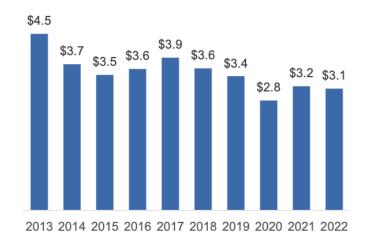
Michigan's Exports to China

Michigan's goods and services exports to China supported 24,550 American jobs in 2021.





Change (2021-2022): -2%

Top Goods Export Markets, 2022

l. Canada	\$26.2 billion
2. Mexico	\$11.8 billion
3. China	\$3.1 billion
4. Germany	\$1.9 billion
5. Korea	\$1.6 billion

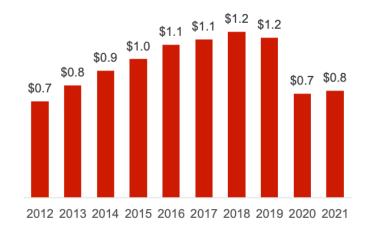
Top Goods Exports to China, 2022

Top Goods Exports to clillia	, 2022
l. Motor vehicle parts	\$510 million
2. Oilseeds & grains	\$508 million
3. Motor vehicles	\$207 million
4. Glass & glass products	\$181 million
5. Pharmaceuticals & medicines	\$160 million

5% of Michigan's global goods exports went to China in 2022

Services

(\$ billion)



Growth (2020-2021): 3%

Top Services Export Markets, 2021

l. Canada	\$2.0 billion
2. Ireland	\$926 million
3. United Kingdom	\$850 million
4. Switzerland	\$780 million
5. China	\$771 million

Top Services Exports to China, 2021

1. Education	\$318 million
2. Royalties from industrial processes	\$105 million
3. Misc. business, prof. & tech.	
services	\$50 million
4. Trademark royalties	\$49 million
5. Arch., eng. & other tech. services	\$41 million

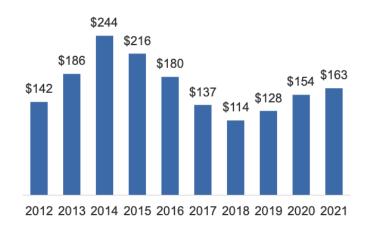
6% of Michigan's global services exports went to China in 2021



Michigan's Ist District Exports to China

Michigan's 1st District goods and services exports to China supported 1,210 American jobs in 2021.

Goods (\$ million)



Growth (2021-2022): 6%

Top Goods Export Markets, 2022

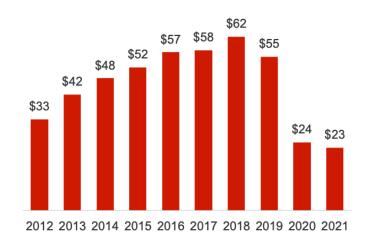
l. Canada	\$1.5 billion
2. Mexico	\$494 million
3. China	\$163 million
4. Germany	\$98 million
5. Japan	\$88 million

Top Goods Exports to China, 2022

	,
l. Oilseeds & grains	\$44 million
2. Glass & glass products	\$13 million
3. Sawmill & wood products	\$11 million
4. Misc. general purpose machinery	\$11 million
5. Timber & logs	\$8.1 million

5% of MI-1 global goods exports went to China in 2022

Services (\$ million)



Change (2020-2021): -8%

Top Services Export Markets, 2021

l. Canada	\$46 million
2. Mexico	\$39 million
3. United Kingdom	\$33 million
4. Ireland	\$24 million
5. China	\$23 million

Top Services Exports to China, 2021

l. Education	\$7.1 million
2. Trademark royalties	\$2.7 million
3. Equip. installation & maintenance	\$2.3 million
4. Royalties from industrial processes	\$1.7 million
5. Misc. personal & recreational	\$1.5 million

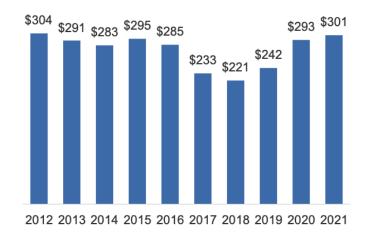
5% of MI-1 global services exports went to China in 2021



Michigan's 2nd District Exports to China

Michigan's 2nd District goods and services exports to China supported 2,260 American jobs in 2021.

