



AN OVERVIEW OF NEW MEXICO'S EXPORTS: 2000-2016

July 2017

Prepared for public use by:

Richard V. Adkisson

Garrey E. and Katherine T. Carruthers Endowed Chair in Economic Development

Bernard Baah-Kumi

Graduate Student, Doctor of Economic Development

Ejiro Osiobe

Graduate Student, Doctor of Economic Development



**Department of Economics, Applied
Statistics, and International Business**

NMSU College of Business

The New Mexico State Data Center



The U.S. Census Bureau's
Premier Local Partner

AN OVERVIEW OF NEW MEXICO'S EXPORTS: 2000-2016

**Richard V. Adkisson¹
Bernard Baah-Kumi
Ejiro Osiobe**

July 7, 2017

New Mexico State University

INTRODUCTION

Specialization and exchange is a big reason why people live as well as they do. Resources are more efficiently used when each entity - a person, town, region, state, or country - specializes in producing the goods and services in which it is relatively efficient and exchanges these goods and services for those in which the entity is relatively less efficient. The result is a higher material standard of living. Because of this, state policymakers promoting economic development are often pleased to hear that their state has increased its exports and dismayed to hear the opposite. Although from the state perspective an export to another state can have the same impact as an export to another nation, the tendency is to focus on international exports. New Mexico is no exception.

Policy makers in New Mexico endeavor to provide an environment that is friendly to job creators so that jobs can be created and goods and services can be produced and exported.² Policy makers use tax incentives and other means to boost production and promote exports. This report aims to provide the best objective information available to guide New Mexico's policymakers in their deliberations and to provide New Mexico's residents with the background information needed to help them understand the state's export position. Ideally the report would be able to cover both the import and export sides of international trade but reliable information on state imports is not available. For this reason, the report focuses only on New Mexico's exports. Three aspects of exports are covered, the volume of exports, direction of exports, and the composition of exports. The report focuses on the 2000-2016 period.

¹ Contact - Department of Economics, Applied Statistics, and International Business, MSC 3CQ, Box 30001, New Mexico State University, Las Cruces, NM 88003-8001. E-mail: radkisso@nmsu.edu. Phone: 575-646-4988.

² <https://gonm.biz/business-resource-center/edd-programs-for-business/international-trade/>

The data examined are ‘Origin of Movement’ (OM) data based on the origin state. The OM series provides export statistics based on the state from which the merchandise starts its journey to the port of export; that is, the data reflect the transportation origin of exports and may not reflect the place where the exported product itself originated.³ Limitations of the data are outlined in Box 1.

Known Limitations in Uses of the Data

Exports

In certain cases, the export origin of movement does not reflect the transportation origin. Specifically, whenever shipments are consolidated, the state will reflect the consolidation point rather than the origin of movement. This effect is particularly noticeable for agricultural shipments. For these shipments intermediaries located in inland states are shipping agricultural commodities down the Mississippi River for export from the port of New Orleans. In this case, the state reflects Louisiana, the state where the port of New Orleans is located, as the state of origin of movement. The states in which the commodities were grown and originally shipped are lost.

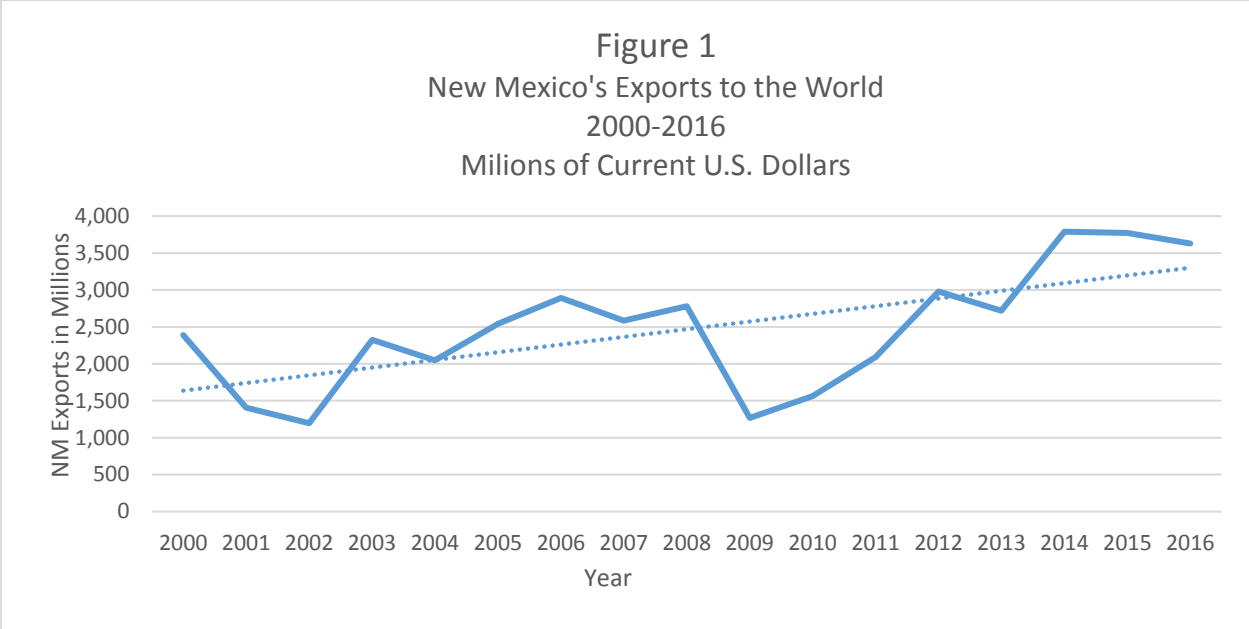
Another impact is on the states of distribution for non-manufactured exports. When goods are generally stored and then exported by central offices or intermediaries. The most visible result is to understate exports from the original production state and to overstate exports from the general office or consolidation point. For example, New York has ports that handle high-value shipments of non-manufactured products that may stand out.

