# Is Amazon Moving Away from Misleading List Prices? Not So Fast.

Amazon.com ballooned into an e-commerce juggernaut—with 224 million regular customers and annual sales of more than \$135 billion—on the promise of fast delivery and hot deals. Delivery speeds are easy to measure. Discounts, far less so.

Amazon has for years relied heavily on often specious "list prices" to give consumers the impression they were getting a great deal when they weren't. That practice began to shift last year, when Amazon—under widespread legal challenge—started quietly phasing out the use of "list prices" meant to reflect a products' standard retail price from which Amazon was discounting.<sup>1</sup>

But a new analysis reveals the e-commerce giant is still deceiving consumers with inflated comparative pricing. A fresh examination of more than 4,000 products found the retailer continues to publish crossed-out prices, or other "reference prices" on more than a quarter of its stock.

Under state and federal laws, reference prices displayed by retailers must reflect the recent prevailing market price.<sup>2</sup> Federal regulations state that it is insufficient to display a manufacturer's suggested price or to cherry-pick the highest competitor's price in choosing a reference price.<sup>3</sup> Instead, a reference price must reflect the price at which a product is generally sold. <sup>4</sup> However, the analysis found that majority of these reference prices exceeded—sometimes by large margins—any plausible definition of the "prevailing market price."

Depending on the definition used, Amazon's reference prices were higher than the prevailing market price more than half, and as as much as three-quarters of the time. In around 40 percent of cases, Amazon's reference price was not charged by *any* rival in the marketplace. That rose to 46 percent of cases when Amazon Marketplace vendors were excluded from the sample of Amazon's competitors. In other words, Amazon highlighted an entirely fictitious reference price charge by no one.

<sup>&</sup>lt;sup>1</sup> https://www.nytimes.com/2016/07/04/business/amazon-is-quietly-eliminating-list-prices.html

<sup>&</sup>lt;sup>2</sup> <u>http://www.leginfo.ca.gov/cgi-bin/displaycode?section=bpc&group=17001-18000&file=17500-17509</u>

<sup>&</sup>lt;sup>3</sup> https://www.law.cornell.edu/cfr/text/16/233.3

<sup>&</sup>lt;sup>4</sup> Ibid.

The findings mean that Amazon, even after being sued and sanctioned for the practice, continues to broadly deceive its customers about the discounts they're receiving. When correcting the inflated reference prices, the fictitious discounts often dissappear.

Amazon began to back-off its comparative pricing in 2016 in the face of mounting legal and regulatory threats. In November 2014, customers filed a class-action lawsuit in California, arguing that Amazon's use of list prices that deviate from the "prevailing market price" violated state and federal law.<sup>5</sup> A California Court fined Amazon competitor Overstock.com \$6.8 million in a similar case the same year.<sup>6</sup> In 2017, Canadian regulators fined Amazon \$1 million CAD for failing to verify the accuracy of its list prices.<sup>7</sup>

Amazon's customers have also weighed-in on the practice. In 2012, observers noted that Amazon's list pricing algorithm was so flawed that the site claimed that a \$4 box of artificial sweetener retailed for \$553.<sup>8</sup> In early 2016, the *New York Times* reported that list prices had "lost their meaning" as they rarely reflected competitors' sale prices.<sup>9</sup> Amazon's own customer forums include at least 137 posts on the topic of inflated list prices, dating back to 2008.<sup>10</sup>

Amazon now claims it "regularly check[s] List Prices against prices recently found on Amazon.com and other retailers."<sup>11</sup> However, our analysis suggests that Amazon does not in fact conduct these checks or, if it does, doesn't update its list prices accordingly.

