



Digital Commerce: Alibaba's Contributions to the U.S. Economy

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SUMMARY

Alibaba offers multiple e-commerce platforms that enable sellers, ranging from global brands and mid-sized companies to small businesses and individual artisans, to sell their products internationally and reach more than a billion consumers in China and other markets. In 2020, large and small U.S. brands sold over \$55.2 billion worth of products to Chinese consumers on Alibaba platforms.

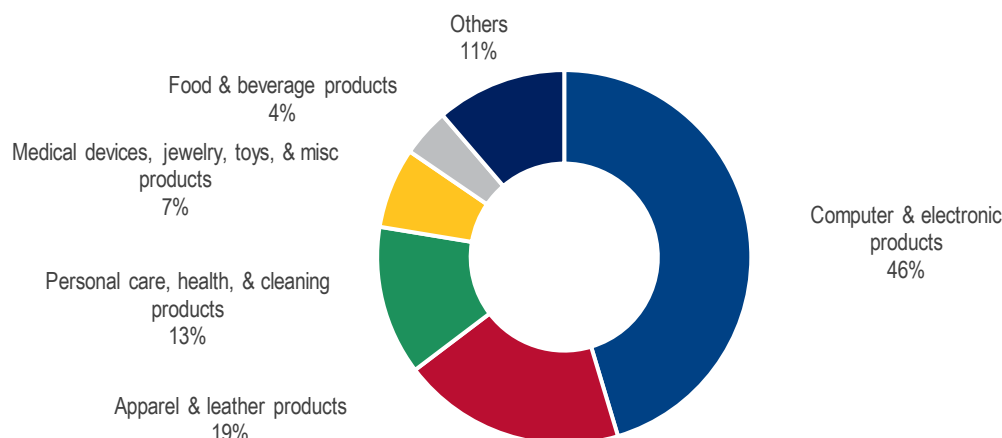
The Alibaba platforms studied and featured in this report include Taobao Global, Tmall, Tmall Global, Freshippo, and Kaola. As part of Alibaba's Taobao Marketplace, one of the world's largest consumer-to-consumer (C2C) platforms, Taobao Global connects companies outside of China to a network of over 60,000 independent online Chinese retailers. In this way, Taobao creates a channel for smaller global brands to sell their products in China, one of the world's largest and fastest-growing digital consumer markets. Tmall and Tmall Global, Alibaba's business-to-consumer (B2C) platforms, provide online stores for global brands and their authorized retailers to sell products directly to Chinese consumers. Freshippo and Kaola, Alibaba's newest platforms, provide Chinese consumers with high-quality imported products and diverse shopping experiences.

U.S. brands sell a wide range of products, from consumer staples to luxury goods, on Alibaba platforms. In 2020, the three largest product categories were computers and electronics, which accounted for 46% of total product sales from U.S. brands, followed by apparel and leather products (19%), and personal care, health, and cleaning products (13%).² (Figure 1)

¹ Nam D. Pham is Managing Partner and Mary Donovan is Principal at ndp | analytics. Stephanie Barelo provided research assistance. The Alibaba Group provided financial support to conduct this study. The opinions and views expressed in this report are solely those of the authors.

² This study analyzes the economic impact of Alibaba sales of U.S. products by industry. To do this, product-level data was mapped to broader industry classifications based on the North American Industry Classification System (NAICS). The study methodology is described in the Appendix.

Figure 1.
Computers and electronics accounted for the largest share of sales of U.S. products on Alibaba platforms in 2020³



U.S. brands sell their products directly and indirectly to Chinese customers on Alibaba platforms using various business models. Smaller brands often choose to work with retail partners who already own and operate online stores on Taobao Global. This model allows companies, especially small businesses, to efficiently market and sell their products to Chinese consumers. In contrast, many larger brands tend to sell directly to consumers through their own online “flagship” stores on Tmall and Tmall Global, or they authorize retailers to sell their products in exclusive or specialized stores on those platforms. Brands that own and operate flagship stores receive nearly all revenues from products sold on Alibaba platforms. Brands that use online retailers to sell to Chinese consumers on Alibaba receive the revenue from product sales minus compensation paid to retail partners for their services. These global retail partners are estimated to receive 28% of total sales of U.S. products on Alibaba’s platforms which is in line with the practices of the broader global retail industry. In fact, during 2019 and 2020, global retailers’ gross margin averaged 26.2% and online retailers’ gross margin averaged 39.4%.⁴

Chinese shoppers purchase billions of dollars worth of U.S. products on Alibaba’s platforms every year, generating revenue for U.S. brands and benefitting the U.S. economy. After subtracting revenues that flow to global retail partners, U.S. brands are estimated to have generated approximately \$39.7 billion in revenues in 2020. These figures are in line with data reported for other international retailers. In addition to generating revenues directly for the brands, U.S. products sold on Alibaba’s platforms produce substantial spillover benefits to companies along the supply chain and in communities in the United States. These spillover benefits, commonly referred to as indirect and induced effects, are estimated using official industry economic multipliers. In 2020, U.S. brands generated \$39.7 billion in direct revenues (also called “output”) from products sold on Alibaba, which created an additional \$29.9 billion in indirect and induced output for companies along the supply chain and in local communities; in total, U.S. brands’ sales on Alibaba platforms supported \$69.6 billion in gross output across the United States.

