The Role of Exports

in the United States Economy

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EXECUTIVE SUMMARY

In his 2010 State of the Union Address, President Obama announced the National Export Initiative (NEI) as part of a government-wide strategy to promote exports. During the ensuing years, as the U.S. recovered from the economic downturn in the "Great Recession," the growth in U.S. exports has been one of the major success stories in the U.S. economy. This is significant, as increased exports generate many benefits to the economy; in particular, as exports grow, they support an increasing number of well-paying jobs. A closer look at U.S. export performance during the period between 2009 and 2013 shows that:

- U.S. exports totaled a record of nearly $2.3 trillion in 2013, which is a 44 percent increase in the dollar value of exports from the most recent low point in 2009. Adjusted for inflation, exports increased by 27 percent over this time period.
- Jobs supported by total exports were 11.3 million in 2013, an increase of 1.6 million since 2009.
- Nearly 30 percent of gross domestic product (GDP) growth over the last five years has been the result of export growth. This is particularly impressive given that exports of late have accounted for nearly 14 percent of GDP.
- The largest export markets for the U.S. – Mexico, Canada and China – contributed the most to export growth since 2009 though, as shown in figure 3, many other countries also contributed significantly to our export growth.
- An important factor in determining the U.S. growth rate of exports to a given country is the rate of GDP growth in that country; thus, to the extent economic growth is slowing in other parts of the world, this can restrain U.S. export growth. See www.commerce.gov/blog/category/138.
- Transportation equipment experienced the largest growth over the period between 2009 and 2013, increasing by $98.6 billion over those years, or 18.9 percent of the total increase in goods exports. Petroleum products, chemicals, computer and electronic products and machinery also contributed significantly to export growth during this time period.
- The number of firms exporting increased by more than 28,000 between the years 2009 and 2012 (the most recent year for which we have these data), reaching a record high of almost 305,000 exporting firms.
- At the state level, between 2009 and 2013, Texas, California, Louisiana, Washington, and Michigan have reported the largest dollar increase in exports. Export growth was widespread as 13 states reported an increase in exports of more than $10 billion between 2009 and 2013 and another 10 saw exports increase by more than $5 billion.
- Export growth between 2009 and 2012 has been widespread at the metropolitan statistical area (MSA) level, with Houston, New York, Detroit, Los Angeles and Miami showing the largest increases on a dollar-value basis. In total, when measured on a nominal basis, 29 out of the top 50 MSAs set export records in 2012.

I. INTRODUCTION

The goal of the original NEI and the NEI/NEXT initiatives are built on the same objective: To increase U.S. exports as a means of strengthening America's economy, supporting additional jobs, and fostering long-term, sustainable growth. With the NEI Obama Administration made it a top priority to improve the conditions that directly affect the ability of U.S. firms to export, such as removing trade barriers abroad, helping U.S. farms and firms of all sizes overcome hurdles to entering new markets, and assisting with financing that is needed for exporting.

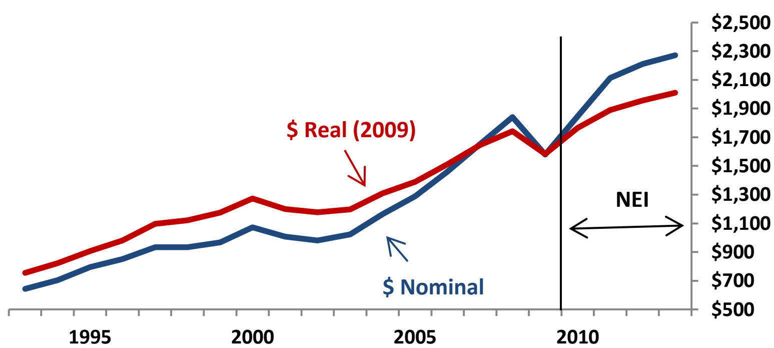
Since 2009, exports have helped pull the U.S. economy out of the devastating recession that occurred between 2007 and 2009. Exports have contributed more to the growth of gross domestic product (GDP) in this recovery than in the previous recovery; have helped support millions of high-paying jobs in the U.S.; and have been responsible for major contributions to the economic performance of many states and metropolitan areas. Moving forward, exports will continue to make important contributions to the U.S. economy and the NEI/NEXT is structured to do more to help U.S. manufacturers, farmers, workers and innovators sell Made-in-America products and services world-wide to the benefit of our economy.

The Benefits of Exporting

During the past 20-year period – with the exception of when the economy was in a recession – export growth has been steady, with an average growth rate of about 6.4 percent in nominal terms and about 5.0 percent in real terms, see Figure 1.

In addition, exports, whether measured on a nominal or real basis, have set record highs in each of the last four years. This growth in exports has helped to generate many benefits for the U.S. economy, including providing support for millions of high-paying jobs.