Goods (\$ million)



Growth (2021-2022): 3%

Top Goods Export Markets, 2022

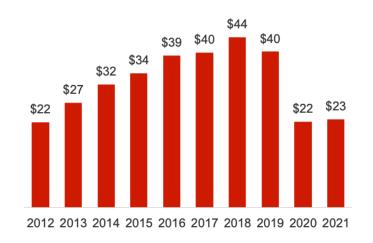
l. Canada	\$2.0 billion
2. Mexico	\$893 million
3. China	\$301 million
4. Germany	\$139 million
5. Japan	\$131 million

Top Goods Exports to China, 2022

Top Goods Exports to Cilila, 2022	
l. Oilseeds & grains	\$120 million
2. Motor vehicle parts	\$17 million
3. Glass & glass products	\$16 million
4. Pharmaceuticals & medicines	\$12 million
5. Electrical equipment & components	\$8.8 million

7% of MI-2 global goods exports went to China in 2022

Services (\$ million)



Growth (2020-2021): 2%

Top Services Export Markets, 2021

l. United Kingdom	\$28 million
2. Ireland	\$26 million
3. Switzerland	\$26 million
4. Mexico	\$23 million
6. China	\$23 million

Top Services Exports to China, 2021

l. Education	\$7.2 million
2. Royalties from industrial processes	\$4.0 million
3. Trademark royalties	\$2.4 million
4. Equip. installation & maintenance	\$2.3 million
5. Misc. business, prof. & tech.	
services	\$2.3 million

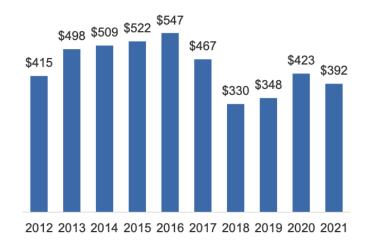
7% of MI-2 global services exports went to China in 2021



Michigan's 3rd District Exports to China

Michigan's 3rd District goods and services exports to China supported 2,660 American jobs in 2021.

Goods (\$ million)



Change (2021-2022): -7%

Top Goods Export Markets, 2022

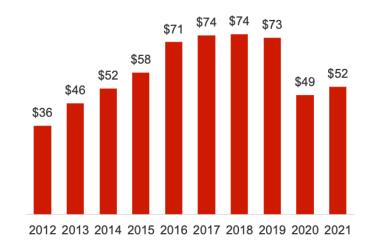
l. Canada	\$2.3 billion
2. Mexico	\$2.0 billion
3. China	\$392 million
4. Germany	\$268 million
5. Korea	\$213 million

Top Goods Exports to China, 2022

)
l. Motor vehicle parts	\$80 million
2. Glass & glass products	\$31 million
3. Misc. general purpose machinery	\$31 million
4. Soaps, cleaning agents & toiletries	\$28 million
5. Navigational & meas. instruments	\$26 million

5% of MI-3 global goods exports went to China in 2022

Services (\$ million)



Growth (2020-2021): 7%

Top Services Export Markets, 2021

l. Switzerland	\$80 million
2. United Kingdom	\$78 million
3. Ireland	\$78 million
4. Canada	\$67 million
5. China	\$52 million

Top Services Exports to China, 2021

l. Royalties from industrial processes	\$13 million
2. Education	\$12 million
3. Misc. business, prof. & tech.	
services	\$7.1 million
4. Trademark royalties	\$5.3 million
5. Equip. installation & maintenance	\$4.6 million

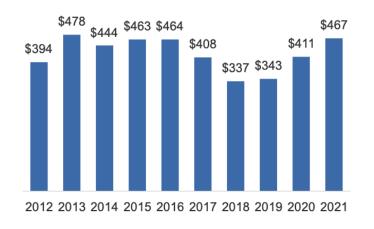
6% of MI-3 global services exports went to China in 2021



Michigan's 4th District Exports to China

Michigan's 4th District goods and services exports to China supported 2,700 American jobs in 2021.