³ The Alibaba Group.

⁴ Damadoran Online Data.

Sales of U.S. products on Alibaba’s platforms increase economic activity in the United States. This new activity is value-added to the U.S. gross domestic product (GDP); it is calculated by subtracting the costs of intermediary goods and services from gross output. In 2020, sales of products from U.S. brands on Alibaba directly contributed \$26.5 billion to U.S. GDP and supported an additional \$12.6 billion in indirect and induced contributions. In total, sales of U.S. products on Alibaba added \$39.1 billion to U.S. GDP in 2020.

U.S. brands employ production and non-production workers to produce and sell their products and manage operations in the United States. In 2020, sales of products from U.S. brands on Alibaba created 124,561 direct U.S. jobs and supported an additional 131,725 indirect and induced jobs along the supply chain and in communities. These 256,286 jobs, in total, generate wages and support individuals and families across the country. In 2020, a total of \$21.0 billion was paid to workers in connection with sales of U.S. products on Alibaba’s platforms, including \$11.9 billion in direct wages and salaries paid by U.S. brands and \$9.1 billion in indirect and induced wages. (Table 1)

Table 1.
Sales of products from U.S. brands on Alibaba platforms create ripple effects along the supply chain in the U.S. economy⁵

Industry	Direct Impact	Indirect and Induced Impact	Total Impact
Gross Revenue/Output (\$M)	\$39,650.8	\$29,907.9	\$69,558.7
Value-Added (\$M)	\$26,493.7	\$12,599.5	\$39,093.2
Production and Non-Production Jobs	124,561	131,725	256,286
Wages and Salaries (\$M)	\$11,911.7	\$9,136.2	\$21,047.9

Alibaba’s platforms provide a variety of vehicles for premium brands, smaller brands, and entrepreneurs in the U.S. to penetrate the world’s largest consumer market of more than 1.4 billion people. Utilizing innovative technology, Alibaba successfully connects U.S. brands to the tools they need to sell their products — from high-tech consumer electronics to fresh produce — to Chinese consumers across many demographics. Like all other cross-border trading activities, products sold in China, directly and indirectly, create positive economic effects for the U.S. economy.

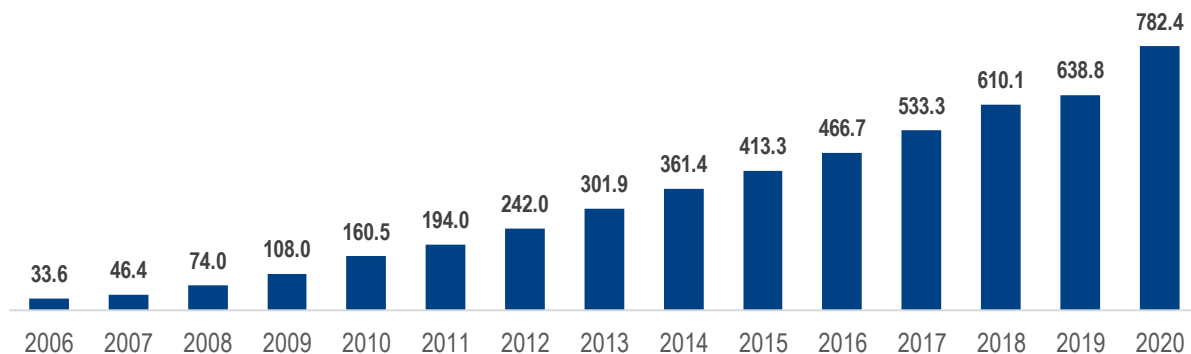
ALIBABA B2C AND C2C PLATFORMS

Since its inception in 1999, Alibaba has deployed advanced technologies to provide sellers, ranging from large global corporations to small businesses, access to the Chinese market and other markets overseas. Global brands and businesses use Alibaba platforms to reach online shoppers in China. This segment of Chinese consumers has grown exponentially, from nearly 34 million online shoppers in 2006 to over 782 million in 2020. (Figure 2)

⁵ The Alibaba Group; Bureau of Economic Analysis; ndp | analytics.

Figure 2.

