



Digital Commerce: Alibaba's Contributions to the U.S. Economy by State and Industry

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Alibaba's Economic Contributions in UNITED STATES

Alibaba provides U.S. brands, ranging from small businesses to multinational corporations, with e-commerce platforms to sell their products to consumers in China. Like all cross-border trading activities, products sold in China, directly and indirectly, create positive economic effects for the U.S. economy. These sales generate billions for U.S. brands, resulting in substantial contributions to the companies along the supply chain and communities across the United States.

Sales from U.S. brands on Alibaba create ripple effects along the supply chain in the U.S. economy

Direct, Indirect, and Induced Economic Impact, 2022



\$52.9B

Total Value Added to the U.S. Economy (GDP)



403K

Total U.S. Jobs Supported

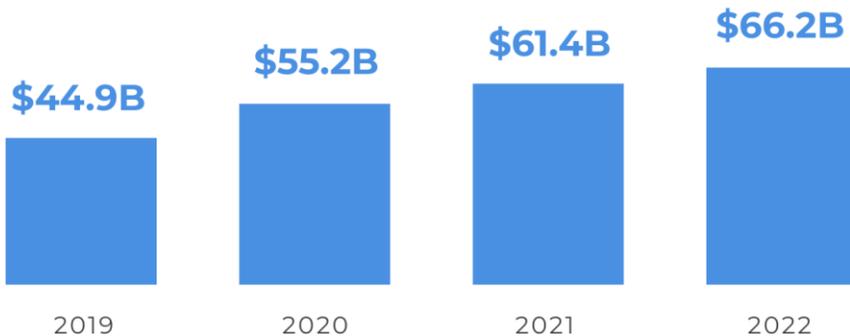


\$36.4B

Total Wages Supported for U.S. Workers

The benefits of Alibaba to the U.S. economy have increased over time

Sales on Alibaba by U.S. brands, 2019-22



U.S. small businesses generate sales on Alibaba platforms



Source: Pham, Nam D. and Mary Donovan. 2024. "Digital Commerce: Alibaba's Contributions to the U.S. Economy by State and Industry." ndp analytics.

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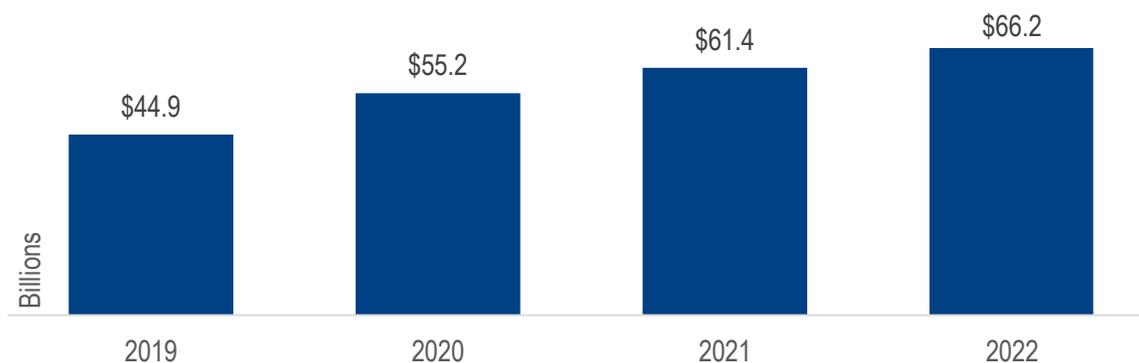
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ndp | analytics¹

Alibaba offers multiple e-commerce platforms that enable sellers, ranging from large global brands to small and medium-sized businesses, to offer their products to over one billion consumers in China, one of the world's largest and fastest-growing digital consumer markets in the world. In 2022, large and small U.S. brands utilized Alibaba's e-commerce platforms to sell approximately \$66.2 billion worth of products to consumers in China, a 47.4% increase since 2019. (Figure 1)

Figure 1.