Goods (\$ million)



Growth (2021-2022): 14%

Top Goods Export Markets, 2022

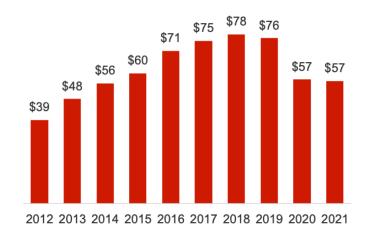
l. Canada	\$2.4 billion
2. Mexico	\$1.5 billion
3. China	\$467 million
4. Germany	\$445 million
5. Japan	\$294 million

Top Goods Exports to China, 2022

	,
1. Pharmaceuticals & med	icines \$91 million
2. Glass & glass products	\$77 million
3. Motor vehicle parts	\$51 million
4. Meat products	\$28 million
5. Oilseeds & grains	\$23 million

6% of MI-4 global goods exports went to China in 2022

Services (\$ million)



Change (2020-2021): -1%

Top Services Export Markets, 2021

l. Ireland	\$103 million
2. Switzerland	\$96 million
3. China	\$57 million
4. Singapore	\$45 million
5. Canada	\$41 million

Top Services Exports to China, 2021

l. Education	\$24 million
2. Royalties from industrial processes	\$19 million
3. Trademark royalties	\$3.6 million
4. Misc. business, prof. & tech.	
services	\$2.9 million
5 Equip installation & maintenance	\$1.6 million

8% of MI-4 global services exports went to China in 2021

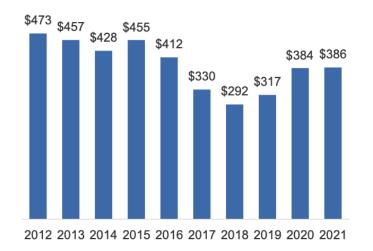


Michigan's 5th District Exports to China

Michigan's 5th District goods and services exports to China supported 2,850 American jobs in 2021.

Goods

(\$ million)



Growth (2021-2022): 1%

Top Goods Export Markets, 2022

l. Canada	\$2.4 billion
2. Mexico	\$1.2 billion
3. China	\$386 million
4. Japan	\$252 million
5. Germany	\$203 million

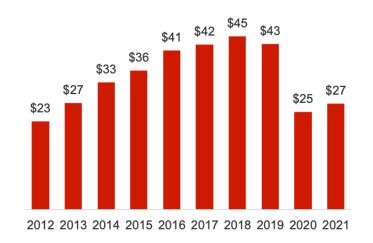
Top Goods Exports to China, 2022

l. Oilseeds & grains	\$136 million
2. Motor vehicle parts	\$42 million
3. Glass & glass products	\$24 million
4. Nonferrous metal products	\$22 million
5. Resins & synthetic fibers	\$15 million

6% of MI-5 global goods exports went to China in 2022

Services

(\$ million)



Growth (2020-2021): 9%

Top Services Export Markets, 2021

l. Switzerland	\$33 million
2. Ireland	\$32 million
3. China	\$27 million
4. United Kingdom	\$27 million
5. Mexico	\$25 million

Top Services Exports to China, 2021

l. Education	\$9.8 million
2. Royalties from industrial processes	\$5.7 million
3. Trademark royalties	\$2.8 million
4. Misc. business, prof. & tech.	
services	\$2.4 million
5. Equip. installation & maintenance	\$1.8 million

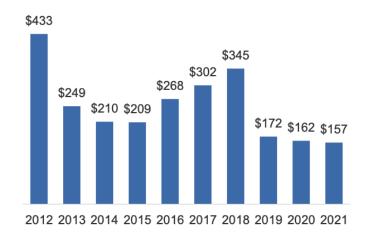
7% of MI-5 global services exports went to China in 2021



Michigan's 6th District Exports to China

Michigan's 6th District goods and services exports to China supported 2,380 American jobs in 2021.