Online shoppers in China grew 23x, from 34 million to 782 million people, in 15 years⁶



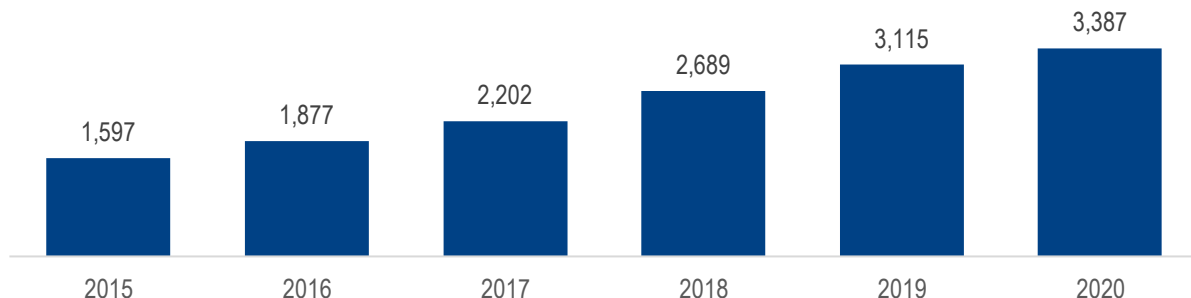
The Alibaba platforms studied in this report include Taobao Global, Tmall, Tmall Global, Freshippo, and Kaola. Each platform is unique and offers U.S. brands, both large and small, the opportunity to reach billions of consumers in China and other markets.

Taobao Global

In 2004, Alibaba launched its Taobao Marketplace platform, allowing small businesses and individuals to open online stores to sell products to Chinese consumers. Customers on Taobao are relatively split between men and women. Roughly 82% live in urban areas, and 56% are under 35 years old; lower-income consumers make up 36% of Taobao shoppers.⁷ The platform has experienced continued growth in recent years. From 2015 to 2020, Taobao's gross merchandise value doubled from 1.6 trillion yuan (\$251.1 billion) to 3.4 trillion yuan (\$532.5 billion). (Figure 3)

Figure 3.

Gross merchandise value of Taobao doubled from 1.6 trillion yuan to 3.4 trillion yuan in 5 years⁸



⁶ Statista.

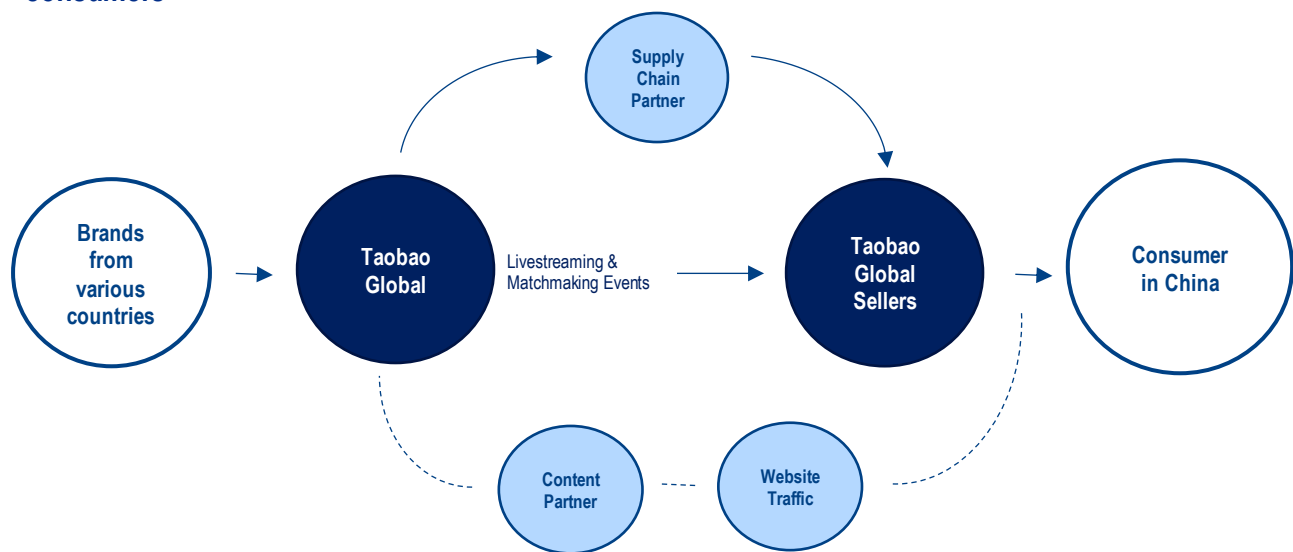
⁷ Statista Global Consumer Survey. 2021. "Online shops: Taobao.com in China 2021." Statista; Alibaba.

⁸ Statista.

In 2007, Alibaba extended its consumer-to-consumer (C2C) platform to create Taobao Global. As part of Taobao Marketplace, Taobao Global connects smaller foreign brands with a network of over 60,000 independent online Chinese retailers to bring high-quality products to Chinese consumers. This connectivity promotes smaller foreign brands to Chinese consumers. Brands typically establish distribution arrangements where they supply the products, and their retail partners promote and deliver them to Chinese consumers in a manner best suited for the market. These online Chinese retail partners provide a “one-stop” solution that covers marketing, delivery, customer service, and other forms of assistance as part of their offerings in the Chinese market. (Figure 4)

Figure 4.