Sales by U.S. brands on Alibaba to consumers in China have grown over 47% since 2019

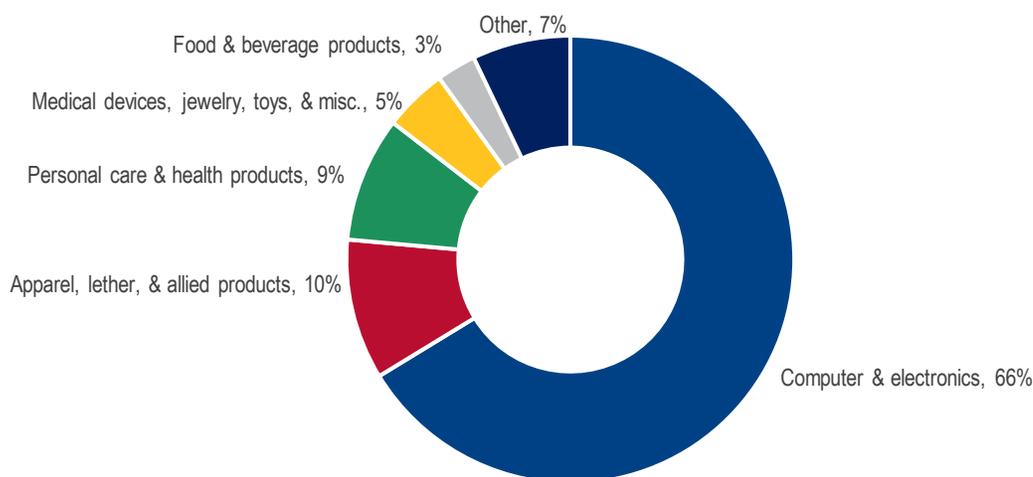


The Alibaba platforms included in this report are Taobao Global, Tmall, Tmall Global, Freshippo, and Koala. As part of Alibaba's Taobao Marketplace, one of the world's largest consumer-to-consumer (C2C) platforms, Taobao Global connects companies, especially smaller brands, to a network of around 60,000 independent online Chinese retailers to sell their products in China. 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 consumers in China. Freshippo and Koala platforms provide Chinese consumers with high-quality imported products and diverse shopping experiences.

¹ Nam D. Pham, Ph.D. is Managing Partner and Mary Donovan is Principal at ndp | analytics. Stephanie Barelo and Ilma Fadhil 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.

U.S. brands sell a wide range of products, from consumer staples to luxury goods, on Alibaba platforms. In 2022, the three largest product categories were computers & electronics (66% of product sales from U.S. brands), apparel & leather products (10%), and personal care & cleaning products (9%). (Figure 2)

Figure 2.
Computers & electronics accounted for 66% of U.S. products sold on Alibaba platforms in 2022²



Direct Economic Impact

U.S. brands utilize different business models on Alibaba platforms to sell products directly and indirectly to consumers in China. Smaller brands often work with local retail partners who own and operate online stores on Taobao Global. This model allows companies, especially small businesses, to efficiently market and sell their products to consumers in China. In contrast, larger brands often sell directly to consumers through their own online “flagship” stores on Tmall and Tmall Global or authorize global 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 consumers in China 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 26% of total sales of U.S. products on Alibaba’s platforms, which is in line with the common practices of the broader global retail industry; from 2019 to 2022, global retailers’ gross margin averaged 25.5% and online retailers’ gross margin averaged 39.8%.³

Every year, shoppers in China purchase billions of dollars’ worth of U.S. products on Alibaba’s platforms, generating revenue for U.S. brands and benefitting the U.S. economy. In 2022, U.S. brands are estimated to have generated approximately \$49.3 billion after subtracting revenues that flow to global retail partners. This

² Alibaba.

³ Damadoran Online Data.

revenue, often called “output” in national account statistics, generated by U.S. brands directly and indirectly creates value for the U.S. economy. (Table 1)

Sales of U.S. products on Alibaba platforms create a chain of positive economic impacts to the U.S. economy. U.S. brands contribute to value-added, which is sales minus costs of intermediary goods and services, to the U.S. gross domestic product (GDP). In 2022, U.S. brands generated \$49.3 billion in revenue from goods sold in China on Alibaba platforms. After subtracting the costs of intermediary goods and services, U.S. brands created \$38.4 billion value-added to the U.S. GDP. (Table 1)

U.S. brand sales on Alibaba create jobs for production and non-production workers across America who fill orders, manage sales, and support operations. In 2022, sales of products from U.S. brands on Alibaba platforms created 170,867 direct U.S. jobs that paid nearly \$19.8 billion in wages. (Table 1)

Table 1.
Sales of products from U.S. brands on Alibaba platforms create ripple effects in the U.S. economy⁴

