Content

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

At a Glance

The construction industry is a critical sector in all industrialized economies not only in terms of providing employment and increasing demand for the production of building materials, but also as stated by the Organization for Economic Cooperation and Development (OECD) "**it builds and maintains the structures and infrastructure on which nearly every other industry depends**".

In 2013 the US construction industry began to expand (at a rate of 3%) after four consecutive years of contraction, reaching a market value of $961.1 billion. Most of the economic growth has been the a result of numerous economic and geo-political factors, including that of low unemployment rates, increased economic political stability and therefore consumer confidence, as well as increased global trade.

An increase in residential construction, both for single-family housing and multi-family housing has resulted in the increase in construction and greatly encouraged the 19% increase in the permit-issuing authorization in the same year. Public administration buildings and real estate industry were the leading sectors of the non-residential construction industry. In geographical terms the construction industry was most active in the Southern and Western regions of the United States, accounting in turn for 50% and 24% of the new permit issues in 2013. Although full recovery has not yet been fully accomplished, compared to the years previous to the economic crisis began in 2008, it is forecasted that the construction industry and thus all of the related sectors will maintain a relatively stable growth rate until 2019.

This report is an overview of the U.S. Construction and Building Materials Industry for the year 2015; highlighting its importance and its notable contribution to the overall country's GDP. Particular emphasis is given to the potential opportunities apperear for exporters. In addition, the report closely examines the bilateral trade patterns and international competition for the top exporting countries to the US market and the relative industry trends that influence growth.

In 2014, the building materials market expanded by 8,9% reaching a value of $39,663.2 million according to official statistics. Within the major exporting countries to the US Construction &Building Materials' market are neighboring countries members of the North-Atlantic Free Trade Agreement (NAFTA) signed by the USA, Mexico and Canada. European contribution is limited but highly specialized. Germany, Italy and the United Kingdom, i.e. countries with strong industrialized economy, are currently the key players to the particular US Industry.

Perhaps it seems that opportunities for Greek exporters are limited in this industry, due to high fixed costs, high transaction costs because of the relatively heavy mass of certain materials in the industry. However, Greek companies should focus on targeting either niche markets or bids where their USP is significant.

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Chapter 1 | About

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

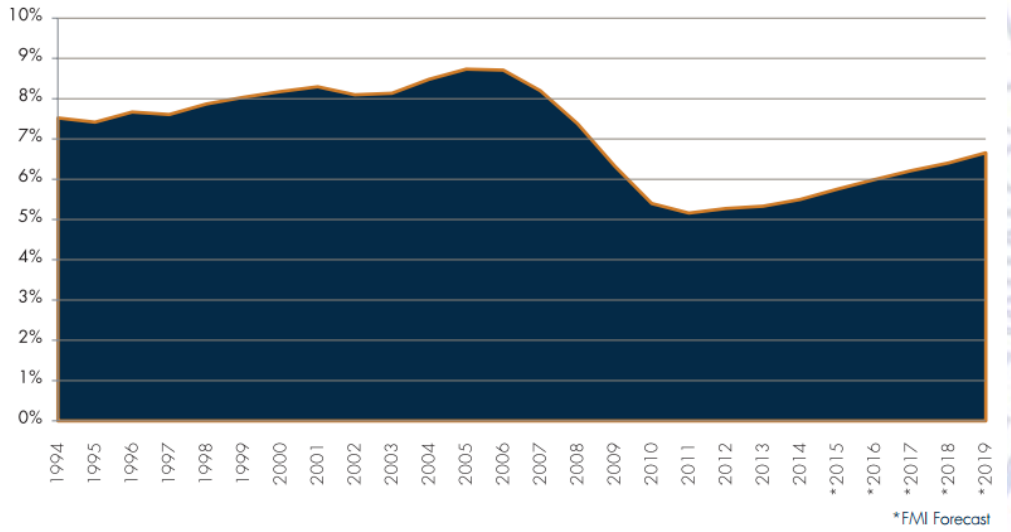
1.1. OVERVIEW OF THE USA CONSTRUCTION INDUSTRY

The construction industry is a critical sector in industrialized economies since "**it builds and maintains the structures and infrastructure on which nearly every other industry depends**" (OECD, 2015).