Figure 1: U.S. Exports of Goods and Services 1993 - 2013 ($ billion)



A. Exports Support a Significant (and growing) Number of Jobs

Exports help support millions of jobs in the U.S. and, as the amount of U.S. exports have increased, so have the number of jobs they support.[1] Jobs supported by total exports were 11.3 million in 2013, up 1.6 million since 2009 (Table 1). This is the greatest number of jobs supported by exports for the period 1993-2013. Goods exports supported 7.1 million jobs in 2013, up 1.1 million from 2009. Services exports supported 4.2 million jobs in 2013, which is the greatest number of jobs supported by services exports for the period 2009-13. Increases in jobs supported by goods exports account for approximately two-thirds of the total 1.6 million gains in jobs supported by total exports since 2009.

Table 1. Millions of Jobs Supported by Exports:
Total, Goods, and Services

	Total	Goods	Services
2009(R)	9.7	6.0	3.6
2010(R)	10.2	6.5	3.7
2011(R)	10.9	6.9	4.0
2012(R)	11.1	7.0	4.0
2013(P)	11.3	7.1	4.2

Note: Values for 2009 to 2012 are revised (R). Values for 2013 are preliminary (P).
Goods and services may not sum to the total due to rounding.

Source: ITA calculations from BLS and BEA data, 2009 to 2012;
ITA calculations from BLS, BEA and Census data, 2013.

B. Jobs in Export-Intensive Industries Pay More

Research conducted by the International Trade Administration (ITA) of the U.S. Department of Commerce has shown that workers in export-intensive manufacturing industries earn, on average, 18 percent more than their counterparts in other manufacturing industries.[2] Similarly, ITA research and

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[1] The methodology used to estimate the number of jobs supported by exports is based input-output matrices which provide detailed information on the flow of goods and services used in the production processes of industries. They show how industries interact with each other, such as how one industry using inputs of other industry to generate output and, ultimately, GDP. The total number of jobs supported by exports includes both the jobs needed in a particular industry to generate a given level of exports but also the indirect jobs necessary to create the inputs used in generating these exports.

[2] Riker, David, (2010): "Do Jobs in Export Industries Still Pay More? And Why?" Manufacturing and Services Economics Brief, International Trade Administration, U.S. Department of Commerce.

academic research found that employees in export-intensive service industries earn 15 to 20 percent more than comparable workers in other service industries.[3]

There are several forces that lead to these higher levels of pay in export-intensive industries. First, industries with greater access to international markets tend to invest heavily in technology and capital. This investment increases the productivity of workers which, in turn, contributes to higher earnings. Of course, higher earnings can reflect industry factors that increase the productivity of the workers whether they export or not, but which also increase the probability that the worker's industry will succeed in exporting. For example, if a U.S. industry produced an exceptionally high quality, relatively unique set of goods, then export success would coincide with higher earnings, even if export intensity did not increase the earnings. This effect has been described as "success begets exporting."[4]

With respect to the service sector, higher levels of education among workers and certain other individual characteristics partly can help explain why earnings are higher among export-intensive service sectors. However, even after controlling for these factors, workers in export-intensive service industries earn more than those in service industries that are not export-intensive. While the cause of this premium is not entirely clear, it is important to note that this earnings premium has been stable over time.[5]

C. Firms that Export Can Experience Productivity Improvements

Perhaps not surprisingly, firms involved in exporting are found to have higher labor productivity and higher total factor productivity than firms not involved in exporting. Reasons for this can include the fact that firms may become more productive due to the pressure provided by increased competition with foreign firms. Technological spillovers that result from increased contact with firms and markets abroad can also improve productivity. However, it is also possible that there is self-selection involved in the pool of firms that are willing and able to sell abroad. That is, firms that are already more productive are the ones more likely to decide to export. Initial evidence on this point seemed to indicate that firms that are already more productive would export.[6] However, some more recent evidence suggests that, while firms that export are more productive, it is also true that the act of exporting can make firms even more efficient.[7]

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[3] Riker, David and Brandon Thurner, (2011):"Weekly Earnings in Export-Intensive U.S. Service Industries," Manufacturing and Services Economics Brief, International Trade Administration, March 2011.

[4] Bernard, A. and J.B. Jensen, (1999): "Exceptional Exporter Performance: Cause, Effect, or Both?" *Journal of International Economics* 47: 1-25.

[5] Jensen, J.B.; L.G. Kletzer (2008): " 'Fear' and Offshoring: The Scope and Potential Impact of Imports and Exports of Services," Policy Brief 08-01, Peterson Institute of International Economics.