Goods (\$ million)



Change (2021-2022): -3%

Top Goods Export Markets, 2022

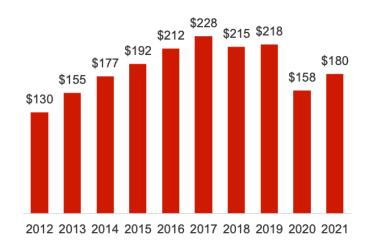
l. Canada	\$2.4 billion
2. Mexico	\$721 million
3. China	\$157 million
4. Korea	\$146 million
5. Australia	\$123 million

Top Goods Exports to China, 2022

TOP GOODS Exports to China	, 2022
l. Motor vehicles	\$36 million
2. Resins & synthetic fibers	\$27 million
3. Motor vehicle parts	\$18 million
4. Engines & turbines	\$15 million
5. Navigational & meas. instruments	\$14 million

3% of MI-6 global goods exports went to China in 2022

Services (\$ million)



Growth (2020-2021): 14%

Top Services Export Markets, 2021

l. China	\$180 million
2. Ireland	\$117 million
3. India	\$98 million
4. Canada	\$95 million
5. United Kingdom	\$82 million

Top Services Exports to China, 2021

1. Education	\$143 million
2. Royalties from industrial processes	\$5.8 million
3. Arch., eng. & other tech. services	\$4.6 million
4. Trademark royalties	\$3.9 million
5. Misc. business, prof. & tech.	
services	\$3.9 million

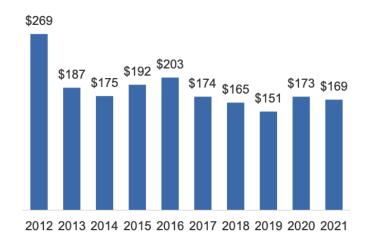
13% of MI-6 global services exports went to China in 2021



Michigan's 7th District Exports to China

Michigan's 7th District goods and services exports to China supported 1,870 American jobs in 2021.

Goods (\$ million)



Change (2021-2022): -2%

Top Goods Export Markets, 2022

l. Canada	\$1.4 billion
2. Mexico	\$529 million
3. China	\$169 million
4. Japan	\$86 million
5. Germany	\$82 million

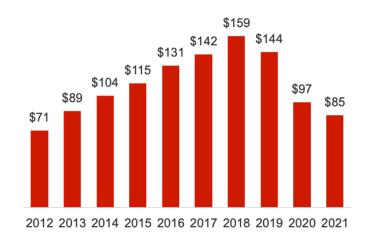
Top Goods Exports to China, 2022

Top Goods Exports to Office, 2022	
l. Oilseeds & grains	\$47 million
2. Motor vehicle parts	\$33 million
3. Pharmaceuticals & medicines	\$16 million
4. Motor vehicles	\$14 million
5. Electrical equipment	\$7.0 million

5% of MI-7 global goods exports went to China in 2022

Services

(\$ million)



Change (2020-2021): -12%

Top Services Export Markets, 2021

l. China	\$85 million
2. United Kingdom	\$76 million
3. Canada	\$70 million
4. Ireland	\$69 million
5. Switzerland	\$50 million

Top Services Exports to China, 2021

l. Education	\$61 million
2. Royalties from industrial processes	\$5.0 million
3. Trademark royalties	\$3.4 million
4. Insurance services	\$2.2 million
5. Misc. business, prof. & tech.	
services	\$2.0 million