	Direct Impact (\$M)
Gross Revenue/Output (\$M)	\$49,338.0
Value-Added (\$M)	\$38,439.2
Production and Non-Production Jobs	170,867
Wages and Salaries (\$M)	\$19,761.2

Small Business Sales

Small businesses are integral to the U.S. economy. Alibaba’s platforms allow small businesses to sell their products to consumers in China. Based on the official output statistics by business size and small business classifications published by the Bureau of Economic Analysis (BEA), we estimate U.S. small businesses with under 100 employees generated \$6.7 billion in sales on Alibaba platforms, accounting for 13.5% of U.S. brand sales on Alibaba platforms in 2022. (Table 2)

⁴ Alibaba; Bureau of Economic Analysis; ndp | analytics.

Table 2.

Nearly 14% of U.S. brand sales on Alibaba platforms were generated by small businesses in 2022⁵

	Direct Output (\$M)	Share of Small Business Output	Small Business Output (\$M)
Computer & Electronic Products (NAICS 334)	\$32,644	9.5%	\$3,106.0
Apparel & Leather Products (NAICS 315-6)	\$4,743	47.4%	\$2,249.9
Personal Care & Cleaning Products (NAICS 325)	\$4,458	6.9%	\$306.4
Medical Devices, Jewelry, Toys, & Other (NAICS 339)	\$2,258	20.1%	\$454.8
Food & Beverage Products (NAICS 311-2)	\$1,405	7.7%	\$107.6
Electrical Equipment & Appliances (NAICS 335)	\$956	11.0%	\$105.6
Paper Products (NAICS 322)	\$818	6.5%	\$53.4
Furniture & Related Products (NAICS 337)	\$771	24.5%	\$189.2
Transportation Equipment (NAICS 336)	\$265	2.9%	\$7.6
Metal Products (NAICS 332)	\$148	27.6%	\$40.8
Top 10 Industries	\$48,466	13.7%	\$6,621.3
All Industries	\$49,338.0	13.5%	\$6,669.8

Production Worker Employment

U.S. businesses create products and services to sell to consumers at home and abroad. Manufacturers hire production workers to assemble, pack, store, and ship products to customers.⁶ Based on official production employment data published by the U.S. Census, we estimate U.S. brands created 96,660 direct production jobs (56.6% of 170,867 total direct jobs) to support \$49.3 billion U.S. brand sales on Alibaba platforms in 2022. (Table 3)

⁵ Bureau of Economic Analysis. 2021. Updated and Expanded Small Business Statistics: Wages, Employment, and Gross Output by Industry and Enterprise Size, 2012 – 2017; ndp | analytics. In its dataset, BEA defines small businesses as those with under 100 employees.

⁶ According to the U.S. Census Glossary, production workers are “workers (up through the line-supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant’s own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Employees above the working-supervisor level are excluded from this item.”

Table 3.

U.S. sales on Alibaba platforms generated 96,660 jobs for U.S. production workers in 2022⁷

	Direct Jobs	Share of Production Jobs	Production Jobs
Computer & Electronic Products (NAICS 334)	105,938	46.0%	48,750
Apparel & Leather Products (NAICS 315-6)	39,486	77.5%	30,608
Medical Devices, Jewelry, Toys, & Other (NAICS 339)	8,450	65.1%	5,504
Personal Care & Cleaning Products (NAICS 325)	4,660	63.2%	2,944
Furniture & Related Products (NAICS 337)	3,806	76.0%	2,894
Electrical Equipment & Appliances (NAICS 335)	2,596	67.4%	1,749
Food & Beverage Products (NAICS 311-2)	2,542	77.6%	1,973
Paper Products (NAICS 322)	1,460	76.5%	1,117
Metal Products (NAICS 332)	519	74.7%	388
Transportation Equipment (NAICS 336)	304	72.9%	222
Top 10 Industries	169,761	56.6%	96,149
All Industries	170,867	56.6%	96,660

Total Economic Impact

In addition to generating revenues directly for U.S. brands, U.S. products sold on Alibaba platforms produce substantial spillover benefits to companies along the supply chain and in large and small communities across America. These benefits, commonly referred to as indirect and induced effects, are estimated using official industry economic multipliers. In 2022, U.S. brands generated \$49.3 billion in direct revenues from products sold on Alibaba platforms, which created an additional \$41.3 billion in indirect and induced output for companies along the supply chain and in U.S. communities. Altogether, U.S. brand sales on Alibaba platforms generated \$90.7 billion in gross output across the U.S. economy in 2022.