[6] See, for example, Clerides, S.K. et. al., (1998) "Is Learning by Exporting Important," *Quarterly Journal of Economics*, 113: 903-947 and Tybout , James R. (2001) "Plant- and Firm-Level Evidence on "New" Trade Theories," *NBER Working Paper No. 8418.*

[7] Harris, R. and Q.C. Li, (2011), "Export-market Dynamics and Firm-Level Productivity: Evidence for UK tradable Sectors," *Industrial and Corporate Change,* 21: 649-670 and Baldwin, J. and B. Yan, (2012) "Export Market Dynamics and Plant-Level Productivity: Impact of Tariff Reductions and Exchange-Rate Cycles," *Scandinavian Journal of Economics*, 114: 831-855.

II. AN OVERVIEW OF EXPORT PERFORMANCE SINCE 2009

U.S. exports totaled a record of nearly $2.3 trillion in 2013, which is a 44 percent increase from the most recent low point in 2009. In 2013, exports were up $60.8 billion from 2012; $28.4 billion of this increase was from exports of goods, while $32.4 billion was from services exports. Export growth since the end of the most recent recession has averaged close to 10 percent, with growth in the exports of goods averaging 10.4 percent over the last four years and the growth in the export of services averaging 7.6 percent.

However, though the overall growth rates were similar, exports contributed more to GDP growth during this most recent recovery than in the recovery after 2001. Nearly 30 percent of GDP growth over the last five years has been the result of export growth, while exports contributed only about 11 percent to GDP growth in the five years after the 2001 recession.

A. U.S. goods exports were sent to more than 230 countries between 2009 and 2013

In 2013, the U.S. exported goods to more than 230 countries, though Canada and Mexico accounted for more than a third of the total goods export volume. Canada was the top goods export market in 2013, at $300 billion, followed by Mexico, ($226 billion), China ($122 billion), Japan ($65 billion), and Germany ($47 billion). Among top goods markets, China showed the highest dollar growth compared to 2012, up nearly $12 billion. See Figure 2.