<https://www.census.gov/foreign-trade/aip/elom.html>

NEW MEXICO’S EXPORT VOLUME

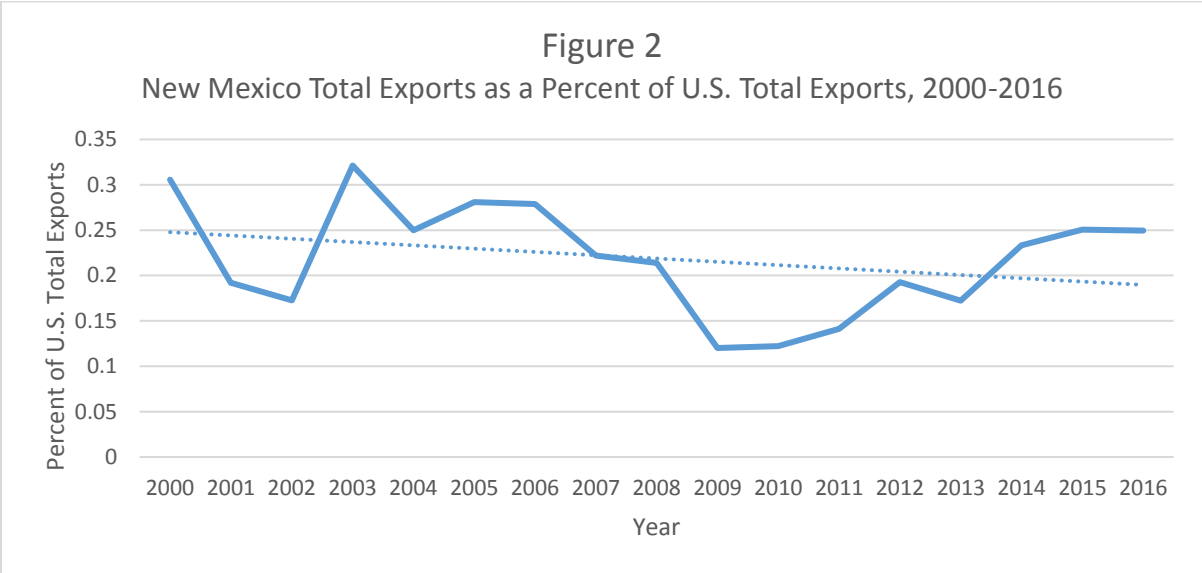
This section focuses on New Mexico’s volume of exports both over time and in relation to the national volume of exports. Figure 1 shows the trend in the volume of total exports (nominal value) from New Mexico to the rest of the world. Over the period, exports have been volatile but there is an overall upward trend. Exports dropped off substantially during the 2007-09 Great Recession but have recovered strongly with two mild downturns. Since the volume of trade is reported in current (nominal) dollars, price level changes have not been accounted for. If New Mexico’s export prices have increased over this period, the positive trend overstates reality. Given that the composition of exports varies substantially from state to state there is no appropriate price index available with which to make inflation adjustments.