Taobao Global connects foreign brands with Chinese retailers to sell products to Chinese consumers⁹



Tmall & Tmall Global

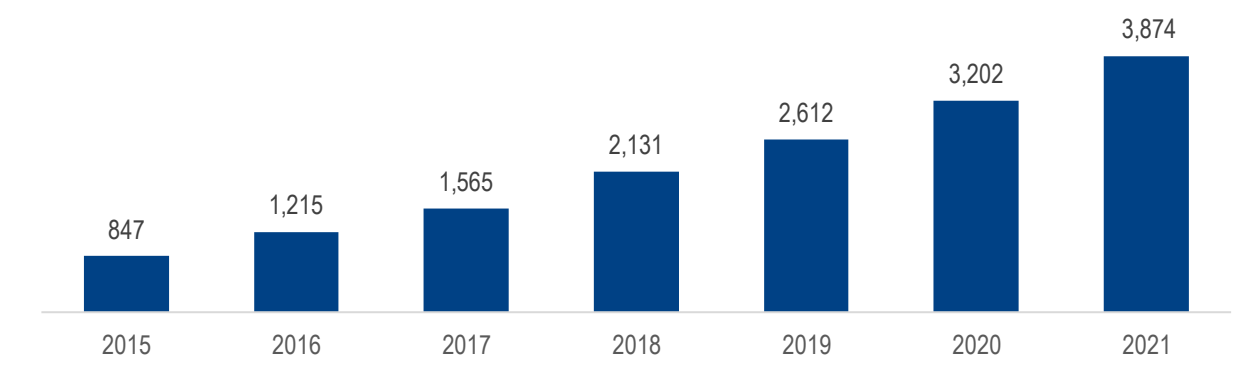
In 2008, Alibaba launched Tmall, a business-to-consumer (B2C) online platform, to complement Taobao’s C2C portal and provide a platform for brands of all sizes, from small- and medium-enterprises to large corporations, to reach Chinese consumers. Six years later, in 2014, Alibaba launched the worldwide version, Tmall Global, a cross-border e-commerce platform providing domestic consumers with imported products. The operations and legal requirements differ between the two platforms. For example, to sell products on Tmall, foreign brands must create a business entity and register their trademark in China. In addition, the brand’s operations, including warehousing and shipping, must be handled within China. The opposite is true for Tmall Global: brands must create their business entities and register trademarks outside of mainland China. They can operate their businesses and ship their products from any overseas country.

⁹ [Taobao Global](#)

Similar to Taobao, Tmall shoppers are roughly split between men and women. However, the income demographics are slightly different; unlike Taobao, middle-income consumers make up 37% of Tmall customers.¹⁰ Tmall has experienced rapid growth in recent years. From 2015 to 2021, the gross merchandise value of Tmall more than quadrupled from 847 billion yuan (\$13.3 billion) to 3.9 trillion yuan (\$609.0 billion). (Figure 5)

Figure 5.

Gross merchandise value of Tmall quadrupled from 847 billion yuan to 3.9 trillion yuan in 6 years¹¹



Tmall and Tmall Global have different store types, such as flagship, authorized, and specialty stores. Flagship stores are owned and operated by brand (trademark) owners or exclusive dealers (merchants) directly authorized by the brand owners. Additionally, these merchants can open authorized stores, also called franchise stores, to sell multiple products in different categories for one brand or multiple sub-brands. Finally, merchants authorized by brand owners can open specialty to sell two or more brands under one category. These brands and merchants sell all types of goods, ranging from beauty products, toys, and clothes to watches, luxury cars, premium wines, and beyond.

Freshippo & Kaola

Since its launch in 2016, Freshippo, Alibaba’s physical supermarket channel, has ushered grocery shopping into the digital era. With approximately 200 stores, Freshippo has become popular among Chinese consumers with features such as a mobile-first shopping experience, 30-minute delivery options, and a vast selection of products, including live seafood with cook-in-store options.¹² In 2019, Alibaba acquired Kaola, an e-commerce platform to provide Chinese consumers with high-quality imported products.¹³ The platform allows foreign brands to promote their products across online forums, portals, and marketing channels. Kaola offers three business models: wholesale buying, an online marketplace, and integration with the seller’s own website or product sales management system. The products sold on Kaola include baby formula and baby products, packaged foods and nutrition products, cosmetics, household and personal care products, apparel

¹⁰ Statista Global Consumer Survey – Brand Report. 2021. “Online shop: tmall.com in China 2021.” Statista.