The harm to consumers is extremely significant. Amazon—with more than \$100 billion in sales<sup>12</sup> and 300 million customer accounts<sup>13</sup>—overstated the median market price by an average of one-fifth.<sup>14</sup> An untold number of U.S. consumers have purchased products from Amazon after being induced to believe they were

<sup>&</sup>lt;sup>5</sup> <u>https://www.truthinadvertising.org/wp-content/uploads/2015/02/Fagerstrom-v-Amazon-notice-of-removal-and-complaint.pdf</u>

<sup>&</sup>lt;sup>6</sup> https://www.law360.com/articles/512196/overstock-to-pay-6-8m-for-falsely-advertising-sale-prices

<sup>&</sup>lt;sup>7</sup> https://www.wsj.com/articles/amazon-to-pay-fine-related-to-pricing-practices-in-canada-1484161028

<sup>&</sup>lt;sup>8</sup> https://gizmodo.com/5888981/amazon-marks-up-a-products-price-like-crazy-to-give-you-fake-savings

<sup>&</sup>lt;sup>9</sup> <u>https://www.nytimes.com/2016/03/06/technology/its-discounted-but-is-it-a-deal-how-list-prices-lost-their-meaning.html?\_r=0</u>

<sup>&</sup>lt;sup>11</sup> https://www.amazon.com/gp/help/customer/display.html?nodeId=201133170

<sup>&</sup>lt;sup>12</sup> https://www.sec.gov/Archives/edgar/data/1018724/000119312516530910/d168744dex991.htm

<sup>13</sup> https://www.statista.com/topics/846/amazon/

<sup>&</sup>lt;sup>14</sup> <u>http://fortune.com/2016/07/11/amazon-prime-customers/</u>

getting a fictitious discount. This study shows that the harm to consumers continues today.

This latest analysis suggests that Amazon's deceptive use of reference prices remains central to its business strategy. Although it took list prices off of many products in response to legal and regulatory threats, it continues to use them on one-in-four products on its site and may continue to reinstate them as threats recede. It suggests that the company's voluntary actions on deceptive pricing are easily reversible and cannot be relied upon to protect consumers.

# Key Findings

- Amazon continues to include reference prices on more than a quarter of its stock
- A majority Amazon's reference prices are greater than the prevailing market price, regardless of how the prevailing price is defined (between half and three-quarters, depending on measure used)
- About 40 percent of Amazon's reference prices are greater than the highest price charged by any known competitor
- On average, Amazon's reference prices overstate the median market prices by \$22, or about 20%.
- Amazon Marketplace vendors also post reference prices in excess of the prevailing market price, but they do so less frequently and to a lesser degree than Amazon itself
- Amazon appears to be in breach of its own List Price policy,<sup>15</sup> and its practices may violate federal regulations governing deceptive pricing

## Background

List prices were once ubiquitous on Amazon.com. The crossed-out prices were meant to reflect the savings that Amazon offered over its competitors, a key allure that drew consumers to Amazon and fueled its breakneck growth.

<sup>&</sup>lt;sup>15</sup> <u>https://www.amazon.com/gp/help/customer/display.html?nodeId=201133170</u>

Amazon's Conditions of Use state that a product's list price "represents the full retail price listed on the product itself, suggested by the manufacturer or supplier, or estimated in accordance with standard industry practice."<sup>16</sup> The statement goes on to clarify

List Price: \$579.00 Price: \$539.99 *Prime* You Save: \$39.01 (7%)

#### A product list price on Amazon

that "the List Price is a comparative price estimate and may or may not represent the prevailing price in every area on any particular day."<sup>17</sup>

Until recently, that was also the definition that Amazon offered on its Help and Customer Service page about list prices.<sup>18</sup> But that recently changed. The page now reads: "'List Price' means the suggested retail price of a product as provided by a manufacturer, supplier or seller. We regularly check List Prices against prices recently found on Amazon.com and other retailers."<sup>19</sup>

This revised statement speaks to the Canadian Competition Bureau's claim that "Amazon relied on its suppliers to provide list prices without verifying that those prices were accurate."<sup>20</sup> It also abandons Amazon's references to "trade area," a longstanding term in recent deceptive pricing litigation.