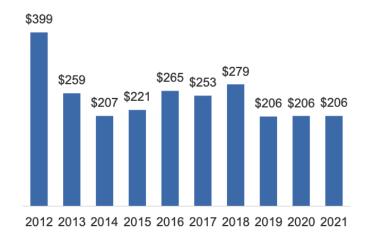
10% of MI-7 global services exports went to China in 2021



Michigan's 8th District Exports to China

Michigan's 8th District goods and services exports to China supported 1,310 American jobs in 2021.

Goods (\$ million)



Growth (2021-2022): 0%

Top Goods Export Markets, 2022

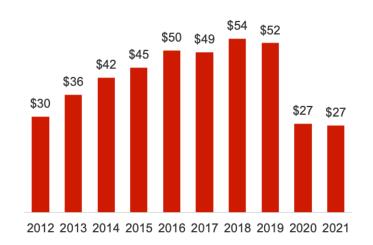
l. Canada	\$1.8 billion
2. Mexico	\$897 million
3. China	\$206 million
4. Germany	\$123 million
5. Korea	\$113 million

Top Goods Exports to China, 2022

l. Resins & synthetic fibers	\$48 million
2. Oilseeds & grains	\$43 million
3. Motor vehicles4. Motor vehicle parts5. Glass & glass products	\$21 million \$19 million \$17 million

5% of MI-8 global goods exports went to China in 2022

Services (\$ million)



Change (2020-2021): -2%

Top Services Export Markets, 2021

l. Switzerland	\$37 million
2. Ireland	\$37 million
3. United Kingdom	\$35 million
4. Mexico	\$30 million
6. China	\$27 million

Top Services Exports to China, 2021

l. Education	\$6.5 million
2. Royalties from industrial processes	\$5.8 million
3. Misc. business, prof. & tech.	
services	\$4.2 million
4. Trademark royalties	\$3.0 million
5 Equip installation & maintenance	\$14 million

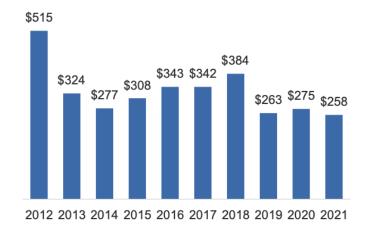
6% of MI-8 global services exports went to China in 2021



Michigan's 9th District Exports to China

Michigan's 9th District goods and services exports to China supported 2,090 American jobs in 2021.

Goods (\$ million)



Change (2021-2022): -6%

Top Goods Export Markets, 2022

l. Canada	\$3.0 billion
2. Mexico	\$755 million
3. China	\$258 million
4. Korea	\$169 million
5. Australia	\$130 million

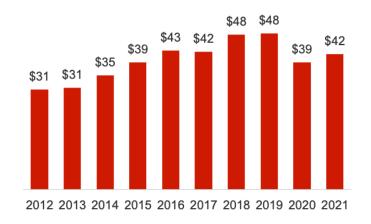
Top Goods Exports to China, 2022

, = > = =
\$95 million
\$50 million
\$39 million
φο ο
\$9.9 million
\$5.6 million

4% of MI-9 global goods exports went to China in 2022

Services

(\$ million)



Growth (2020-2021): 7%

Top Services Export Markets, 2021

l. Canada	\$505 million
2. United Kingdom	\$50 million
3. Switzerland	\$44 million
4. China	\$42 million
5. Ireland	\$42 million

Top Services Exports to China, 2021

l. Misc. freight & port services	\$16 million
2. Royalties from industrial processes	\$5.8 million
3. Arch., eng. & other tech. services	\$4.8 million
4. Misc. business, prof. & tech.	
services	\$3.5 million
5 Trademark royalties	\$2.8 million

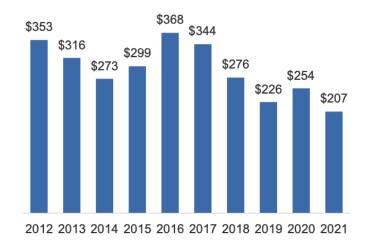
4% of MI-9 global services exports went to China in 2021



Michigan's 10th District Exports to China

Michigan's 10th District goods and services exports to China supported 1,720 American jobs in 2021.