¹¹ Statista 2022 (2006-2020 data); [Alibaba 2021 Annual Report](#) (2021 data)

¹² [Alizila](#)

¹³ [Alibaba PR Newswire](#)

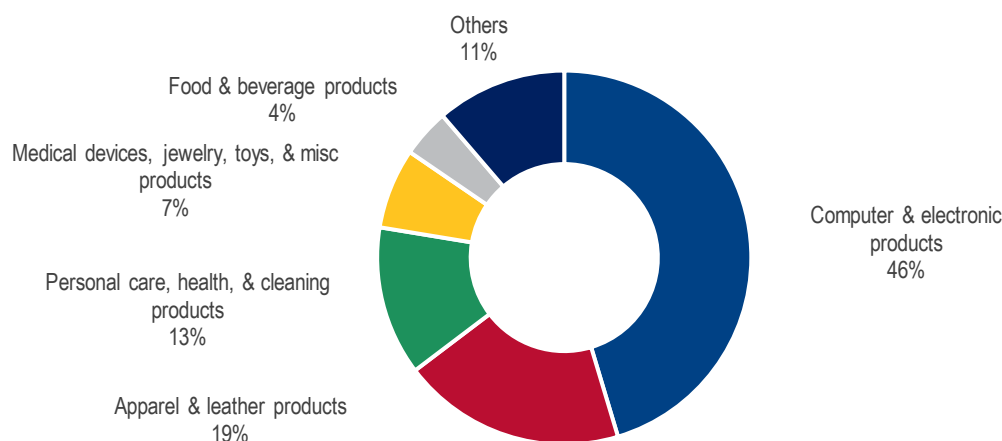
and accessories, and small consumer electronics.¹⁴ Unlike Taobao and Tmall, female shoppers make up over 80% of Kaola’s customers. 39% of Kaola shoppers are under 25, and 75% are 30 years old and younger.¹⁵

SALES OF U.S. BRANDS ON ALIBABA PLATFORMS IN CHINA

U.S. products continue to gain popularity among Chinese consumers. In 2020, sales of products from U.S. brands on Alibaba’s platforms totaled over \$55.2 billion, a 23% increase from 2019. These sales were generated from more than 1.4 billion orders placed by Chinese shoppers, a 25% increase from 2019.

The U.S. brands that sell products on Alibaba come from many different industries. To examine the impact of their sales, this study mapped product-level data to broader industry classifications based on the North American Industry Classification System (NAICS).¹⁶ In 2020, the top three categories were computers and electronics, which accounted for the largest share of product sales from U.S. brands (46%), followed by apparel and leather products (19%), and personal care, health, and cleaning products (13%). (Figure 6)

Figure 6.
In 2020, 46% of sales from U.S. brands were computer and electronic products¹⁷



Sales of products from U.S. brands increased across most categories from 2019 to 2020. The largest category, computers and electronics, grew by 28%, from \$19.6 billion in 2019 to \$25.1 billion in 2020. Similarly, sales of apparel and leather products rose 20%, from \$8.9 billion in 2019 to \$10.7 billion in 2020. During that same period, personal care, health, and cleaning products grew by 53% from \$4.7 billion to \$7.1 billion. (Table 2)

¹⁴ [Department for International Trade](#)

¹⁵ Statista

¹⁶ See Appendix for detailed methodology.

¹⁷ The Alibaba Group

Table 2.

Sales of computers and electronics from U.S. brands on Alibaba grew 28% from 2019 to 2020¹⁸

Total Sales of Top 10 Product Categories (millions of USD)

	2019	2020	Growth
Computer & electronic products	\$19,575.1	\$25,050.8	28.0%
Apparel & leather products	\$8,896.3	\$10,673.2	20.0%
Personal care, health, & cleaning products	\$4,660.9	\$7,128.0	52.9%
Medical devices, jewelry, toys, & other misc. products	\$3,195.0	\$3,839.4	20.2%
Food & beverage products	\$2,000.5	\$2,305.7	15.3%
Electrical equipment & appliances	\$1,173.7	\$1,460.0	24.4%
Furniture	\$664.2	\$1,091.8	64.4%
Baby diapers, paper supplies, & packaging	\$982.1	\$1,474.5	50.1%
Motor vehicles and parts & bikes	\$2,886.2	\$947.8	-67.2%
Hardware/tools, & kitchen/tableware	\$204.9	\$296.4	44.7%

Number of Orders of Top 10 Product Categories (millions)

	2019	2020	Growth
Computer & electronic products	85.5	97.6	14.1%
Apparel & leather products	213.6	252.6	18.3%
Personal care, health, & cleaning products	264.2	347.8	31.6%
Medical devices, jewelry, toys, & other misc. products	139.7	162.9	16.6%
Food & beverage products	193.0	237.7	23.2%
Electrical equipment & appliances	30.5	30.6	0.2%
Furniture	11.8	14.3	21.5%
Baby diapers, paper supplies, & packaging	120.0	168.6	40.5%
Motor vehicles and parts & bikes	14.1	16.8	19.1%
Hardware/tools, & kitchen/tableware	16.5	24.0	46.1%

THE ECONOMIC CONTRIBUTIONS OF ALIBABA'S PLATFORMS TO THE U.S. ECONOMY

Most premium and larger U.S. brands sell their products directly to Chinese consumers through Alibaba's online stores or through authorized retailers. In contrast, smaller U.S. brands tend to rely on retail partners who have a deep knowledge of local culture, consumer tastes, and preferences — and languages and dialects — to market their products effectively to Chinese consumers on Alibaba's Taobao Global platform. These retail partners are typically independent entrepreneurs who live in China or elsewhere while operating

¹⁸ The Alibaba Group.

their online stores on Alibaba’s platforms. The fees charged by retail partners for their services vary depending on factors such as store type, product type, and other partnership terms.