³ <https://www.census.gov/foreign-trade/aip/elom.html>



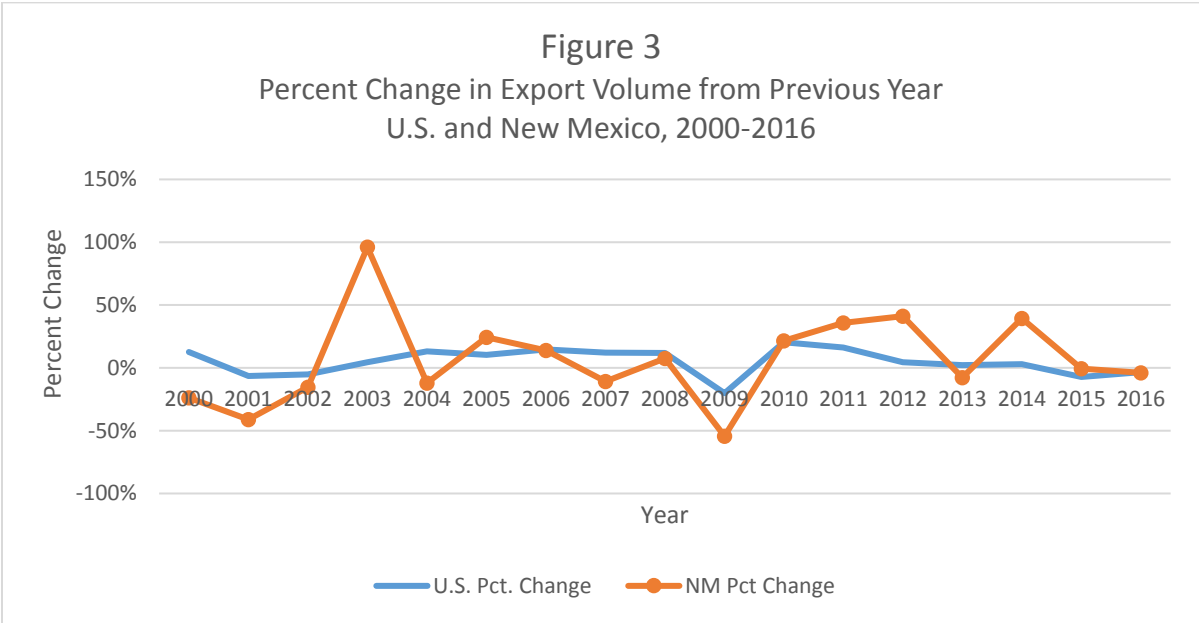
Source: U.S. Census, Origin of Movement Series, Accessed 6-6-2017

Figure 2 shows how New Mexico’s export volume compares to the national volume. New Mexico’s exports have varied from a bit more than 0.1 percent of national exports to approximately 0.31 percent of national exports. Thus, while New Mexico’s volume of exports has increased, its share has decreased indicating that, over time, national exports have grown at a slightly higher rate than have New Mexico’s exports.



Source: U.S. Census, Origin of Movement Series, Accessed 6-6-2017

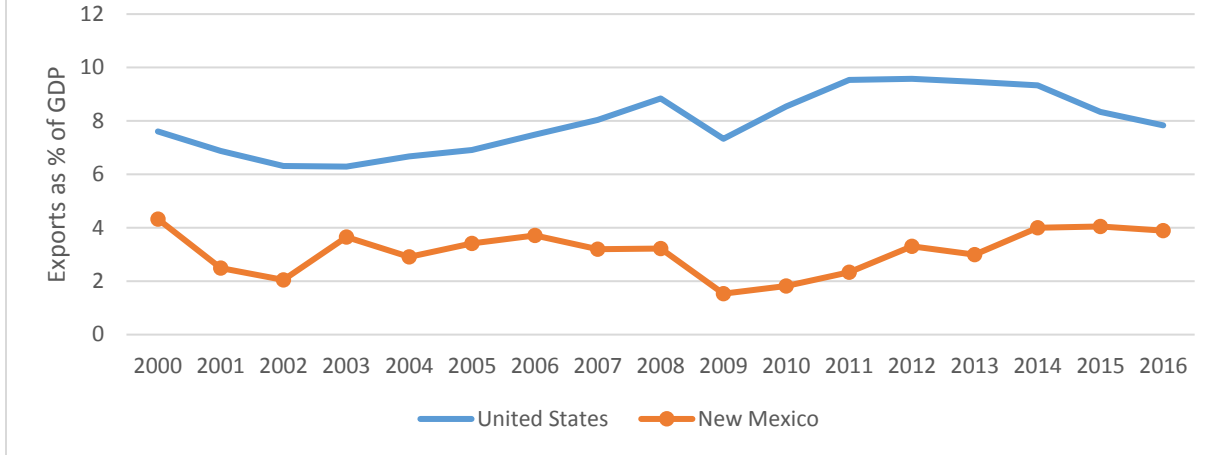
Figure 3 shows the percent change in the volume of exports from New Mexico and the U.S to the rest of the world. The figure reveals that New Mexico’s exports are much more volatile than national exports. Some difference is to be expected as any state’s exports will differ in composition (what is being exported) and direction (where the exports go) when compared to the nation.