The FTC defines a trade area as "the area in which [a retailer] does business."<sup>21</sup> Until the 1990s, this was a geographic distinction. Now, these guidelines apply to online retailers who compete with one another on a national scale.<sup>22</sup> The FTC considers the prevailing price to be the price of an item at the "principal retail outlets" in any given area. At the same time, the FTC warns:

If the list price is significantly in excess of the highest price at which substantial sales in the trade area are made, there is a clear and serious danger of the consumer being misled by an advertised reduction from this price.<sup>23</sup>

<sup>23</sup> 16 CFR 233.3 (d)

<sup>&</sup>lt;sup>16</sup> https://www.amazon.com/gp/help/customer/display.html?nodeId=201550830

<sup>17</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> Amazon apparently prevents web archiving utility Archive.org from archiving its pages. As such, it is difficult to determine when the company updated its help page on list pricing.

<sup>&</sup>lt;sup>19</sup> <u>https://www.amazon.com/gp/help/customer/display.html?nodeId=201133170</u>

<sup>&</sup>lt;sup>20</sup> http://www.recode.net/2017/1/11/14243250/amazon-canada-fine-list-prices-misleading-pricing

<sup>&</sup>lt;sup>21</sup> 16 CFR 233.2 – 233.3

<sup>&</sup>lt;sup>22</sup> <u>https://www.ftc.gov/sites/default/files/attachments/press-releases/ftc-staff-revises-online-advertising-disclosure-guidelines/130312dotcomdisclosures.pdf</u>

Amazon's disclaimer that its list prices "may not represent the prevailing price in every area on any particular day" does not inoculate it against the FTC's standards, which take consumer perceptions into account:

Many members of the purchasing public believe that a manufacturer's list price, or suggested retail price, is the price at which an article is generally sold. Therefore, if a reduction from this price is advertised, many people will believe that they are being offered a genuine bargain. To the extent that list or suggested retail prices do not in fact correspond to prices at which a substantial number of sales of the article in question are made, the advertisement of a reduction may mislead the consumer.<sup>24</sup>

[...]

In other words, a retailer who advertises a manufacturer's or distributor's suggested retail price should be careful to avoid creating a false impression that he is offering a reduction from the price at which the product is generally sold in his trade area. If a number of the principal retail outlets in the area are regularly engaged in making sales at the manufacturer's suggested price, that price may be used in advertising by one who is selling at a lower price. If, however, the list price is being followed only by, for example, small suburban stores, house-to-house canvassers, and credit houses, accounting for only an insubstantial volume of sales in the area, advertising of the list price would be deceptive.<sup>25</sup>

Amazon and other retailers have run afoul of these regulations. A 2014 class-action lawsuit filed against Amazon in California alleged that its practice of listing the manufacturer's suggested retail price constituted deceptive pricing under state law and federal regulations.<sup>26</sup>

The case was originally brought by a consumer who purchased a Vitamix blender from Amazon for \$299, ostensibly a discount from Amazon's \$329 list price. The consumer later learned that several other online retailers also offered the blender for \$299.

<sup>&</sup>lt;sup>24</sup> 16 CFR 233.3(a)

<sup>&</sup>lt;sup>25</sup> 16 CFR 233.3(f)

<sup>&</sup>lt;sup>26</sup> Fagerstrom et al vs. Amazon.com

In a similar case against the online retailer Overstock.com, a California Superior Court ruled that the company's use of the term "list price" on its website served to "mislead customers who viewed that term as reflecting a 'regular/average price,' and thus one may infer that the use of formulas to set high ARPs [advertised retail prices] had the capacity to mislead and did mislead customers."<sup>27</sup>

Overstock's opaque method of determining retail price was central to the case. Like Amazon, Overstock did not describe the method by which it determined list prices not set by the manufacturer.