The output generated from U.S. brands’ activity on Alibaba is calculated by subtracting typical retail margins from total product sales for each business unit, store type, and product category. Global retail partners are estimated to receive 28% of total sales of U.S. products on Alibaba’s platforms, which is in line with the broader global retail industry. During 2019 and 2020, global retailers’ gross margin averaged 26.2% and online retailers’ gross margin averaged 39.4%.¹⁹

Based on these assumptions, U.S. brands generated nearly \$39.7 billion from selling their products to Chinese consumers on Alibaba platforms in 2020. Computer and electronic products generated nearly \$21.2 billion, apparel and leather products generated almost \$5.9 billion, and personal care, health, and cleaning products generated nearly \$4.3 billion. (Table 3)

Table 3.
U.S. brands generated nearly \$39.7 billion from selling their products on Alibaba in 2020²⁰

	Output of U.S. Brands (\$M)
Manufacturing products	\$39,291.2
Computer & electronic products	\$21,154.6
Apparel & leather products	\$5,890.5
Personal care, health, & cleaning products	\$4,277.6
Medical devices, jewelry, toys, & other misc. products	\$2,285.6
Food & beverage products	\$1,529.1
Electrical equipment & appliances	\$1,136.1
Furniture	\$858.5
Baby diapers, paper supplies, & packaging	\$816.7
Motor vehicles and parts & bikes	\$840.1
Hardware/tools, & kitchen/tableware	\$201.4
Other manufacturing products	\$300.9
Non-manufacturing products	\$359.7
Total	\$39,650.8

The economic impacts of products from U.S. brands sold on Alibaba’s platforms extend beyond the revenue received by U.S. brands. Increased production, operations, and investments of U.S. brands create a ripple effect that generates additional economic benefits for companies along the supply chain, local communities, and the overall U.S. economy. In 2020, U.S. brands generated approximately \$39.7 billion in sales (also called “output”) of products to Chinese consumers. These outputs result in increased economic activity across

¹⁹ Damadoran Online Data. Operating and Net Margins by Industry.

²⁰ The Alibaba Group; ndp | analytics.

the U.S. supply chain, commonly referred to as indirect and induced effects. Based on official industry output multipliers calculated and published by the U.S. Bureau of Economic Analysis (BEA), the direct output of U.S. brands generated an additional \$29.9 billion in indirect and induced output for U.S. suppliers and businesses. Altogether, sales of products from U.S. brands on Alibaba's platforms generate a combined \$69.6 billion in direct, indirect, and induced economic output in the U.S. (Table 4)

Table 4.
Sales of products from U.S. brands on Alibaba generated \$69.6 billion in total output in the U.S.²¹

	Direct Output (\$M)	Indirect & Induced Output (\$M)	Total Output (\$M)
Manufacturing products	\$39,291.2	\$29,837.2	\$69,128.4
Computer & electronic products	\$21,154.6	\$14,078.1	\$35,232.7
Apparel & leather products	\$5,890.5	\$5,396.8	\$11,287.3
Personal care, health, & cleaning products	\$4,277.6	\$3,385.3	\$7,662.8
Medical devices, jewelry, toys, & other misc. products	\$2,285.6	\$1,761.7	\$4,047.4
Food & beverage products	\$1,529.1	\$1,796.3	\$3,325.4
Electrical equipment & appliances	\$1,136.1	\$864.4	\$2,000.5
Furniture	\$858.5	\$726.8	\$1,585.3
Baby diapers, paper supplies, & packaging	\$816.7	\$691.4	\$1,508.1
Motor vehicles and parts & bikes	\$840.1	\$711.2	\$1,551.3
Hardware/tools, & kitchen/tableware	\$201.4	\$170.5	\$372.0
Other manufacturing products	\$300.9	\$254.7	\$555.6
Non-manufacturing products	\$359.7	\$70.6	\$430.3
Total	\$39,650.8	\$29,907.9	\$69,558.7

Sales, or output, include the costs of intermediary goods and services, as well as the internal costs of adding value to the goods and services before selling them. The latter is the "value-added" or "economic contribution" to the gross domestic product (GDP). Based on official BEA industry value-added-to-output ratios, products from U.S. brands sold to Chinese customers on Alibaba's platforms directly contributed \$26.5 billion to U.S. GDP in 2020. Applying industry value-added multipliers, calculated and published by BEA, U.S. brands and U.S. retail partners contributed an additional \$12.6 billion in indirect and induced value-added contributions to the U.S. economy in 2020. Altogether, products from U.S. brands sold on Alibaba's platforms to Chinese consumers contributed \$39.1 billion in value-added to the U.S. economy in 2020. (Table 5)

²¹ The Alibaba Group; ndp | analytics.

