, however, are more measurable and they fall short of proving a retail apocalypse is occurring. Start with store closures. A study by US research and advisory firm IHL estimates that US retailers will open 4,080 more stores than they will close in 2017, and that number of new stores expands to more than 10,000 if smaller shops are included. Discount outlets, convenience stores, fruit shops, restaurants and cafés are expanding while clothing and department chains are shrinking – 16 chains account for 48% of stores closing, five of them are responsible for 28% of closures.<sup>10</sup>

Retail jobs aren't disappearing either. Retail employment in the US grew at an annual rate of 0.3% from 2006 to 2016 to 15.8 million workers, an increase of 467,000 jobs over the 10 years, even if retail jobs growth was below the 0.5% annual growth rate of the US workforce over that time.<sup>11</sup>

Studies say these figures underplay the number of retail jobs added in the US in recent years because they don't include storage and distribution e-commerce jobs. The US-based Progressive Policy Institute says that if e-retail employment were more broadly

defined the number of jobs created by e-commerce and general retail from 2013 to 2016 topped 373,000 jobs. This is the best three-year stretch for retail job creation in 25 years, apart from 1997 to 2000 when 374,000 retail jobs were added.<sup>12</sup>

The absence of a store-closing and job-shedding apocalypse makes it harder to blame e-commerce for the wages stagnation that economists lament is hobbling economic growth and leading to wider inequality. The Progressive Policy Institute says jobs in e-commerce in 2016 paid 29% more per hour than in the physical sector. On top of that, aggregate wages in e-commerce and general retail have risen by US\$19 billion (in 2016 dollars) since 2007 and US\$18 billion of that rise comes from e-commerce. "Amazon is following the footsteps of industrial giants such as General Motors and General Electric: high-productivity enterprises that can afford to pay higher wages and gradually enable workers to shift to these higher-paying opportunities," the institute says. "If this new pattern continues, it will ... rejuvenate the middle class."<sup>13</sup>

While the institute is assuming that new warehousing jobs are tied to retail and Amazon could employ far fewer workers in its warehouses in coming years, other evidence supports its findings. The US jobless rate, for example, stood at a 17-year low of 4.1% in November.<sup>14</sup> Average hourly earnings of all retail employees, to cite another barometer, jumped 12.5% over the five years to October to US\$18.28,<sup>15</sup> nearly double the US inflation rate of 6.7% over that time.<sup>16</sup> Amazon, with 542,000 employees now, set a record for a company reaching 300,000 workers by achieving that feat in 20 years.<sup>17</sup> Warehousing is the booming property segment in the US. Anecdotal evidence supports the institute's conclusions too. US men's clothing retailer, Bonobos, for example, which started on the internet in 2007, has opened close to 50 stores in recent years.<sup>18</sup> Since 2015, Amazon is even opening book stores.

### **E-retail and inflation**

The more contentious macro effect of e-retailing is whether or not it is keeping inflation too low – which means that monetary policy is looser than otherwise, which is good for the economy but perhaps at risk of fuelling asset bubbles.

There is debate as to the degree of impact e-commerce has had on inflation. Many economists such as Federal Reserve Chair Janet Yellen argue that "the growing importance of online shopping, by increasing the competitiveness of the US retail sector, may have reduced price margins and restrained the ability of firms to raise prices in response to rising demand".<sup>19</sup> Others respond that the cost advantage of e-retailing is overstated, online prices are not noticeably lower than offline prices, many e-retailers are running on such low margins they can't afford to discount and that the big

<sup>10</sup> IHL. Research & Advisory. 'Debunking the retail apocalypse.' 29 August 2017. [ihlservices.com/product/debunking-the-retail-apocalypse/](http://ihlservices.com/product/debunking-the-retail-apocalypse/)

<sup>12</sup> Progressive Policy Institute. 'The creation of a new middle class?: A historical perspective on job and wage growth in the digital sector, part 1.' March 2017. Page 26. [progressivepolicy.org/wp-content/uploads/2017/03/Tech-middle-class-3-9-17b.pdf](http://progressivepolicy.org/wp-content/uploads/2017/03/Tech-middle-class-3-9-17b.pdf)

<sup>13</sup> Progressive Policy Institute. Op cit.