In addition to awarding more than \$6.8 million in damages, the court ordered Overstock to be more transparent about how it calculates retail prices, and to take prices offered by multiple retailers into account.<sup>28</sup> Observers noted that the ruling was likely to have widespread repercussions for how online retailers calculated and advertised discounts.<sup>29</sup>

In December 2016, the Los Angeles city attorney's office filed suit against four major retailers—JC Penney, Sears, Kohl's and Macy's—charging that they falsely advertised high "list" or "regular" prices on merchandise that was never actually for sale at that price.<sup>30</sup> If the court finds against the retailers, Amazon could face legal action as well.

## Examples

Our scrape of the Amazon site unearthed thousands of examples of reference prices that were not in line with prevailing prices among other large retailers. Here are a few examples:

<sup>&</sup>lt;sup>27</sup> People of the State of California vs. Overstock.com, Inc.

<sup>&</sup>lt;sup>28</sup> Ibid.

<sup>&</sup>lt;sup>29</sup> <u>https://www.wired.com/2014/01/overstock-price-ruling/</u>

<sup>&</sup>lt;sup>30</sup> http://www.latimes.com/business/la-fi-retailers-lawsuit-20161207-story.html

 Amazon advertised a Chicago Pneumatic brand drill (#CP9791) for \$182.99, a claimed 40% discount from its \$305 reference price.<sup>31</sup> In fact, all of Amazon's competitors sold the same drill for roughly the same price.

Jet.com and two retailers on Amazon Marketplace matched Amazon's sale price exactly, while Walmart and construction goods retailer zoro.com sold the drill for \$189.99.<sup>32</sup> According to Nextag.com, the highest price the



Chicago Pneumatic CP9791 Heavy Duty 1/2-Inch Reversible Drill, Keyless Chuck by Chicago Pneumatic

\$182<sup>99</sup> \$305.00 √*Prime* Only 6 left in stock - order soon. More Buying Choices \$182.99 new (3 offers) FREE Shipping on eligible orders

drill fetched on any retailer over the past six months was \$210.<sup>33</sup> The manufacturer provided no reference price for the drill on its website.<sup>34</sup>

• On Amazon, an Acer laptop displayed a reference price of \$799.<sup>35</sup> On its own website, Acer listed the same model at \$749.<sup>36</sup>



Acer Switch Alpha 12 SA5-271-57QF i5-6200U 12-in 8GB 256GB Notebook (NT.LCDAA.005;SA5-271-57QF)

20 customer reviews | 17 answered questions
List Price: \$799.89
Price: \$718.49 & FREE Shipping. Details
You Save: \$81.50 (10%)
 i Item is eligible: No interest if paid in full within 12 months with the Amazon.com Store Card. Apply now
Only 2 left in stock.
Ships from and sold by Amazon.com. Gift-wrap available.

 Conly 2 left in stock
 instead by Amazon.com. Gift-wrap available.

 Windows 10 Home
 intel® Core<sup>w</sup> 15-6200U processor Dual-core 2.30 GHz
 12° CHD (2160 x 1440) 3:2 IPS
 intel® Shared Memory
 8 GB, LPDDR3 Memory + 266 GB SSD
 See more product details

\_\_\_\_\_

<sup>&</sup>lt;sup>31</sup> https://www.amazon.com/Chicago-Pneumatic-CP9791-Reversible-

Keyless/dp/B004V70U4Y/ref=sr\_1\_1?s=hi&ie=UTF8qid=1487100894&sr=1-

<sup>1&</sup>amp;keywords=Chicago+Pneumatic+CP9791+Heavy+Duty+1%2F2-Inch+Reversible+Drill%2C+Keyless+Chuck

<sup>&</sup>lt;sup>32</sup> http://www.nextag.com/product/Chicago-Pneumatic-Cp9791-Heavy-Duty?pid=p890854074&tid=1015266518

<sup>&</sup>lt;sup>33</sup> <u>http://www.nextag.com/product/Chicago-Pneumatic-Cp9791-Heavy-Duty?pid=p890854074&tid=1015266518</u> (Click the "price history" tab on this page.)