In 2022, U.S. brand sales on Alibaba directly added \$38.4 billion to the U.S. GDP and contributed an additional \$14.4 billion in indirect and induced value-added. In total, sales of U.S. products on Alibaba platforms added \$52.9 billion to the U.S. GDP in 2022.

U.S. brands employ workers across America to produce and sell products and manage operations. In 2022, U.S. brand sales on Alibaba platforms created 170,867 direct U.S. jobs and supported 232,044 indirect and induced jobs along the supply chain and in communities nationwide. These 402,911 total jobs generate wages and support individuals and families across the country. In 2022, \$36.4 billion was paid to workers in

⁷ U.S. Census. 2023. Annual Survey of Manufactures; ; ndp | analytics.

connection with sales of U.S. products on Alibaba's platforms, including \$19.8 billion in direct wages paid by U.S. brands and \$16.7 billion in indirect and induced wages. (Table 4)

Table 4.
Sales of products from U.S. brands on Alibaba platforms create ripple effects in the U.S. economy⁸

	Direct Impact	Indirect and Induced Impact	Total Impact
Gross Revenue/Output (\$M)	\$49,338.0	\$41,319.5	\$90,657.5
Value-Added (\$M)	\$38,439.2	\$14,412.4	\$52,851.6
Production and Non-Production Jobs	170,867	232,044	402,911
Wages and Salaries (\$M)	\$19,761.2	\$16,664.5	\$36,425.7

The economic contributions of Alibaba to the U.S. economy are distributed across states. The largest Census division is the Pacific, which generated \$22.6 billion in output, followed by East North Central (\$11.8 billion) and West South Central (\$11.5 billion). (Table 5)

Table 5.
Alibaba's economic contributions are realized across America⁹

	Total Output (\$M)	Total Value-Added (\$M)	Total Jobs	Total Wages (\$M)
MIDWEST				
East North Central (IL, IN, MI, OH, WI)	\$11,752.5	\$6,475.7	46,900	\$3,189.0
West North Central (IA, KS, MN, MO, NE, ND, SD)	\$7,473.4	\$4,191.7	28,088	\$1,968.4
NORTHEAST				
Middle Atlantic (NJ, NY, PA)	\$9,353.3	\$5,485.7	40,882	\$3,098.4
New England (CT, MA, ME, NH, RI, VT)	\$8,244.8	\$5,145.4	27,030	\$2,413.1
SOUTH				
East South Central (AL, KY, MI, TN)	\$2,969.4	\$1,541.8	12,679	\$707.6
South Atlantic (DC, DE, FL, GA, MD, NC, SC, VA, WV)	\$10,759.6	\$6,211.0	52,693	\$3,848.5
West South Central (AR, LA, OK, TX)	\$11,482.2	\$6,405.8	47,892	\$3,763.6
WEST				
Mountain (AZ, CO, ID, MT, NV, NM, UT, WY)	\$6,030.9	\$3,693.8	29,476	\$2,311.7
Pacific AK, CA, HI, OR, WA)	\$22,591.4	\$13,700.8	117,270	\$15,125.3

⁸ Alibaba; Bureau of Economic Analysis; ndp | analytics.

⁹ Geographic divisions are defined by the U.S. Census Bureau.

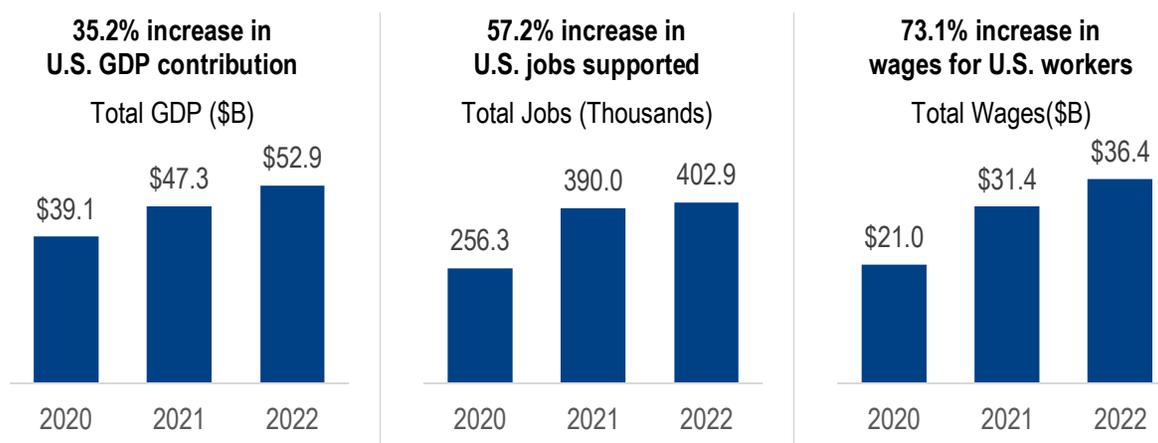
Alibaba platforms provide a variety of vehicles for premium brands, smaller brands, and entrepreneurs in the U.S. to penetrate the world’s largest consumer market of more than 1.4 billion people. Utilizing innovative technology, Alibaba provides U.S. brands with the tools to sell their products — from consumer electronics to fresh produce — to consumers in China 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.