<sup>14</sup> US Bureau of Labor Statistics. Unemployment rate. Series id: LNS14000000. [data.bls.gov/cgi-bin/surveymost](http://data.bls.gov/cgi-bin/surveymost)

<sup>15</sup> Federal Reserve Bank of St Louis. 'Average hourly earnings of all employees: retail trade.' CES4200000003. Updated October 2017. [fred.stlouisfed.org/series/CES4200000003](http://fred.stlouisfed.org/series/CES4200000003)

<sup>16</sup> Bureau of Labor Statistics. 'CPI-All Urban Consumers. Series ID: CUUR0000SA0.' The consumer price index rose from 234.3 in September 2012 to 246.8 in September 2017. [data.bls.gov/cgi-bin/surveymost](http://data.bls.gov/cgi-bin/surveymost)

<sup>17</sup> Progressive Policy Institute. Op cit.

<sup>18</sup> Bonobos.com/guideshop.

<sup>19</sup> Janet Yellen, chair of the Federal Reserve. 'Inflation, uncertainty, and monetary policy.' Speech. 26 September 2017. [federalreserve.gov/newsevents/speech/yellen20170926a.htm#fn26](http://federalreserve.gov/newsevents/speech/yellen20170926a.htm#fn26)

falls in prices are coming from energy, food and rents, not consumer goods sold online.

European Central Bank President Mario Draghi is among those who claim that there is scant evidence that e-commerce has been deflationary to date. "We do not see much evidence to suggest that e-commerce is depressing inflation in the euro area today – at least to the extent that we can measure it," Draghi said in a speech on November 17,<sup>20</sup> the day after a report showed annual inflation in the eurozone stood at 1.4%.<sup>21</sup> A 2016 study by the non-profit, US-based (and recession-judging) National Bureau of Economic Research that compared online and offline prices across 56 large retailers in 10 countries including Australia found that "price levels are identical about 72% of the time".<sup>22</sup> Private consultancies have come to similar conclusions on e-commerce's muted effect on inflation. BCA Research, a Canada-based consultancy founded in 1949 with offices around the globe including Sydney, said in a paper in 2017 that there is no evidence that e-commerce reduces the US inflation rate by more than 0.1 or 0.2 percentage points.<sup>23</sup> Looking to the future, the productivity boost linked to today's technological gains – including from e-commerce but especially, say, from artificial intelligence's ability to automate services – is expected to become increasingly deflationary.

Whatever the Amazon effect is, or will be, on prices, the public thinks that lower prices are found online. That will only help Bezos in his relentless quest to sell people everything.

By Michael Collins, Investment Specialist

#### Important Information:

This material has been prepared for general information purposes and must not be construed as investment advice. This material does not constitute an offer or inducement to engage in an investment activity nor does it form part of any offer or invitation to purchase, sell or subscribe for interests in any type of investment product or service. This material does not take into account your investment objectives, financial situation or particular needs. You should read and consider any relevant offer documentation applicable to any investment product or service and consider obtaining professional investment advice tailored to your specific circumstances before making any investment decision. This material and the information contained within it may not be reproduced or disclosed, in whole or in part, without the prior written consent of Magellan Asset Management Limited. Any trademarks, logos, and service marks contained herein may be the registered and unregistered trademarks of their respective owners. Nothing contained herein should be construed as granting by implication, or otherwise, any licence or right to use any trademark displayed without the written permission of the owner. No part of this material may be reproduced or disclosed, in whole or in part, without the prior written consent of Magellan Asset Management Limited.

#### Average hourly earnings of all US retail workers



**Source:** Federal Reserve Bank of St Louis. 'Average hourly earnings of all employees: retail trade.' CES4200000003. Updated October 2017. fred.stlouisfed.org/series/CES4200000003

<sup>20</sup> Speech by Mario Draghi, President of the European Central Bank. 'Monetary policy and the outlook for the economy.' 17 November 2017. [ecb.europa.eu/press/key/date/2017/html/ecb.sp171117.en.html](http://ecb.europa.eu/press/key/date/2017/html/ecb.sp171117.en.html)

<sup>21</sup> Eurostat. 'Annual inflation down to 1.4% in the euro area.' 16 November 2017. [ec.europa.eu/eurostat/documents/2995521/8456366/2-16112017-AP-EN.pdf/f8123350-5adf-4d76-a829-19bd0fe0535f](http://ec.europa.eu/eurostat/documents/2995521/8456366/2-16112017-AP-EN.pdf/f8123350-5adf-4d76-a829-19bd0fe0535f)

<sup>22</sup> Alberto F. Cavallo. 'Are online and offline prices similar? Evidence from large multi-channel retailers.' National Bureau of Economic Research Working Paper No. 22142. Issued March 2016. Revised in August 2016. [nber.org/papers/w22142](http://nber.org/papers/w22142)

<sup>23</sup> BCA Research. 'Did Amazon kill the Phillips Curve?' Special report in The Bank Credit Analyst monthly publication. September 2017 – Vol 69 – No. 3.