Amongst the industry's main characteristics is its high diversity in terms of the structures which includes i.e. residential, non-residential (commercial, lodging, education, public health, religious and offices) and industrial buildings, all of which require the appropriate materials and specialized skills for completion. Consequently, the sector trade within the construction industry takes place on multiple levels and is divided into three main categories; that of specialized labor, machinery (capital) and construction materials.

In the US economy, the construction sector plays an important role, accounting for approximately 5% of total GDP in 2012 and has since begun to grow (FMI Construction Outlook Report, 2015).

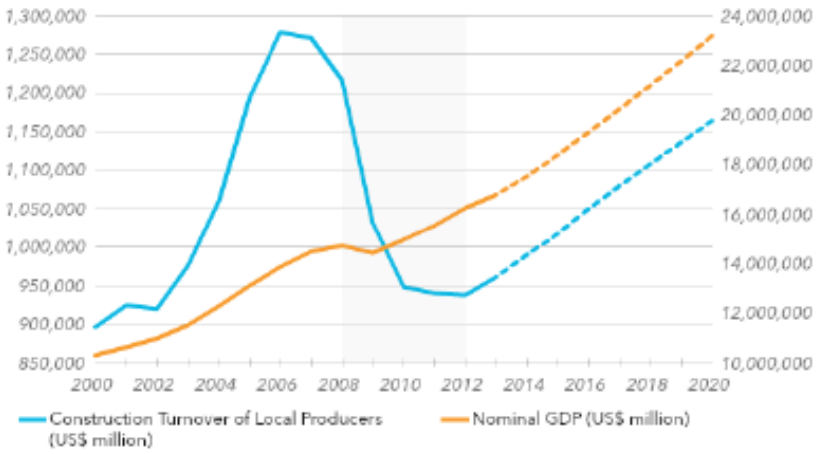
Figure 1: Construction as a Percentage of GDP



Source: FMI Construction Outlook Report, 2015

Since the beginning of 2013 the construction industry is showing significant signs of recovery in spite of persistently high mortgage rates, after four consecutive years of stagnation, due to the global financial crisis and a drastic decrease in demand. As a result of improved consumer confidence and declining unemployment rates, new residential homes are once again being constructed. The construction industry expanded by 3% in 2013 at reaching $961.1 billion, this level however is still 22% lower than the compared to the levels previous to the economic crisis and is forecasted to grow at an average of 3% over the period 2013 – 2019.

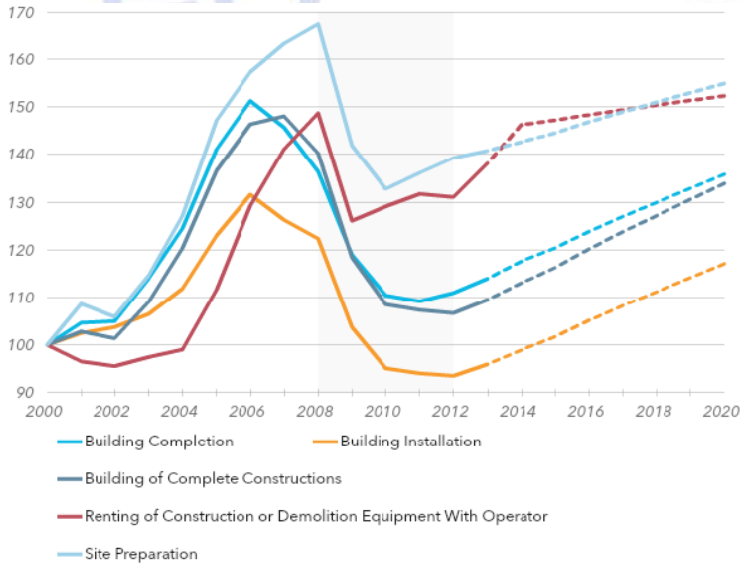
Figure 2: Production in Construction vs. Nominal GDP 2000 – 2020



Source: Euromonitor, 2014

Figure 2, compares the turnover of local producers in construction to the nominal GDP in millions of dollars. After 2010 the turnover from construction decreases and from 2012 begins to recover. The industry's growth indices by sector are analyzed in figure 3. They all follow a similar trend with preparation and building completion being the fastest growing sectors. Building installations is the slowest growing sector in the construction industry.