Figure 2: Top Export Markets and Growth, 2013

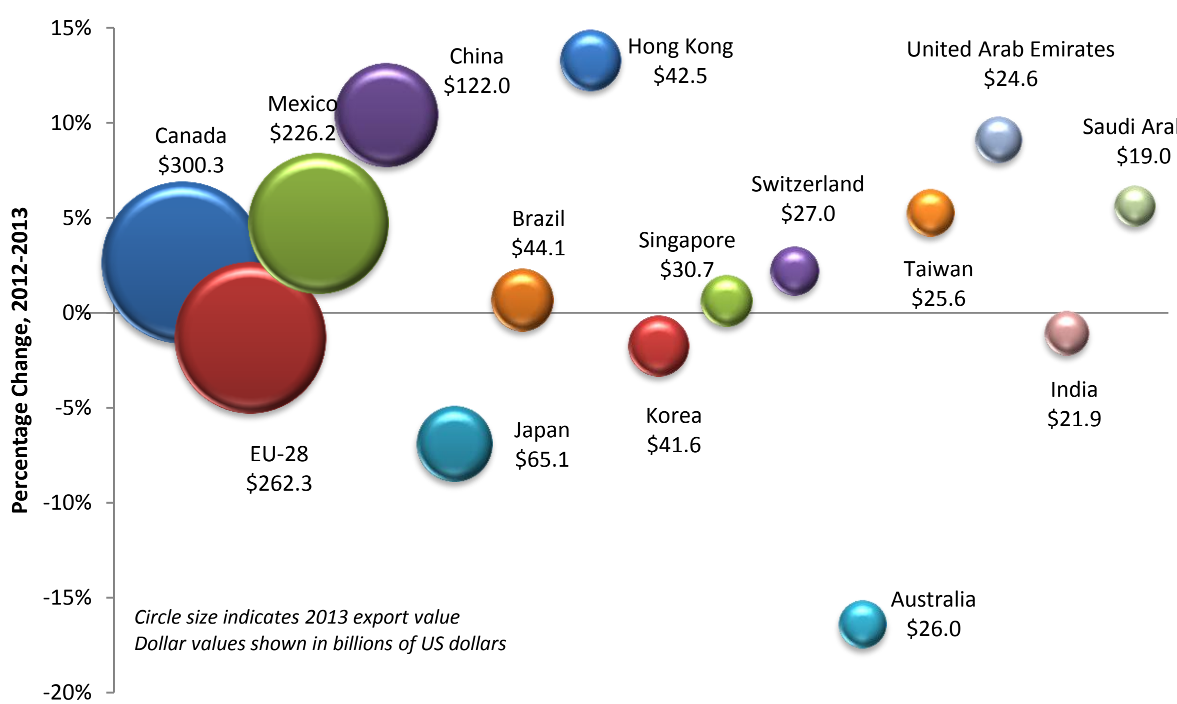
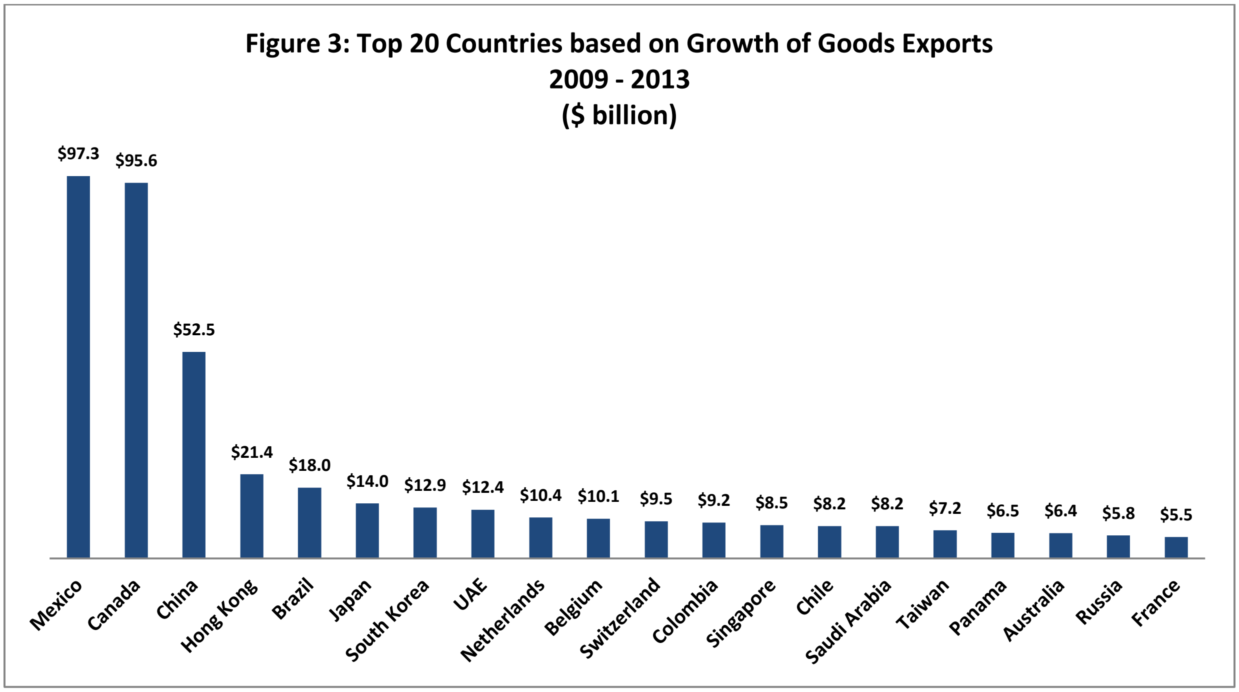
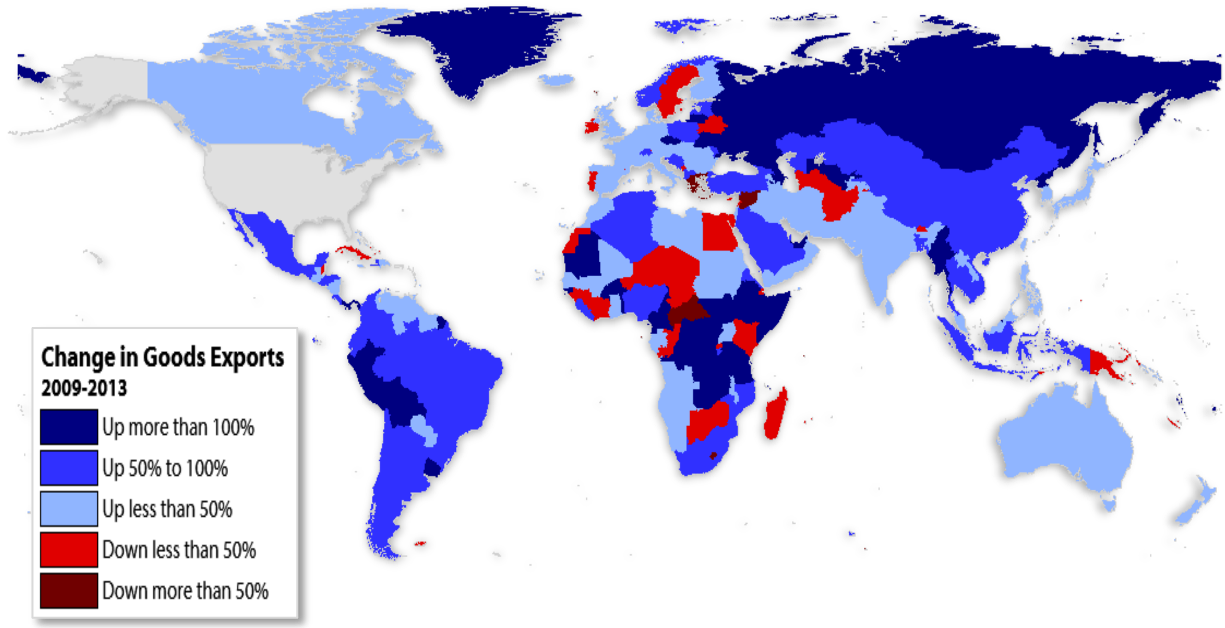