Goods (\$ million)



Change (2021-2022): -19%

Top Goods Export Markets, 2022

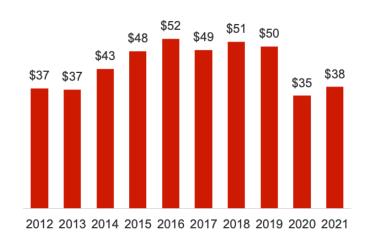
l. Canada	\$1.9 billion
2. Mexico	\$1.0 billion
3. China	\$207 million
4. Germany	\$107 million
5. Spain	\$100 million

Top Goods Exports to China, 2022

	,
l. Motor vehicle parts	\$97 million
2. Misc. general purpose machinery	\$18 million
3. Motor vehicles	\$15 million
4. Electrical equipment	\$10 million
5. Bolts, nuts & misc. turned prods	\$9.9 million

5% of MI-10 global goods exports went to China in 2022

Services (\$ million)



Growth (2020-2021): 8%

Top Services Export Markets, 2021

l. Canada	\$62 million
2. United Kingdom	\$55 million
3. Switzerland	\$53 million
4. Ireland	\$52 million
6. China	\$38 million

Top Services Exports to China, 2021

l. Arch., eng. & other tech. services	\$9.5 million
2. Royalties from industrial processes	\$7.7 million
3. Misc. business, prof. & tech.	
services	\$5.0 million
4. Equip. installation & maintenance	\$4.6 million
5. Trademark royalties	\$4.2 million

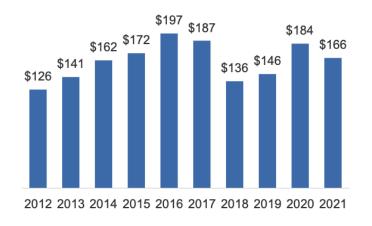
6% of MI-10 global services exports went to China in 2021



Michigan's IIth District Exports to China

Michigan's 11th District goods and services exports to China supported 1,540 American jobs in 2021.

Goods (\$ million)



Change (2021-2022): -10%

Top Goods Export Markets, 2022

l. Canada	\$823 million
2. Mexico	\$723 million
3. China	\$166 million
4. Germany	\$107 million
5. Japan	\$79 million

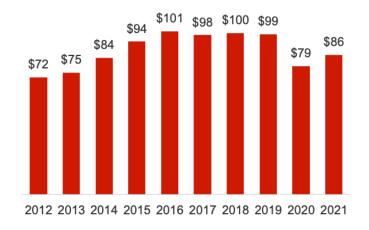
Top Goods Exports to China, 2022

	, — - — —
l. Motor vehicle parts	\$57 million
2. Basic chemicals	\$19 million
3. Misc. general purpose machinery	\$13 million
	433
4. Misc. manufactured commodities	\$11 million
5. Paints, coatings & adhesives	\$9.1 million

6% of MI-11 global goods exports went to China in 2022

Services

(\$ million)



Growth (2020-2021): 9%

Top Services Export Markets, 2021

l. Canada	\$195 million
2. Ireland	\$167 million
3. United Kingdom	\$165 million
4. Switzerland	\$136 million
6. China	\$86 million

Top Services Exports to China, 2021

1. Royalties from industrial processes	\$17 million
2. Arch., eng. & other tech. services	\$13 million
3. Education	\$9.7 million
4. Misc. business, prof. & tech.	
services	\$8.6 million
5 Trademark royalties	\$6.8 million

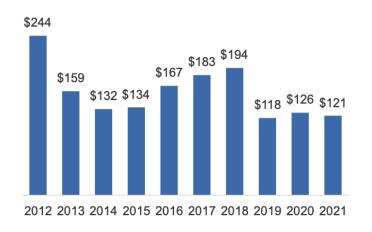
5% of MI-11 global services exports went to China in 2021



Michigan's 12th District Exports to China

Michigan's 12th District goods and services exports to China supported 1,040 American jobs in 2021.