Figure 3: Industry's Sectors' Growth Indices 2000- 2020



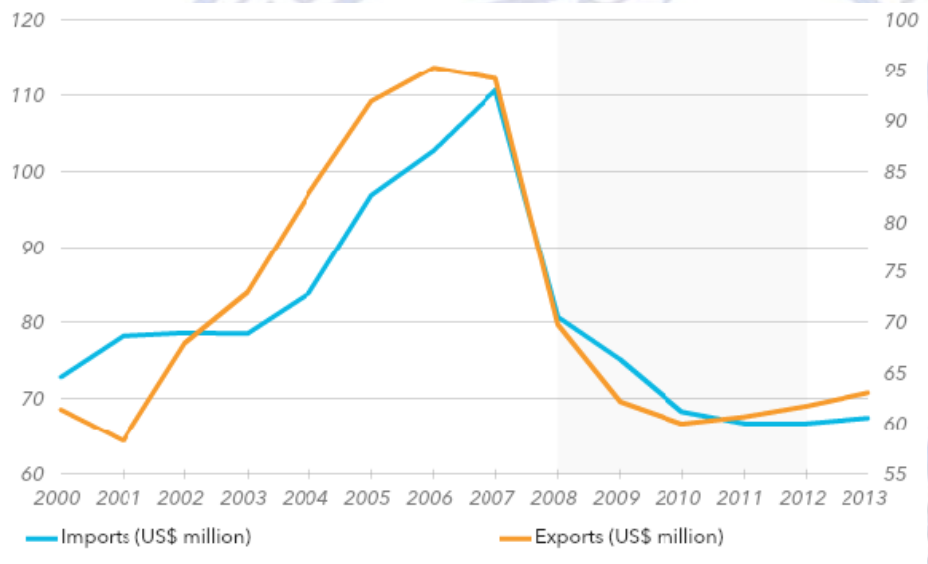
Source: Euromonitor, 2014

The main exporting destinations according to the Euromonitor for the construction industry are summarized below. The majority of the exports go to Canada and Mexico which are neighboring countries and part of NAFTA. Ukraine is the only eastern European destination of USA exports, which is followed by Panama and Australia.

Figure 4: Export Destinations 2008 - 2013

% share of exports	2008	2009	2010	2011	2012	2013
Canada	48.1	44.7	41.5	49.5	54.0	55.0
Mexico	8.3	5.7	6.5	7.5	6.0	5.6
Ukraine	0.6	0.1	0.5	0.7	2.9	3.3
Panama	0.1	0.1	0.4	0.5	2.2	2.1
Australia	0.8	0.7	0.9	0.8	2.1	2.0
Other	42.1	48.8	50.2	41.0	32.7	32.0
Total	100	100	100	100	100	100
Source: Euromonitor, 2014						

Figure 5: Import vs. Export Growth 2000 – 2013

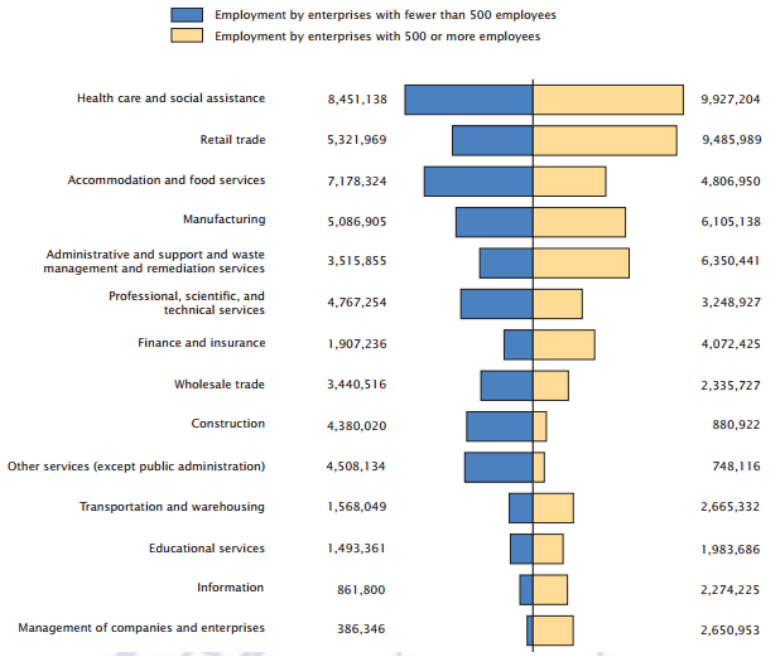


Source: Euromonitor, 2014

Comparing exports and imports in monetary value, overall during the 13 year period studied, the trade balance is positive indicating that exports surpass imports. During the economic recession of 2008 – 2010 the trade balance presents a negative value as is the case for the period 2000 – 2002.