Figure 3 provides detail on the geographic areas that have been most responsible for the growth in goods exports during the last four years. The largest export markets for the U.S. – Mexico, Canada and China – contributed the most to export growth since 2009 though, many other countries also contributed significantly to our export growth. It is also important to note that, while currently responsible for a smaller share of overall trade, U.S. goods exports to markets in South and Central America, see figure 4, have shown the most rapid growth since 2009: up by more than 70 percent; the trade surplus with this region was a record high in 2013. Free trade agreements also appear to have helped contribute to export growth since the end of the recent recession: U.S. goods exports to our free trade partners have grown by 57 percent since 2009.



While Figure 3 presents data on the destinations with the largest increase in goods exports on an <u>absolute dollar</u> basis, Figure 4 provides detail on overall <u>percentage</u> changes in U.S. exports to various countries during this period. The story told in Figure 4 is generally similar to Figure 3; though the ranking is different between the two, many of the countries with the largest dollar increase in goods exports also had the largest increase in exports on a percentage basis.

Figure 4: Change in U.S. Goods Exports by Country, 2009

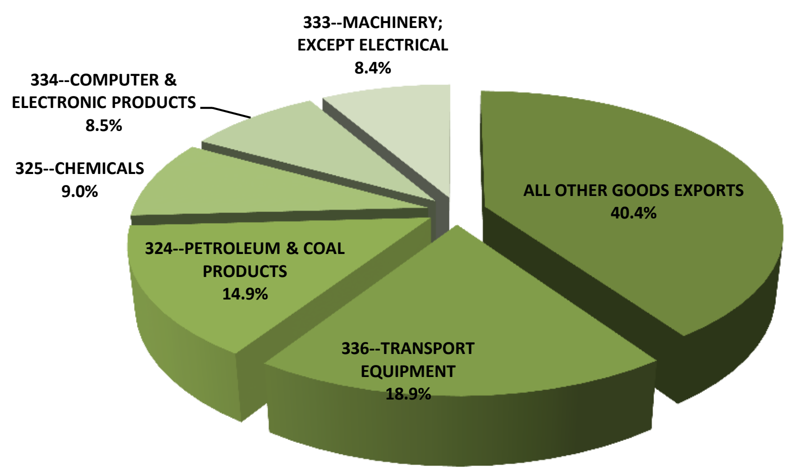


In addition, a key determinant of where U.S. exports are likely to grow the fastest is the growth rate of GDP in the target country. That is, as the growth rate in GDP increases, so does the growth of exports by the U.S. to that country.

B. Transportation Equipment, Petroleum Products Led Export Growth Over the Last Four Years

Between 2009 and 2013, exports of transportation equipment, which primarily includes cars and trucks, motor vehicle parts, aircraft and aircraft engines and parts, grew $98.6 billion, or 18.9 percent of the total increase in goods exports. See Figure5. Exports of petroleum and coal products also increased significantly during this time period; the value of exports in this category increased $77.7 billion between 2009 and 2013, or 14.9 percent of the total increase. The export categories of chemicals, computer and electronic products and machinery (except electrical) all saw increases of between $40 billion and $50 billion over this period, or between 8 and 9 percent of the total increase for each category.

Figure 5: Contribution to Merchandise Export Growth by Product Category, 2009 - 2013



C. The Number of Merchandise Exporters Reached a New Record-High in 2012

A large and increasing number of U.S. firms are involved in exporting. In 2012, which are the latest data available, the number of firms identified as merchandise exporters reached an all-time high of nearly 305,000 exporters.[8] See Figure 6.