Table 5.

Sales of products from U.S. brands on Alibaba contributed nearly \$39.1 billion to U.S. GDP²²

	Direct Value-Added (\$M)	Indirect & Induced Value-Added (\$M)	Total Value-Added (\$M)
Manufacturing products	\$26,446.7	\$12,551.7	\$38,998.4
Computer & electronic products	\$17,729.4	\$4,801.7	\$22,531.1
Apparel & leather products	\$3,243.1	\$2,792.0	\$6,035.1
Personal care, health, & cleaning products	\$2,164.3	\$1,225.3	\$3,389.6
Medical devices, jewelry, toys, & other misc. products	\$1,234.2	\$916.9	\$2,151.1
Food & beverage products	\$459.4	\$765.0	\$1,224.4
Electrical equipment & appliances	\$564.5	\$365.3	\$929.8
Furniture	\$392.5	\$386.2	\$778.7
Baby diapers, paper supplies, & packaging	\$259.1	\$481.7	\$740.8
Motor vehicles and parts & bikes	\$203.8	\$558.2	\$762.0
Hardware/tools, & kitchen/tableware	\$83.3	\$99.4	\$182.7
Other manufacturing products	\$113.0	\$159.9	\$272.9
Non-manufacturing products	\$47.1	\$47.8	\$94.9
Total	\$26,493.7	\$12,599.5	\$39,093.2

Sales of products from U.S. brands on Alibaba’s platforms positively impact U.S. employment markets via two channels. First, U.S. brands hire production and non-production workers to fulfill the demand of Chinese consumers; these are commonly referred to as “direct” jobs. Second, U.S. brands indirectly create jobs in upstream and downstream industries, commonly referred to as “indirect and induced” jobs. In 2020, U.S. brands generated nearly \$39.7 billion in revenues from selling their products on Alibaba’s platforms. Based on sales-per-employee ratios, calculated using industry data published by BEA, U.S. brands created 124,561 direct production and non-production jobs. Applying BEA’s industry employment multipliers, U.S. brands supported 131,725 indirect and induced jobs across all U.S. industries. Altogether, products from U.S. brands sold to Chinese consumers on Alibaba’s platforms supported 256,286 direct, indirect, and induced jobs in the U.S. in 2020. (Table 6)

²² The Alibaba Group; ndp | analytics.

Table 6.

Sales of products from U.S. brands on Alibaba supported 256,286 U.S. jobs²³

	Direct Jobs	Indirect & Induced Jobs	Total Jobs
Manufacturing products	123,978	131,449	255,427
Computer & electronic products	59,229	70,719	129,948
Apparel & leather products	37,726	18,909	56,635
Personal care, health, & cleaning products	4,640	10,775	15,415
Medical devices, jewelry, toys, & other misc. products	7,152	7,458	14,611
Food & beverage products	2,974	6,392	9,366
Electrical equipment & appliances	3,382	4,543	7,925
Furniture	4,498	6,412	10,910
Baby diapers, paper supplies, & packaging	1,536	2,190	3,726
Motor vehicles and parts & bikes	1,175	1,674	2,849
Hardware/tools, & kitchen/tableware	785	1,119	1,904
Other manufacturing products	882	1,257	2,139
Non-manufacturing products	583	276	858
Total	124,561	131,725	256,286

U.S. brands pay their production and non-production workers directly. Using BEA's wage-per-employee by industry, U.S. brands paid their workers approximately \$11.9 billion to produce and sell their products on Alibaba's platforms in 2020. Applying the industry wage multipliers calculated and published by BEA, U.S. brands supported an additional \$9.1 billion in indirect and induced wages across all U.S. industries. Combined, products from U.S. brands sold to Chinese consumers on Alibaba's platforms supported \$21.0 billion in direct, indirect, and induced wages in the U.S. in 2020. (Table 7)

²³ The Alibaba Group; ndp | analytics.

Table 7.

Sales of products from U.S. brands on Alibaba supported \$21.0B in wages for U.S. workers²⁴

	Direct Wages (\$M)	Indirect & Induced Wages (\$M)	Total Wages (\$M)
Manufacturing products	\$11,887.8	\$9,119.1	\$21,006.8
Computer & electronic products	\$8,128.0	\$5,410.1	\$13,538.1
Apparel & leather products	\$1,832.7	\$1,425.4	\$3,258.1
Personal care, health, & cleaning products	\$486.5	\$642.3	\$1,128.8
Medical devices, jewelry, toys, & other misc. products	\$506.6	\$484.0	\$990.6
Food & beverage products	\$163.2	\$313.3	\$476.5
Electrical equipment & appliances	\$250.0	\$263.4	\$513.4
Furniture	\$227.6	\$253.8	\$481.4
Baby diapers, paper supplies, & packaging	\$112.2	\$125.2	\$237.4
Motor vehicles and parts & bikes	\$78.1	\$87.1	\$165.1
Hardware/tools, & kitchen/tableware	\$48.5	\$54.1	\$102.7
Other manufacturing products	\$54.3	\$60.5	\$114.8
Non-manufacturing products	\$24.0	\$17.1	\$41.1
Total	\$11,911.7	\$9,136.2	\$21,047.9