The importance of the construction industry to the American economy is evident, since it is the 9th largest sector which provides employment to the USA citizens and is highly concentrated with smaller companies.

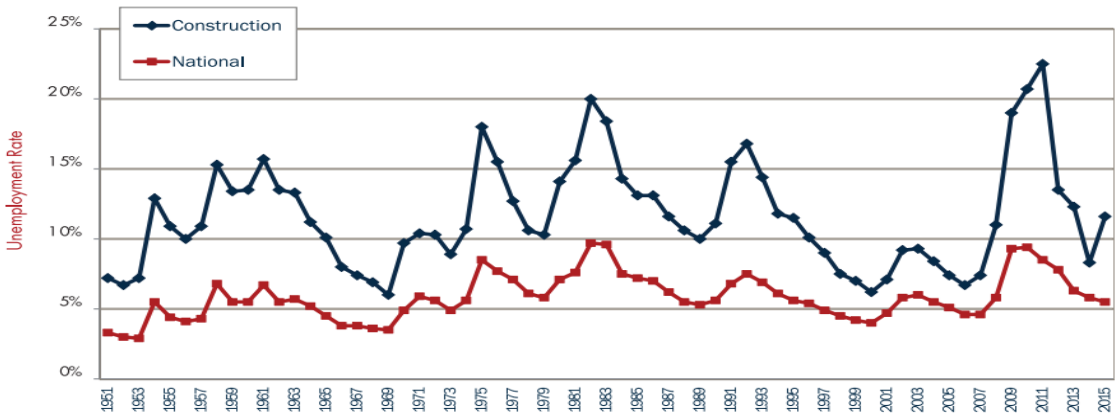
Figure 6: Employment by NAICS Sector and Enterprise Employment Size 2012



Source: US Census, 2012

The biggest challenge faced by contractors however, continues to be the search for labor (FMI Construction Outlook Report, 2015). The following figure presents the national unemployment rates compared to that of the construction industry. On average the latter is approximately 4% higher than the national average and indicates that the construction industry has a higher unemployment rate than that of the national average.

Figure 7: Construction Sector vs. National Unemployment Rates



Source: FMI Construction Outlook Report, 2015

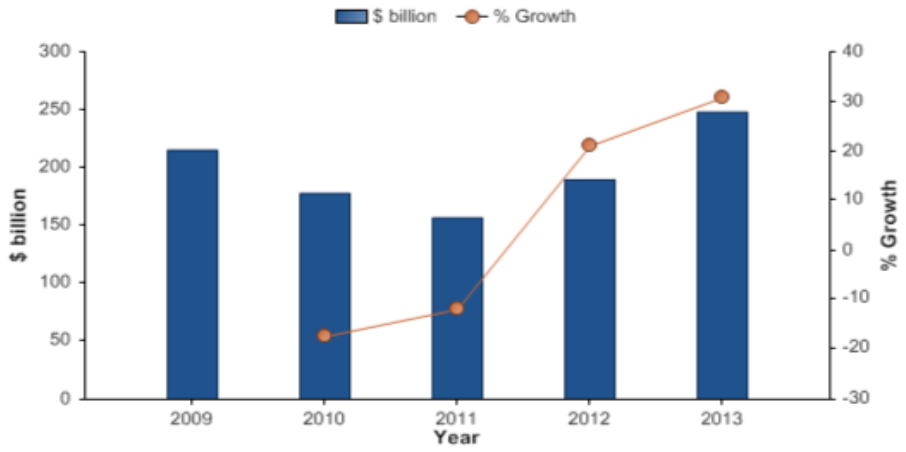
The above trend follows the identical pattern of national unemployment rates with an initially higher and exaggerated rate. The number of employees in the sector has decreased significantly as a result of the increase in the average salaries after 2008 in line with the beginning of the economic recession. At the end of October 2015 USA spending for construction increased 3.3% compared to the same period in 2014. In monetary terms the corresponding value for 2014 approached €783 billion or $971 billion.