Figure 6: Number of U.S. Goods Exporters

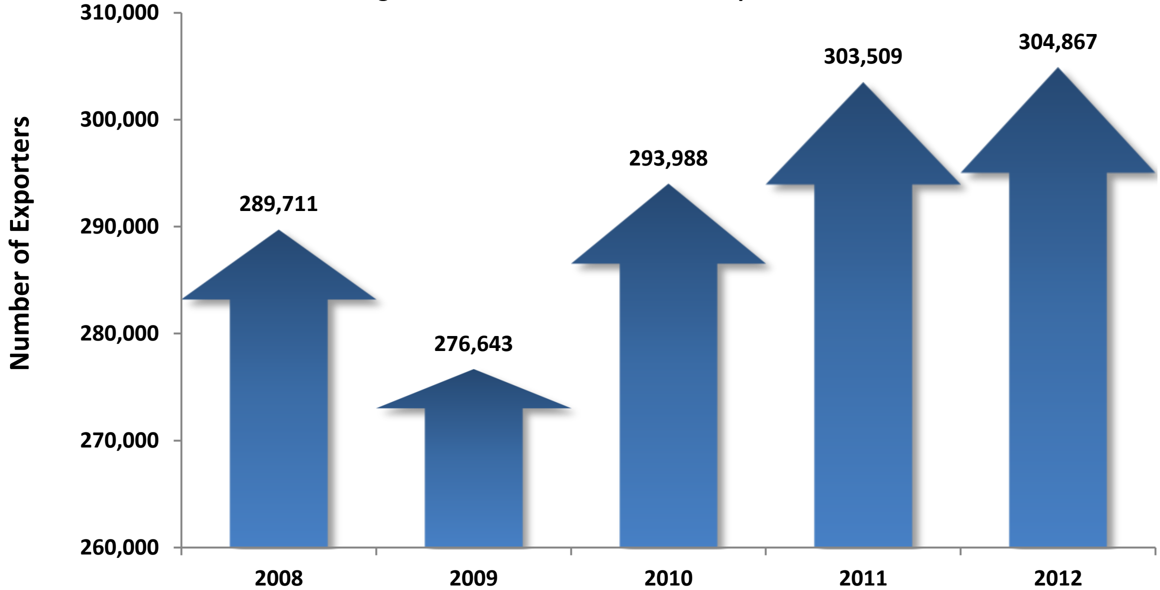
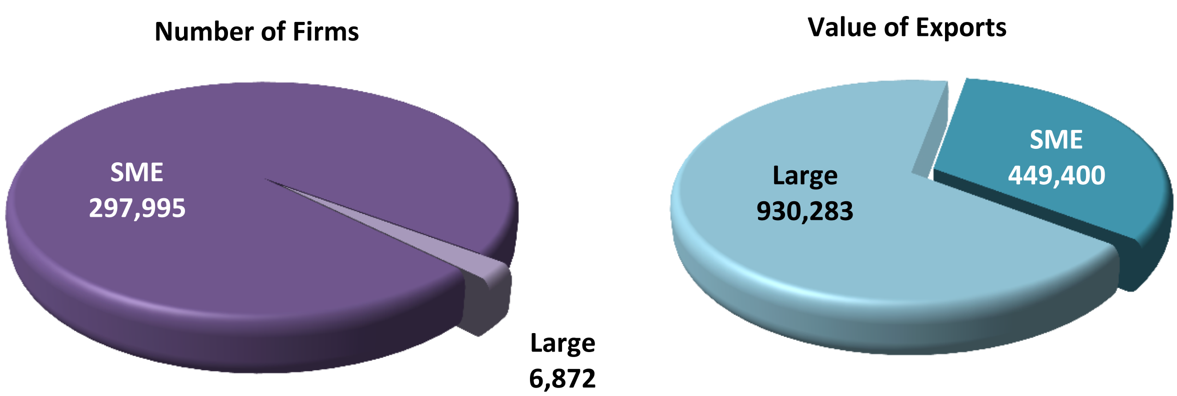


Figure 7: 2012 Exporters, by Size of Company

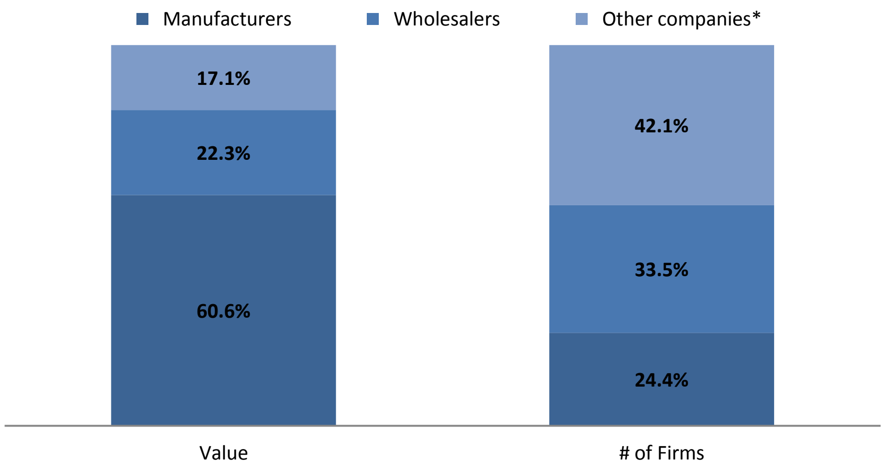


[8] Not all export transactions can be tied to specific firms, so these numbers may understate the total number of exporters. In 2012, almost 11 percent of the total value of exports could not be linked to specific firms. In addition a numerous smaller companies use wholesalers to export their products and the wholesaler shows up as the exporters not the manufacturer. See U.S. Census Bureau, “A Profile of U.S. Importing and Exporting Companies, 2011 – 2012,” April 2014.