CONCLUSION

While the future of e-commerce continues to take shape, Alibaba is making significant and growing contributions to the U.S. economy. As this analysis has shown, Alibaba's diverse suite of platforms generates substantial economic output, supports hundreds of thousands of U.S. jobs, and accounts for important induced benefits throughout the United States. These e-commerce activities generate substantial positive economic impacts. Through its platforms, Alibaba is advancing how American brands of all sizes, who sell virtually every type of product, reach over a billion consumers in China and other markets.

²⁴ The Alibaba Group; ndp | analytics.

Appendix: Data Sources and Methodology

This report relies on data provided by the Alibaba Group, official industry statistics, and economic multipliers compiled and published by U.S. governmental agencies, and third-party research. Below are data descriptions and sources of four major datasets used in this report.

1. The Alibaba Group provided annual sales in 2019 and 2020 by business unit, store type, and product category. The business units included in this study are Taobao Global, Tmall, Tmall Global, Freshippo, and Kaola. The store types included are Taobao Global stores, flagship stores, exclusive stores, specialized stores, Freshippo stores, and Kaola stores. Alibaba sales data are classified into 171 product categories.
2. The Alibaba Group also provided a range of estimated gross profits of global retail partners by product category and store type. Retail partners' gross profits are total sales on Alibaba platforms minus the cost of goods sold paid to the U.S. brands who leveraged the platforms and retail partners. Global retail partners, who are independent retailers and not employed by the Alibaba Group, help U.S. brands market and sell their products on Alibaba platforms. Less than half of the retail partners for U.S. brands on Tmall Global are U.S. retail partners, while most retail partners in Taobao Global, Tmall, Freshippo, and Kaola are Chinese retailers.
3. Official industry statistics, including gross output, value-added, employment, and wages, were obtained from the U.S. Bureau of Economic Analysis (BEA). BEA industry data are classified based on the North America Industry Classification System (NAICS) codes at 2-digit level and 3-digit level.
4. Official industry-level economic multipliers were obtained from BEA. The agency's Regional Input-Output Modeling System (RIMS II) calculates and publishes economic multipliers (indirect and induced impacts) of gross output, value-added, employment, and wages.

Using Alibaba's proprietary sales data and estimated gross profits of global retail partners as well as U.S. official industry statistics and economic multipliers, the study estimated the total direct, indirect, and induced impacts of products from U.S. brands sold on Alibaba platforms to the U.S. economy. Below are the major calculations used to quantify the economic impacts.

1. Revenues of U.S. brands from products sold on Alibaba platforms:
 - a. Annual sales include revenues of U.S. brands and gross profits of global retail partners. The study estimated the average gross profits of retail partners on Alibaba platforms by business unit and product category to calculate revenues received by U.S. brands from sales of their products on Alibaba platforms.
2. Direct economic impacts by industry:
 - a. Output: The study created concordances to map Alibaba's 171 product categories to 26 manufacturing and non-manufacturing industries, based on 2-digit and 3-digit NAICS codes. The study then categorized product-level revenues of U.S. brands into 26 NAICS industries.
 - b. Value-added/Contribution to GDP: The study applied value-added-to-output ratios from BEA to calculate the direct value-added of U.S. brands for each of 26 NAICS industries.

- c. Employment: The study divided the annual revenue of U.S. brands by gross output per employee from BEA to calculate direct jobs in each of the 26 NAICS industries.
 - d. Wages: The study applied BEA's wage-per-employee data to the number of estimated jobs to calculate direct wages for each of the 26 NAICS industries.
3. Indirect and induced economic impacts by industry: We used BEA's economic multipliers to calculate indirect and induced impacts of output, value-added, employment, and wages in each NAICS industry.
 4. Total economic impact to the U.S. economy is the sum of direct, indirect, and induced economic impacts.

The NAICS codes that correspond to the categories in this study's tables and charts are below.

	NAICS Codes
Manufacturing products	31-33
Computer & electronic products	334
Apparel & leather products	315-6
Personal care, health, & cleaning products	325
Medical devices, jewelry, toys, & other misc. products	339
Food & beverage products	311-2
Electrical equipment & appliances	335
Furniture	337
Baby diapers, paper supplies, & packaging	322
Motor vehicles and parts & bikes	336
Hardware/tools, & kitchen/tableware	332
Other manufacturing products	All other 31-33
Non-manufacturing products	11, 44-45, 51, 54, 61, 62, 71, 72