RESIDENTIAL CONSTRUCTION
HOMEBUILDING INDUSTRY

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

This market includes the construction of houses and apartments, which grew by 30.8% in 2013, is estimated at $248 billion and forecasted to grow by 1.4% annually in terms of volume from 2013 to 2018, reaching a value of $340.1 billion. The European and Asian-Pacific respective markets are however expected to grow at higher rates from the given period.

Figure 8: USA Homebuilding Industry 2009 - 2013 (Billions of US$)



Source Homebuilding in the United States, 2014

Figure 9: USA Homebuilding Industry – Volume Forecasts (2013 – 2018)

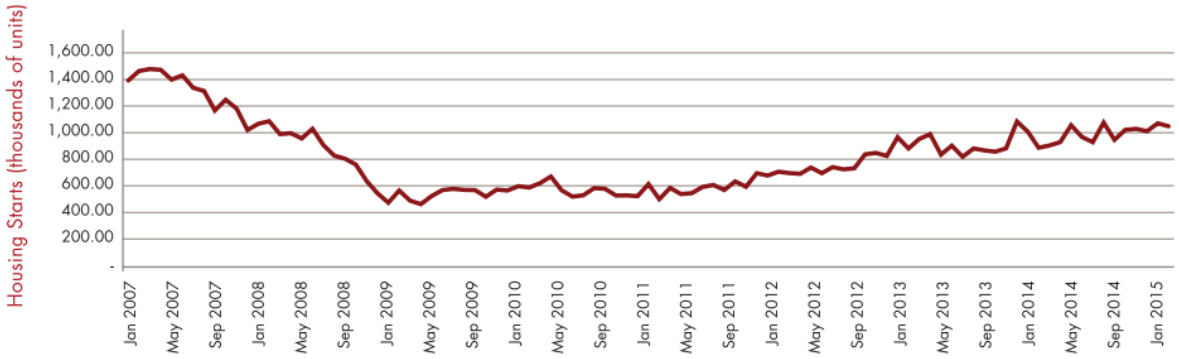
Source: Homebuilding in the United States, 2014

Low unemployment rates and an increase in population are the most significant drivers of the market. Another significant factor which encouraged the growth of the specific industry was consumer attitudes, which improved in 2013 as a result of the comeback of the overall economy, leading to a more optimistic approach of USA citizens in relation to their financial situation. This meant that the average consumer could once again invest in home extensions or refurbishment and in the sales of new housing units.

There was also a growth in the number of authorized construction projects for private-housing units, particularly in the western and southern regions of the United States. The industry is labor-

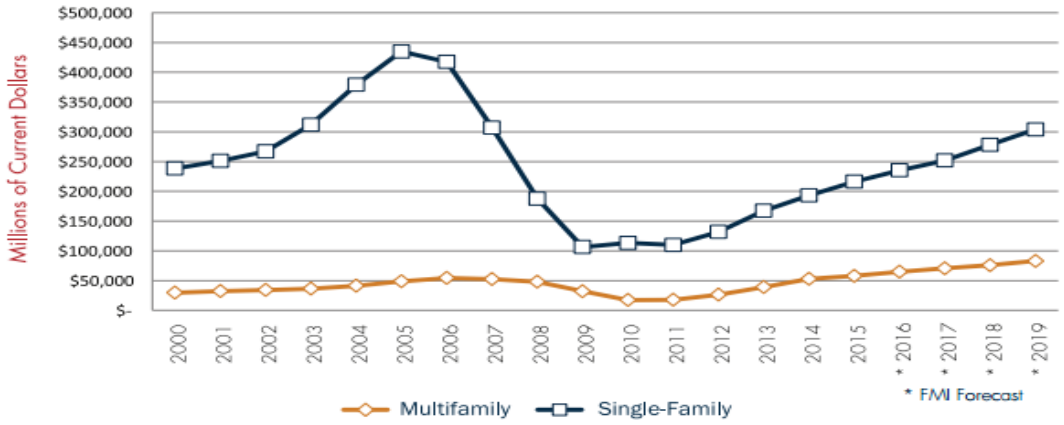
intensive and includes a large number of self-employed members. The competitive landscape of the construction industry in the USA is regionally fragmented and recently restructuring itself since many companies in the domestic construction sector are contracted, leaving over 2.9 million operating companies.