<sup>&</sup>lt;sup>34</sup> http://www.cp.com/usen/whatwedo/powertools/ecatalogue/?family=5&filterby=all

<sup>&</sup>lt;sup>35</sup> https://www.amazon.com/Acer-SA5-271-57QF-i5-6200U-Notebook-NT-LCDAA-005/dp/B01FJT295A

<sup>&</sup>lt;sup>36</sup> https://www.acer.com/ac/en/US/content/model/NT.LCDAA.005



Amazon's claim that reference prices originate from the manufacturer<sup>37</sup> is demonstrably false in this case—the reference price exceeded the manufacturer's price by \$50. According to a Google Shopping search, not one of the 125 online stores that carry this laptop sold the computer for \$799.<sup>38</sup>

57QF&hl=en&biw=1620&bih=869&stick=H4sIAAAAAAAAAAABXMOw4CUQxDUUGFKBmqt4rY-TjZ6SyXILm6ss7r\_blQYS4rYteDjjoXFcxpjxglUm19vogAOWljFJLGyq1olORKo1d2YeZc6I6c1Rwh1KjgGpdjKcXbGGCW5M9-

<sup>&</sup>lt;sup>37</sup> https://www.amazon.com/gp/help/customer/display.html?nodeId=201133170

<sup>&</sup>lt;sup>38</sup> https://encrypted.google.com/shopping/product/13054792273148968657?q=acer+SA5-271-

<sup>52</sup>RWbAlxv18\_ACB2THanAAAAA&bav=on.2,or.&bvm=bv.146786187,d.amc&tch=1&ech=1&psi=82jWMzmN4j4jwT3saCAAQ.1487106036767.7&sa=X&ved=0ahUKEwjEt82fvpDSAhXMzIMKHWKRCXgQqA0IKCg B

- Amazon and its six primary competitors all sold a BOB baby stroller for \$399.<sup>39</sup> The majority of independent retailers on Amazon marketplace also charged \$399 for the stroller.<sup>40</sup> Defying the market's convergence around a single prevailing price, Amazon advertised a reference price of \$449 for the stroller and promoted the stroller under its "February Baby Savings" sale.<sup>41</sup>
- Amazon advertised an amazing gaming laptop.<sup>42</sup> Unfortunately, this massive discount was a fiction. The average Amazon competitor sold the laptop for \$600 less than Amazon's reference price.<sup>43</sup> At least one competitor, Newegg.com, matched Amazon's price.<sup>44</sup>



<u>CS74K&hl=en&biw=1620&bih=869&bav=on.2,or.&bvm=bv.146786187,d.cGc&tch=1&ech=1&psi=YYCjWKidGY</u> <u>KCjwOfz6BA.1487110242522.3&prds=hsec:online&sa=X&ved=0ahUKEwiIrp-vzZDSAhUB-</u> 2MKHYFIA4kO2SsIEw

 <sup>&</sup>lt;sup>39</sup> http://www.nextag.com/product/Bob-Strollers-2016-Bob-Revolution?pid=p6268617991&tid=7408236716
 <sup>40</sup> https://www.amazon.com/gp/offer-

listing/B019EZD7Y2/ref=olp\_page\_1?ie=UTF8&f\_new=true&qid=1487107905&sr=1-2 <sup>41</sup> https://www.amazon.com/BOB-2016-Revolution-Stroller-

Black/dp/B019EZD7Y2/ref=sr\_1\_1\_a\_it?ie=UTF8&qid=1487107309&sr=8-

<sup>1&</sup>amp;keywords=Britax%2BBOB%2B2016%2BRevolution%2BFLEX%2BStroller&th=1

<sup>&</sup>lt;sup>42</sup> https://www.amazon.com/G701VO-CS74K-17-3-Inch-Overclocked-Gaming-