Source: U.S. Census, Origin of Movement Series, Accessed 6-6-2017

Finally, Figure 4 shows the relative openness of New Mexico when compared to the nation. A typical way of measuring openness is to calculate some measure of international trade, imports, exports, or imports plus exports as a percentage of gross domestic product (GDP). Figure 4 shows exports as a percentage of GDP for New Mexico and the United States. New Mexico has been less reliant on exports (less open) than has the United States for the whole period. As with the changes in volume shown in Figure 3, there is no reason to expect any particular state to have the same degree of openness as the nation. By this measure, neither the U.S. nor New Mexico has become substantially more or less open over the 2000-2016 period.

Figure 4
Total Exports as a Percent of GDP
United States and New Mexico
2000-2016



Source: U.S. Census, Origin of Movement Series, Accessed 6-6-2017

NEW MEXICO’S DIRECTION OF EXPORTS

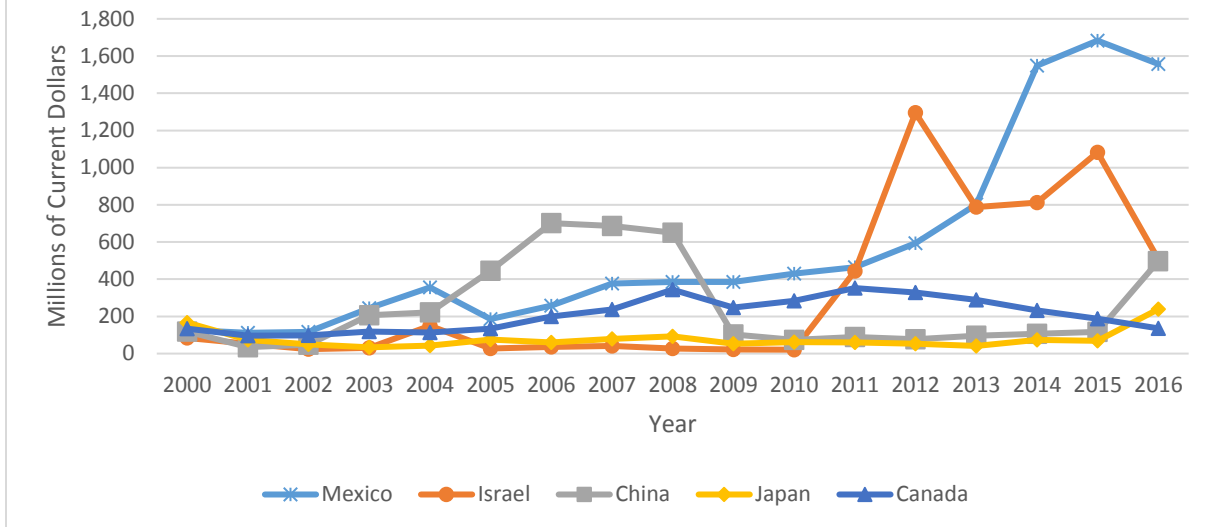
This section explains the changing direction of New Mexico’s exports (i.e. where the exports go). Table 1 shows New Mexico’s top five export destinations for three years. Two things are made obvious by the table. First, the list of top receiving countries differs substantially from year to year and, second, jointly, the top five export receiving nations’ share of total New Mexico exports has increased over the years. Notice that only one of the top five nations from 2000 is still in the top five in 2016. In 2015 none of the top five from 2000 were represented.

Rank	2000	%	2007	%	2016	%
1	South Korea	19	China	27	Mexico	45
2	Philippines	17	Malaysia	18	Israel	29
3	Malaysia	15	Mexico	15	China	5
4	Japan	7	Canada	9	Japan	3
5	Taiwan	7	Philippines	5	Canada	2
	Top 5 Total	65	Top 5 Total	74	Top 5 Total	82

Source: U.S. Department of Commerce, International Trade Division,
<http://tse.export.gov/tse/MapDisplay.aspx> , Downloaded June 6, 2017.

Figure 5 shows the year-to-year trends in New Mexico’s exports to its top-five destination nations for 2016. In recent years Mexico, and to a lesser extend Israel, have become New Mexico’s main export destinations. The large increase in exports to Mexico corresponds in time with the expansion of freight handling facilities in Santa Teresa. Table 1A in the Appendix provides annual details on New Mexico’s top 10 export destinations.