Goods (\$ million)



Change (2021-2022): -4%

Top Goods Export Markets, 2022

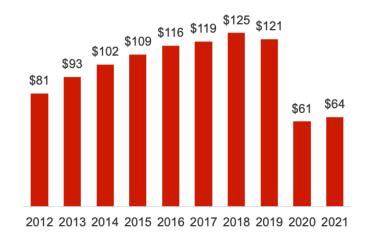
1. Canada	\$1.5 billion
2. Mexico	\$485 million
3. China	\$121 million
4. Korea	\$87 million
5. Germany	\$84 million

Top Goods Exports to China, 2022

c	
l. Motor vehicle parts	\$28 million
2. Engines & turbines	\$19 million
3. Motor vehicles	\$18 million
	41.4 111
4. Basic chemicals	\$14 million
5. Paints, coatings & adhesives	\$4.5 million

4% of MI-12 global goods exports went to China in 2022

Services (\$ million)



Growth (2020-2021): 5%

Top Services Export Markets, 2021

l. Canada	\$116 million
2. United Kingdom	\$103 million
3. Ireland	\$103 million
4. Switzerland	\$77 million
6. China	\$64 million

Top Services Exports to China, 2021

l. Education	\$21 million
2. Royalties from industrial processes	\$8.9 million
3. Trademark royalties	\$4.9 million
4. Misc. business, prof. & tech.	
services	\$4.2 million
5. Arch., eng. & other tech. services	\$4.0 million

5% of MI-12 global services exports went to China in 2021

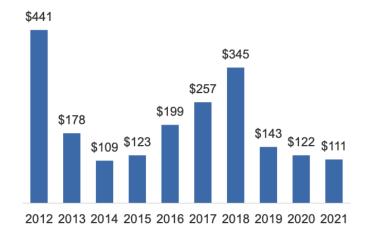


Michigan's 15th District Exports to China

Michigan's 13th District goods and services exports to China supported 930 American jobs in 2021.

Goods

(\$ million)



Change (2021-2022): -9%

Top Goods Export Markets, 2022

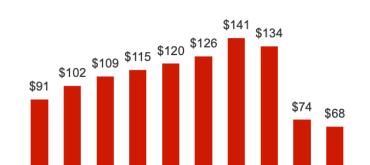
l. Canada	\$2.9 billion
2. Mexico	\$467 million
3. Korea	\$178 million
4. Australia	\$144 million
6. China	\$111 million

Top Goods Exports to China, 2022

		/
l. Motor vehicles		\$47 million
2. Basic chemicals		\$14 million
3. Motor vehicle parts		\$10 million
4. Resins & synthetic fib	oers	\$7.7 million
5. Engines & turbines		\$5.8 million

2% of MI-13 global goods exports went to China in 2022

Services (\$ million)



2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Change (2020-2021): -8%

Top Services Export Markets, 2021

l. Canada	\$735 million
2. United Kingdom	\$79 million
3. Ireland	\$77 million
4. China	\$68 million
5. Mexico	\$66 million

Top Services Exports to China, 2021

l. Misc. freight & port services	\$22 million
2. Education	\$17 million
3. Royalties from industrial processes	\$4.6 million
4. Trademark royalties	\$3.6 million
5. Misc. financial services	\$3.0 million

4% of MI-13 global services exports went to China in 2021