<sup>2400</sup>MHz/dp/B01GHQOQJG/ref=sr\_1\_1?ie=UTF8&qid=1487109467&sr=8-1&keywords=Asus+ROG+G701VO-CS74K

<sup>&</sup>lt;sup>43</sup> https://encrypted.google.com/shopping/product/9884741525990714462?q=Asus+ROG+G701VO-

<sup>&</sup>lt;sup>44</sup> https://www.newegg.com/Product/Product.aspx?Item=N82E16834234146&ignorebbr=1&nm\_mc=KNC-GoogleAdwords-PC&cm\_mmc=KNC-GoogleAdwords-PC-\_-pla-\_-Gaming+Laptops-\_-N82E16834234146&gclid=CMTuqejOkNICFU6BswodD\_YMzA&gclsrc=aw.ds

## Analysis

Amazon claims it "routinely checks" prices recently found on Amazon and other retailers" to verify the accuracy of its reference prices. To test this claim, we compared Amazon's reference prices to recent prices on Amazon Marketplace and other retailers, and found that Amazon's reference prices bear little resemblance to their competitors' sale prices.

Using web browser automation, we searched price comparison website Nextag.com<sup>45</sup> for 25 common household products sold on Amazon, and captured the first 20 pages of results. (See Appendix for a list of product keywords searched). Our automated browser then visited the Nextag page for each of the resulting 4086 products and captured the reference and sale prices advertised by each retailer. Where Nextag indicated that Amazon advertised a reference price, our automated browser clicked through to Amazon to verify that Amazon did, in fact, have a reference price on its product page.

Preliminary analysis of this data revealed that, while reference prices are no longer ubiquitous on Amazon.com, they still appear on a significant proportion of the company's products. We verified the use of reference prices on more than 28% of products sold by Amazon in our sample, and nearly 23% of products sold by Amazon Marketplace in our sample.



To test Amazon's claim that list prices represent prices advertised by other retailers, we further restricted the sample to only those products with list prices that

<sup>&</sup>lt;sup>45</sup> <u>https://www.nextag.com/</u>

are also sold by at least one retailer outside of Amazon and Amazon Marketplace. The 845 products in this narrower sample provide the basis for the following findings.

# Results

Amazon continues to deceive customers with inflated reference prices.

Even after recent changes forced by legal and regulatory pressure, around a quarter of the products on Amazon still displayed reference prices or "was prices" indicating a previous sale price. Those reference prices also continued to be deceptive: More than half the reference prices on Amazon.com exceeded the prevailing price charged by the retailers' competitors.

This finding applied even when using different definitions of competitors and prevailing market prices. Amazon's reference prices for the majority of products in this study were higher than the the mean (average), median (middle), and mode (most frequent) prices charged by its competitors. The finding held true whether or not one counted products sold by other retailers on Amazon Marketplace among Amazon's competitors. Amazon's reference price even frequently exceeded the maximum price charged by its competitors.

### Mean

Amazon does not disclose the benchmark measure it uses to determine the prevailing market price among its competitors. In the absence of a standard definition for the prevailing market price, we tested all plausible definitions of the



prevailing price. One such definition is the

average, or mean, of other online retailers'prices. By this measure, 71% of Amazon's reference prices were greater than their competitors' sale prices when Amazon Marketplace vendors were counted among their competitors, and 66.4% of Amazon's reference prices are greater than their non-Marketplace competitors' sale prices.<sup>46</sup>

Amazon's reference prices were not just greater than the mean market price; the difference was also significant. Across all of the products in the study sample,

\$18.88Average difference<br/>between Amazon list<br/>price and market mean<br/>(All competitors)average<br/>ma<br/>ver<br/>con<br/>\$13\$15.25Average difference<br/>between Amazon list<br/>price and market mean<br/>(Non-Marketplace competitors only)average<br/>ma<br/>price<br/>and<br/>ma<br/>price<br/>and<br/>ma<br/>price

Amazon's reference price was an average of \$18.88 higher than the market mean when Marketplace vendors are counted among its competitors, and an average of \$15.25 higher than its nonmarketplace competitors' mean price.