Figure 5
Volume of New Mexico Exports to 2015 Top Five Destinations
Millions of Current U.S. Dollars, 2000-2016



Source: U.S. Department of Commerce, International Trade Division, <http://tse.export.gov/tse/MapDisplay.aspx>, Downloaded June 6, 2017

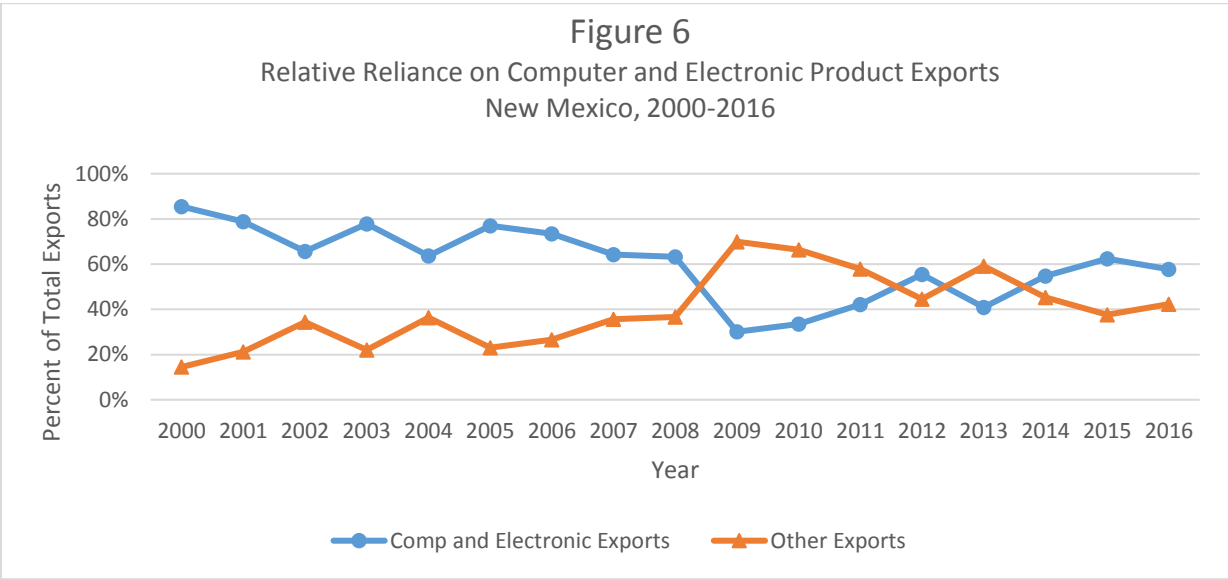
NEW MEXICO’S COMPOSITION OF EXPORTS

This section reveals the evolving composition of New Mexico’s exports over the 2000-2016 period. Table 2 shows the relative importance of various export product categories for three example years, 2000, 2007, and 2016. It is obvious from the table that New Mexico is highly specialized in the export of computer and electronic products. In 2000, exports in this category represented 85.49 percent of the state’s total exports. By 2016 this had been reduced to 57.8 percent. Thus, while New Mexico is extremely reliant on one category of goods for export, the relative reliance has decreased through time. This can also be seen in Figure 6 which shows that ‘computer and electronic products’ made up the highest share of exports until 2009 when ‘all other products’ took over. However, ‘computer and electronic products’ has again had the highest share of exports since 2014.

Table 2
New Mexico's Exports by Category, 2000, 2007, and 2016
Percent of Total Exports and Rank, Sorted by 2016 Rank