Virtually all (97.7 percent) exporters in 2012 were small- and medium-sized companies (i.e. firms with fewer than 500 employees), though large firms accounted for roughly two-thirds of the value of exports in 2012. See Figure 7. Similarly, during 2012, only about 9 percent (28,700) of all identified exporters had more than one location; however, these companies accounted for roughly 76 percent of the known export value.

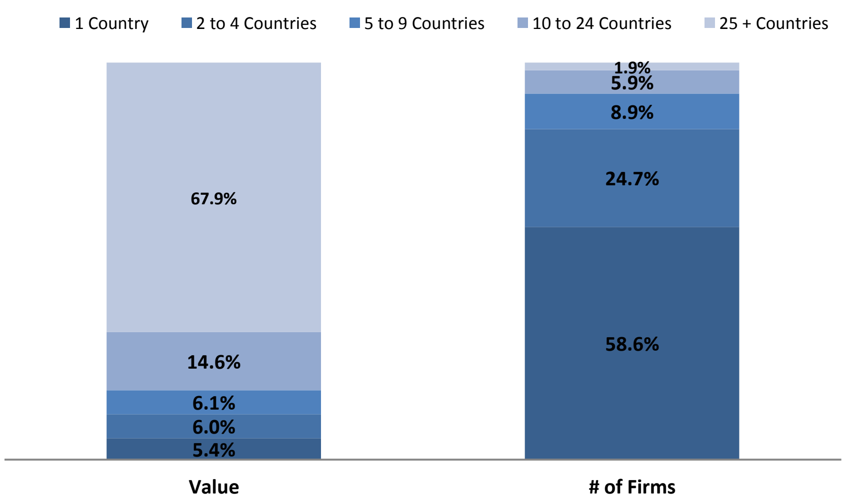
As can be seen in Figure 8, manufacturers dominate in terms of the number of firms that export, but when measured by value, manufacturers only represent about 25 percent of the total. Figure 9 shows that the majority (58.6 percent) of firms that export do so only to one country, while more than two-thirds of the value of exports are shipped by firms that deal with 25 or more countries.

Figure 8: Distribution of Exporting Firms by Type, 2012



*Includes software firms; communication, transportation, engineering, management and scientific service firms; and coal, oil and coal mining firms

Figure 9: Distribution of Exporting Firms by Number of Export Destinations



III. EXPORTS HELP DRIVE ECONOMIC GROWTH AT THE STATE AND METROPOLITAN AREA LEVELS

A. State-Level Export Growth

Between 2009 and 2013, Texas, California, Louisiana, Washington, and Michigan have reported the largest dollar increase in goods exports. Goods export growth was widespread as 13 states reported an increase in exports of more than $10 billion between 2009 and 2013 and another 10 saw goods exports increase by more than $5 billion.[9] At the product category level, there is a certain amount of specialization that is found in each of these states, with the top category contributing a significant amount to total goods exports. In addition, there is a certain specialization in the areas that drove goods export growth in these states. For Texas and Louisiana, petroleum and coal products contributed 34 percent and 63 percent of total export growth, respectively; for Washington and Michigan, transportation equipment was the main driver of growth, with this category accounting for 59 percent and 57 percent, respectively, of the increase in exports. The largest contributor to export growth for California was computer and electronic products; this category contributed 15 percent of the increase in exports. However, California's export growth was more diversified than these other states, as several other categories, such as agricultural products (12 percent), miscellaneous manufactured commodities (11 percent), transportation equipment (10 percent) and machinery, except electrical (9 percent), all contributed significant amounts to its export growth.

Table 2: Top 5 States by Dollar Growth in Merchandise Exports, 2009-2013

State	2009	2013	2009 to 2013 (Dollar Change)	2009 to 2013 (Percent Change)
UNITED STATES	1,056,042,963,028	1,578,851,422,749	522,808,459,721	50%
Texas	162,994,740,450	279,694,916,153	116,700,175,703	72%
California	120,079,965,765	168,128,418,347	48,048,452,582	40%
Louisiana	32,616,451,452	63,079,100,473	30,462,649,021	93%
Washington	51,850,856,743	81,938,684,618	30,087,827,875	58%
Michigan	32,655,333,884	58,456,169,285	25,800,835,401	79%

[9] 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. For example, when intermediaries ship agricultural goods from inland states down the Mississippi River for export at New Orleans, Louisiana would be listed as the state of origin rather than the state where the commodity was grown. For more information, see U.S. Census Bureau, Known Limitations in Uses of the Data, http://www.census.gov/foreign-trade/aip/elom.html#limitations.