Amazon Marketplace vendors also advertised reference prices well above the market mean, but

they did so less frequently. 39% of reference prices on Amazon marketplace exceed the mean sale price advertised by non-Amazon vendors. The marketplace reference price deviates from the mean market sale price by an average of \$27.08.

### Median

Another plausible definition of the prevailing market price is the "median," or the middle price when competitors' prices are arranged in ascending order. Using the median rather than the mean reduces the likelihood that an outlier will distort the results. The comparison between Amazon's reference price and the median market price bore a striking resemblance to the comparison between Amazon's reference price was greater than the median sale price advertised by 68.8% of non-Marketplace competitors, and 74.4% of all competitors listed on Nextag.

<sup>&</sup>lt;sup>46</sup> Where "competitors" is defined as non-Amazon retailers whose sale prices are cataloged on Nextag.com.



Amazon's reference prices deviated from the median market price by an even greater degree than they did the mean market price. On average, Amazon's reference price was \$21.87 more than the median sale price advertised by any competitor, and \$16.99 more than the median price advertised by non-marketplace competitors.

Marketplace vendors' reference prices exceeded the median sale price 42% of the time, far less frequently than Amazon's reference prices exceeded the market median. On average, marketplace reference prices were \$31.30 greater than the median competitor's sale price.

#### Mode

Another plausible definition of the prevailing market price is the "mode," or the price most frequently charged by Amazon's competitors. Where multiple modes exist (if the same number of retailers advertise two different prices) we take the higher value. Even by this rigorous standard, more than 50% of Amazon's reference prices exceeded the most common price charged by the retailer's competitors cataloged on Nextag.

\$21.87

Average difference between Amazon list price and market median (All competitors)

\$16.99

Average difference between Amazon list price and market median (Non-Marketplace competitors only)





 \$3.97
 Average difference between Amazon list price and market mode (All competitors)

\$4.25 be

Average difference between Amazon list price and market mode (Non-Marketplace competitors only) On average, Amazon's reference prices exceeded the sale price most commonly charged by Amazon's competitors by about \$4, regardless of whether Marketplace vendors were included among Amazon's competitors.

Marketplace vendors advertised reference prices that exceeded the modal market price less frequently than Amazon itself, but the

magnitude of their deviation was larger. 30% of reference prices on Marketplace exceeded the modal competitor's price, and the average difference between the Marketplace reference price and the modal competitor price was \$9.90.

#### Maximum

In many cases, Amazon's reference prices appear to be unrelated to any market price, let alone the prevailing one. In 40% of the products we studied, Amazon's reference price exceeded the sale price advertised by every single competitor cataloged on Nextag. When Marketplace vendors were excluded from the sample of competitors, Amazon's reference price is greater than the maximum competitor price for 46% of products.



Averaging across all products, the dollar difference between the maximum market price and Amazon's reference price was negative. Among the 40-45 percent of products where Amazon's reference price exceeded the maximum competitor price, however, the average reference price was around \$30 greater than the average maximum price.

Just over a quarter—27.5 percent—of Marketplace reference prices exceeded the maximum sale price advertised by non-Amazon competitors. Among these items, the average marketplace reference price was \$16.38 more than the maximum competitor's price.

## Appendix: Product keywords searched on Nextag.com

- Camera
- Diapers
- Shoes
- Drill
- Paper towels
- Bed Sheets
- Laptop
- Soccer Ball
- Vitamins
- Toy Car
- Refrigerator
- Surge Protector
- Lego Set
- Hand Lotion
- Light Bulbs
- Nail Polish
- Sunblock
- Socks
- Headphones
- Printer Paper
- Baby Stroller
- Suitcase
- Dog Food
- Detergent
- Water Bottle