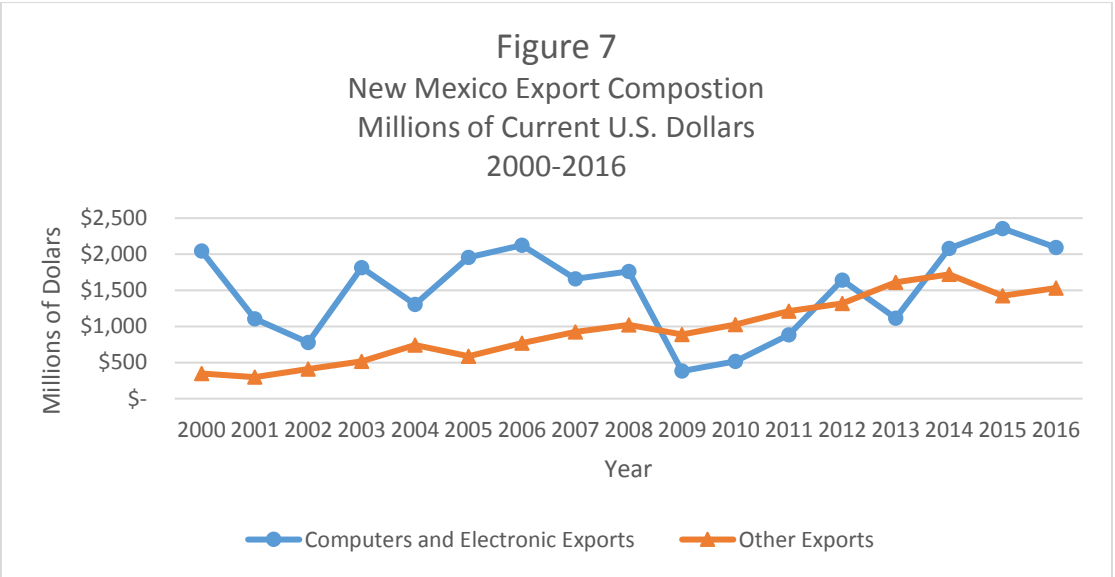
Item	2000 Pct	2000 Rank	2007 Pct	2007 Rank	2016 Pct	2016 Rank
TOTAL						
334--COMPUTER AND ELECTRONIC PRODUCTS	85.49%	1	64.3%	1	57.8%	1
332--FABRICATED METAL PRODUCTS, NESOI	1.51%	5	3.81%	4	7.77%	2
335--ELECTRICAL EQUIP, APPLIANCES & COMP	0.83%	7	2.34%	7	5.50%	3
336--TRANSPORTATION EQUIPMENT	1.69%	4	7.56%	2	5.39%	4
311--FOOD MANUFACTURES	0.33%	12	2.41%	6	4.48%	5
325--CHEMICALS	3.79%	2	1.47%	10	3.44%	6
333--MACHINERY, EXCEPT ELECTRICAL	1.94%	3	5.47%	3	3.19%	7
339--MISCELLANEOUS MANF. COMMODITIES	0.67%	8	1.15%	13	3.10%	8
326--PLASTICS & RUBBER PRODUCTS	0.95%	6	2.58%	5	2.41%	9
331--PRIMARY METAL MFG	0.38%	11	1.51%	9	1.50%	10
111--AGRICULTURAL PRODUCTS	0.50%	9	1.34%	12	1.05%	11
322--PAPER	0.06%	21	0.37%	16	1.05%	12
910--WASTE AND SCRAP	0.02%	26	0.20%	19	0.95%	13
930--USED OR SECOND-HAND MERCHANDISE	0.00%	32	0.00%	33	0.75%	14
337--FURNITURE & FIXTURES	0.03%	24	0.04%	24	0.39%	15
212--MINERALS & ORES	0.17%	15	0.83%	14	0.32%	16
327--NONMETALLIC MINERAL PRODUCTS	0.10%	18	0.30%	18	0.15%	17
112--OTHER ANIMALS	0.25%	14	0.09%	21	0.12%	18
314--TEXTILE MILLS PRODUCTS	0.04%	22	0.07%	23	0.12%	19
323--PRINTED MATTER AND REL. PRODUCTS, NESOI	0.02%	25	0.03%	25	0.11%	20
313--TEXTILES & FABRICS	0.07%	20	0.42%	15	0.11%	21
211--OIL & GAS	0.25%	13	1.47%	11	0.09%	22
321--WOOD PRODUCTS	0.15%	17	0.15%	20	0.08%	23
990--SPECIAL CLASS. PROVISIONS, NESOI	0.41%	10	1.63%	8	0.07%	24
113--FORESTRY PRODUCTS, NESOI	0.00%	31	0.01%	30	0.03%	25
324--PETROLEUM & COAL PRODUCTS	0.01%	27	0.07%	22	0.03%	26
312--BEVERAGES & TOBACCO PRODUCTS	0.01%	30	0.00%	31	0.02%	27
315--APPAREL MANUFACTURING PRODUCTS	0.03%	23	0.01%	29	0.01%	28
316--LEATHER & ALLIED PRODUCTS	0.01%	28	0.01%	28	0.01%	29
980--GOODS RET TO CA; US GOODS RET & REIMPS	0.10%	19	0.02%	27	0.01%	30
114--FISH, FRESH/CHILLED/FROZEN & OTHER MARINE PRODUCTS	0.00%	32	0.00%	32	0.00%	31
511--NEWSPAPERS, BOOKS & OTHER PUBLISHED MATTER, NESOI	0.01%	29	0.02%	26	0.00%	32
920--USED OR SECOND-HAND MERCHANDISE	0.16%	16	0.34%	17	0.00%	33

Source: Office of Trade and Economic Analysis (OTEA), Industry and Analysis, International Trade Administration, U.S. Department of Commerce