Total Impact Over Time

The total economic contributions from large and small U.S. brands utilizing Alibaba’s e-commerce platforms have been increasing over the years. The economic contribution of Alibaba platforms to the U.S. GDP grew 35.2% from \$39.1 billion in 2020 to \$52.9 billion in 2022. During that time, the impacts of Alibaba platforms on U.S. jobs increased 57.2% from 256,286 workers to 402,911 workers and on U.S. wages grew 73.1% from \$21.0 billion to \$36.4 billion. (Figure 3)

Figure 3.

The total economic contributions of Alibaba platforms to the U.S. economy grew substantially in the past three years



Final Remarks

The economic contributions of Alibaba in the U.S. is far-reaching. U.S. businesses, large and small, in a variety of industries across the country utilize Alibaba’s platforms to sell products to consumers in China. These sales increase output of U.S. businesses which generates jobs, wages and adds to U.S. GDP. This economic activity includes the U.S. brands who sell on Alibaba’s platforms (direct impact), their supply chains (indirect impact), and the local communities where U.S. workers at the brands and along the supply chain spend their wages (induced impact). In 2022, the total impact (direct, indirect, and induced) of sales from U.S. brands on Alibaba platforms contributed \$52.9 billion to U.S. GDP and supported 402,911 U.S. jobs which paid \$36.4 billion in wages. Since 2020, the impact has grown; contributions to GDP increased by 35.2%, total U.S. jobs grew 57.2% and the wages paid to U.S. workers increased by 73.1%.

Data Sources and Methodology

This report relies on data provided by Alibaba, official industry statistics, 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. Alibaba provided annual sales in 2022 by business unit, store type, and product category. The business units included in this study are Taobao Global, Tmall, Tmall Global, Freshippo, and Koala. The store types included are Taobao Global stores, Tmall and Tmall Global flagship, exclusive, specialized, and other stores, Freshippo stores, and Koala stores. Alibaba sales data are classified into nearly 170 product categories.
2. Alibaba 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 Koala are Chinese retailers.
3. Official industry statistics by state, including gross output, value-added, employment, wages, small business output, and production worker employment, were obtained from the U.S. Bureau of Economic Analysis (BEA) and the Census. The industry data are classified based on the North American Industry Classification System (NAICS) codes at 2-digit level and 3-digit level.
4. Official industry-level economic multipliers by state were obtained from the U.S. Bureau of Economic Analysis (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 by industry and state.

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 by state, 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 by state. 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.
 - b. The study created concordances to map Alibaba's 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 in 2022 into 26 NAICS industries.

2. Direct economic impacts by industry by state:
 - a. Output: The study used the industry production distribution across all U.S. states published by BEA and Census to estimate the impacts of Alibaba sales on U.S. production by industry by state.
 - 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 the 26 NAICS industries in each state.
 - 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 in each state.
 - 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 in each state.
 - e. Small Business Output: The study used national-level industry output by business size published by BEA business to calculate the value of small business output (sales) in each of the 26 NAICS industries in each state.
 - f. Production Worker Employment: The study calculated the share of production workers by industry and state using data published by the Census and applied it to the number of direct jobs for each NAICS manufacturing industry in each state.

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 in each state.

4. Total economic impacts to the U.S. economy: We calculated the sum of direct, indirect, and induced economic impacts by state, division, region, and the U.S. overall; geographic regions and divisions are defined by the U.S. Census Bureau.

The NAICS codes corresponding 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