The states that saw the fastest goods export growth over the 2009 to 2013 period are somewhat different than those that had the largest dollar value of goods exports, though both Louisiana and Michigan are among the top five states in both categories.

Table 3: Top 5 States by Percent Growth in Merchandise Exports, 2009-2013

State	2009	2013	2009 to 2013 (Dollar Change)	2009 to 2013 (Percent Change)
UNITED STATES	1,056,042,963,028	1,578,851,422,749	522,808,459,721	50%
New Mexico	1,269,535,234	2,719,604,952	1,450,069,718	114%
Mississippi	6,316,488,807	12,367,524,201	6,051,035,394	96%
Louisiana	32,616,451,452	63,079,100,473	30,462,649,021	93%
Michigan	32,655,333,884	58,456,169,285	25,800,835,401	79%
West Virginia	4,825,570,207	8,474,208,495	3,648,638,288	76%

B. Metropolitan Statistical Area-Level Growth

Export growth since 2009 has been widespread at the metropolitan statistical area (MSA) level, with Houston, New York, Detroit, Los Angeles and Miami showing the largest increases on a dollar-value basis. See Table 4. Out of the top five metropolitan areas by export value, three MSAs set a record for levels of exports in 2012 (the latest data available); in total, 29 out of the top 50 MSAs set records in 2012, as did an additional 141 MSAs outside of the top 50.

Table 4: Top 5 MSAs by Dollar Growth in Merchandise Exports, 2009-2012

MSA	2009 (Full Year)	2012 (Full Year)	Dollar Change	Percent Change
Houston-Sugar Land-Baytown, TX	65,820,898,833	110,297,753,116	44,476,854,283	68%
New York-Northern New Jersey-Long Island, NY-NJ-PA	69,990,311,832	102,298,029,869	32,307,718,037	46%
Detroit-Warren-Livonia, MI	28,405,159,986	55,387,305,415	26,982,145,429	95%
Los Angeles-Long Beach-Santa Ana, CA	51,528,365,660	75,007,521,224	23,479,155,564	46%
Miami-Fort Lauderdale-Pompano Beach, FL	31,174,986,589	47,858,713,857	16,683,727,268	54%

Table 5: Top 5 MSAs by Percent Growth in Merchandise Exports, 2009-2012

MSA	2009 (Full Year)	2012 (Full Year)	Dollar Change	Percent Change
Muncie, IN	90,148,872	492,818,788	402,669,916	447%
Albuquerque, NM	357,635,858	1,790,610,246	1,432,974,388	401%
Morgantown, WV	16,785,448	75,853,234	59,067,786	352%
Mount Vernon-Anacortes, WA	505,182,252	1,953,988,566	1,448,806,314	287%
Lake Charles, LA	1,305,043,228	4,749,472,040	3,444,428,812	264%

IV. THE NATIONAL EXPORT INITIATIVE PROMOTES EXPORT GROWTH

Since NEI was announced by the President in his 2010 State of the Union speech, it has been a top priority of the Obama Administration to improve the conditions that directly affect the ability of U.S. firms to export, such as removing trade barriers abroad, helping U.S. firms and farms of all sizes overcome hurdles to entering new markets, and assisting with financing that is needed for exporting.

The Administration continues to support U.S. companies selling their goods and services abroad. NEI/NEXT will help more American companies reach more overseas markets by improving data, providing information on specific export opportunities, working more closely with financing organizations and service providers, and partnering with states and communities to empower local export efforts.

Efforts that NEI/NEXT will build on include:

- Continuing to build our trade advocacy and export promotion efforts:
    - Since the launch of the NEI through 2013, interagency advocacy support through the Department of Commerce's Advocacy Center has resulted in more than 200 wins for U.S. companies competing for foreign government tenders, including nearly $160 billion in U.S. export content.
    - The number of trade missions increased by 20 percent and the number of companies going on trade missions doubled under the NEI, resulting in $9 billion in export successes.
- Educating U.S. companies about markets opened by our free trade agreements (FTAs) and the export opportunities that will derive from trade negotiations such as the Trans-Pacific Partnership (TPP), Transatlantic Trade and Investment Partnership (T-TIP), and Trade in Services Agreement.
- Enforcing U.S. trade rights under international agreements.
- Aggressively investigating unfair trade practices affecting U.S. exports or imports into the U.S. market.

CONCLUSION

In sum, U.S. exports have grown significantly over the last few years, reaching a striking level of $2.3 trillion in 2013, and the number of jobs exports support has increased to 11.3 million. A case can be made that the Administration's efforts under the NEI have played a role in this increase. Looking forward, as global economic health strengthens further, so do the prospects for continued U.S. export growth and a fulfillment of the Administration and the U.S. Department of Commerce' pledge to do everything possible to enable U.S. businesses to succeed.