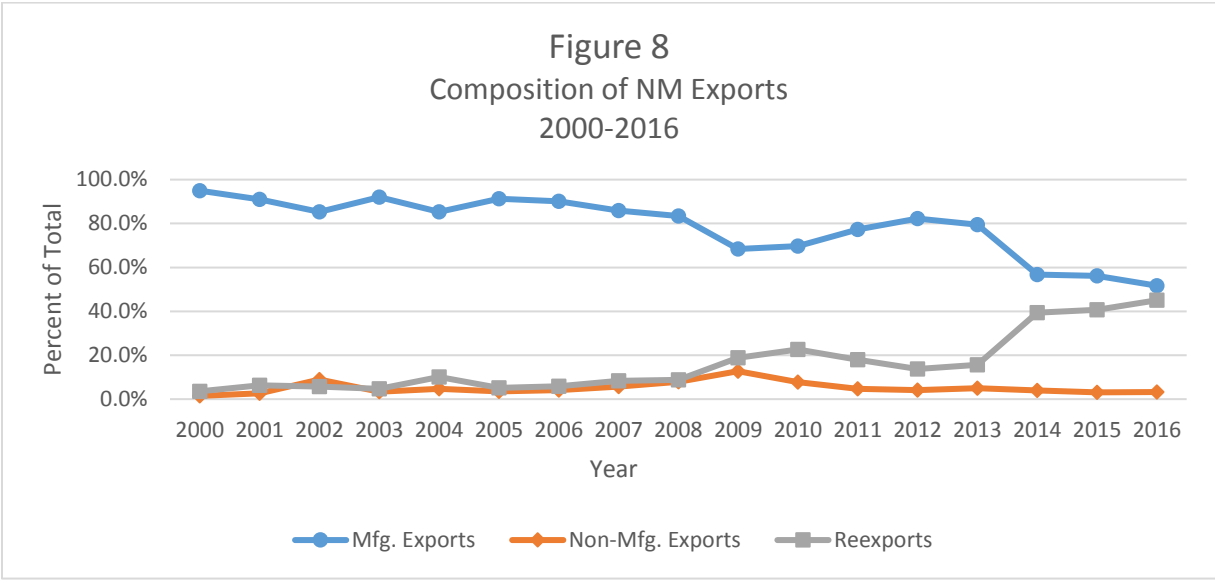
Source: U.S. Department of Commerce, International Trade Division, <http://tse.export.gov/tse/ChartDisplay.aspx>,
Downloaded June 6, 2017

Figure 7 shows the same thing as Figure 6 except in total values rather than percentage shares. Figure 7 reveals that ‘other exports’ has grown fairly steadily since 2000 while computer and electronic exports have been very volatile from year to year.



Source: U.S. Department of Commerce, International Trade Division, <http://tse.export.gov/tse/ChartDisplay.aspx>,
Downloaded June 6, 2017

Figure 8 shows the shares of manufactured exports, non-manufactured exports, and re-exports of New Mexico to the world. Since 2009, there has been an increase in the share and growth in re-exports volumes, especially from 2013 to 2015. Re-exports consist of commodities of foreign origin that have previously been admitted to a U.S. foreign trade zone or entered the United States for consumption, including entry into a Customs and Border Protection bonded warehouse, and which, at the time of exportation, are in substantially the same condition as when imported.⁴



Source: U.S. Bureau of the Census, *State Exports from New Mexico and the United States*, https://www.census.gov/foreign-trade/statistics/state/origin_movement/index.html, Downloaded May, 29, 2017

⁴ <https://www.census.gov/foreign-trade/reference/definitions/index.html#R>

QUICK SUMMARY, NEW MEXICO'S EXPORTS, 2000-2016

Based on the data presented above several brief observations can be made.

- Measured in nominal dollars, the volume of New Mexico's exports has been on an upward trend over the 2000-2016 period.
- New Mexico's exports have been highly concentrated in one category, computer and electronic products, however, reliance on this category has decreased somewhat with time.
- New Mexico has become increasingly reliant on exports to a few destination countries, although the particular destinations have changed through time.
- A result of the above two bullets is that New Mexico's exports have been quite volatile both in volume and direction
- Most of the volatility in volume has its origin in manufactured exports, especially computer and electronic product exports.
- New Mexico's export volume has grown at a slightly lower rate than has national volume.
- New Mexico's non-computer and electronic product exports have grown steadily and are less volatile than computer and electronic exports.
- A large increase in re-exports has driven the increase in non-manufactured exports. After accounting for re-exports, non-manufactured exports have decreased substantially.

POLICY IMPLICATIONS

The purpose of this report is simply to provide information to inform both policy makers and New Mexico residents about recent trends in New Mexico's exports. For this reason, no specific policy recommendations are made. However, in a broad sense, the lesson seems to be that New Mexico's export situation evolves rapidly. The data show substantial volatility in both the volume and composition of New Mexico's exports so any policy proposals should be based on longer-term trends rather than on short-term export performance.

APPENDIX

Table 1A New Mexico's Top 10 Export Destinations, 1999-2016								
1999	Rank	PCT	2000	Rank	PCT	2001	Rank	PCT
Philippines	1	33	South Korea	1	19	Philippines	1	18
South Korea	2	27	Philippines	2	17	Malaysia	2	12
Malaysia	3	12	Malaysia	3	15	Mexico	3	8
China	4	7	Japan	4	7	South Korea	4	7
Canada	5	2	Taiwan	5	7	Canada	5	7
Taiwan	6	2	Canada	6	6	Taiwan	6	6
Ireland	7	2	Mexico	7	5	Costa Rica	7	6
Japan	8	2	China	8	5	Japan	8	5
Mexico	9	2	Israel	9	3	Thailand	9	4
Thailand	10	1	Ireland	10	2	Israel	10	4
Total		<u>91</u>	Total		<u>87</u>	Total		<u>78</u>
2002	Rank	PCT	2003	Rank	PCT	2004	Rank	PCT
Philippines	1	15	Philippines	1	19	Mexico	1	17
Mexico	2	10	South Korea	2	18	Costa Rica	2	11
Costa Rica	3	10	Mexico	3	10	Malaysia	3	11
South Korea	4	9	Malaysia	4	10	China	4	11
Canada	5	8	China	5	9	Philippines	5	10
Malaysia	6	8	Taiwan	6	9	Israel	6	7
Taiwan	7	6	Canada	7	5	Canada	7	6
Japan	8	4	Japan	8	5	Taiwan	8	4
China	9	4	Ireland	9	3	Ireland	9	3
Denmark	10	3	Thailand	10	2	South Korea	10	2
Total		<u>77</u>	Total		<u>90</u>	Total		<u>82</u>
2005	Rank	PCT	2006	Rank	PCT	2007	Rank	PCT
Philippines	1	18	China	1	24	China	1	27
China	2	18	Malaysia	2	17	Malaysia	2	18
Malaysia	3	13	Philippines	3	9	Mexico	3	15
Costa Rica	4	10	Mexico	4	9	Canada	4	9
Mexico	5	7	Canada	5	7	Philippines	5	3
Taiwan	6	6	South Korea	6	6	Japan	6	3
Canada	7	5	Taiwan	7	5	South Korea	7	3
South Korea	8	4	Costa Rica	8	4	Taiwan	8	2
Japan	9	3	Japan	9	2	Germany	9	2
Ireland	10	3	Ireland	10	2	United Kingdom	10	2

<u>Total</u>		<u>87</u>	<u>Total</u>		<u>84</u>	<u>Total</u>		<u>85</u>
Table 2 Continued New Mexico's Top 10 Export Destinations, 1999-2016								
2008	Rank	PCT	2009	Rank	PCT	2010	Rank	PCT
China	1	23	Mexico	1	30	Mexico	1	28
Malaysia	2	23	Canada	2	19	Canada	2	18
Mexico	3	14	China	3	8	Germany	3	7
Canada	4	12	Germany	4	6	China	4	5
Philippines	5	4	Afghanistan	5	4	Japan	5	4
Japan	6	3	Japan	6	4	Spain	6	3
Germany	7	2	Singapore	7	3	Singapore	7	2
United	8	2	United	8	2	United Kingdom	8	2
Ireland	9	1	Israel	9	2	South Korea	9	2
South Korea	10	1	France	10	2	Hong Kong	10	2
<u>Total</u>		<u>85</u>	<u>Total</u>		<u>79</u>	<u>Total</u>		<u>72</u>
2011	Rank	PCT	2012	Rank	PCT	2013	Rank	PCT
Mexico	1	22	Israel	1	44	Mexico	1	29
Israel	2	21	Mexico	2	20	Israel	2	29
Canada	3	17	Canada	3	11	Canada	3	11
China	4	4	China	4	3	China	4	4
United	5	4	Germany	5	2	Germany	5	2
Germany	6	4	Japan	6	2	Ireland	6	2
Japan	7	3	United	7	2	Belgium	7	2
Thailand	8	2	Brazil	8	1	Brazil	8	2
Hong Kong	9	1	Saudi Arabia	9	1	Japan	9	1
South Korea	10	1	Australia	10	1	Australia	10	1
<u>Total</u>		<u>80</u>	<u>Total</u>		<u>87</u>	<u>Total</u>		<u>83</u>
2014	Rank	PCT	2015	Rank	PCT	2016	Rank	PCT
Mexico	1	41	Mexico	1	45	Mexico	1	43
Israel	2	21	Israel	2	29	Israel	2	14
Italy	3	7	Canada	3	5	China	3	14
Canada	4	6	China	4	3	Japan	4	7
China	5	3	Belgium	5	2	Canada	5	4
Ireland	6	3	Japan	6	2	Germany	6	2
Japan	7	2	Germany	7	2	United Arab	7	2
Saudi Arabia	8	2	Ireland	8	1	Belgium	8	1
Germany	9	2	United Arab	9	1	Saudi Arabia	9	1
Belgium	10	2	United	10	1	Singapore	10	1
<u>Total</u>		<u>88</u>	<u>Total</u>		<u>91</u>	<u>Total</u>		<u>89</u>

Data Source: U.S. Department of Commerce, International Trade Division, <http://tse.export.gov/tse/MapDisplay.aspx>, Downloaded June 6, 2017