Figure 10: New Privately Owned Housing Units Started (2007 - 2015)



Source: FMI's Construction Outlook 2015

Figure 11A: Single-Family vs. Multi-family Residential Constructions (2000 - 2019)



Source: FMI's Construction Outlook 2015

Multi-family housing but particularly single-family constructions have recovered. The single-family housing market in particular that includes detached houses or town houses in particular grew by 8% in 2013. The details of the market in terms of establishments, sales and employment are presented below and overall indicate a growing trend.

Figure 11B: Single-Family Industry Establishments, Sales & Employment Trends

	Year					Percent Chg. Year-to-Year			
	2011	2012	2013	2014	2015	11-12	12-13	13-14	14-15
Establishments	48,480	47,506	47,807	48,390	50,187	-2.0%	0.6%	1.2%	3.7%
Sales ($Millions)	39,974	40,838	42,596	45,026	48,805	2.2%	4.3%	5.7%	8.4%
Employment	213,476	209,184	210,507	213,081	220,990	-2.0%	0.6%	1.2%	3.7%

Source: Barnes Report, 2014

The renovation of existing households is another aspect of the residential construction market. A survey by Houzz indicates that 84% of homeowners were planning to decorate or redecorate their homes in the next two years and another 40% seem to be committed to the idea of remodeling or building an extension to their current housing unit. Amongst the most common planned improvements are the bathroom and kitchen renovations (Euromonitor, 2014).

When considering entering the USA residential construction market, compliance with safety and environmental regulations are a major concern and the primary reason why competition in the industry remains strong, limiting the entrance of new players. Compliance with the regulations is costly and long procedures, sometimes discouraging competitors to enter.

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

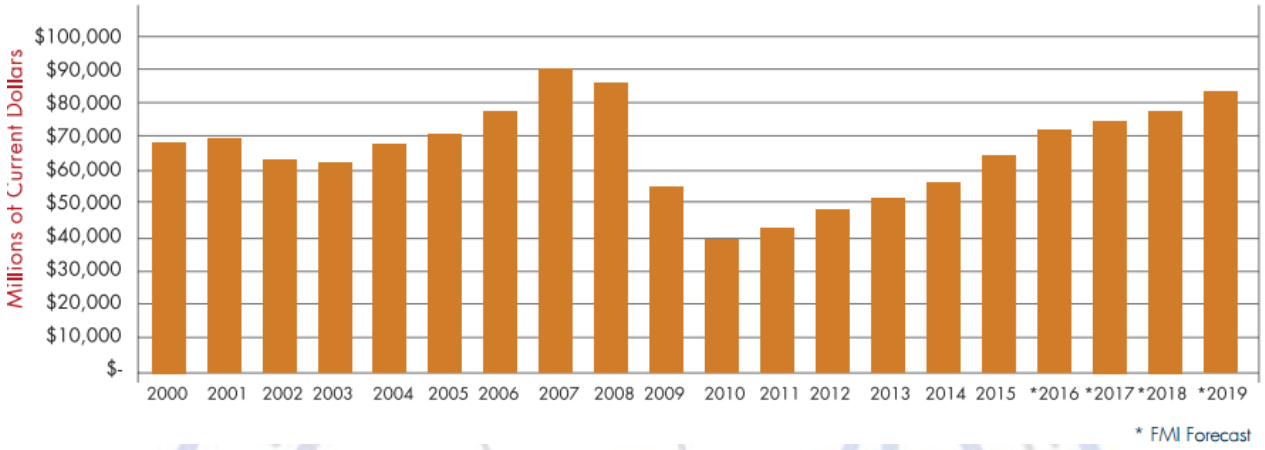
NON-RESIDENTIAL CONSTRUCTION

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

COMMERCIAL CONSTRUCTION

Commercial construction increased by 18% in 2014 and is expected to grow further leading up to 2019 as figure 12 indicates.

Figure 12: Commercial Constructions (2000 - 2019)

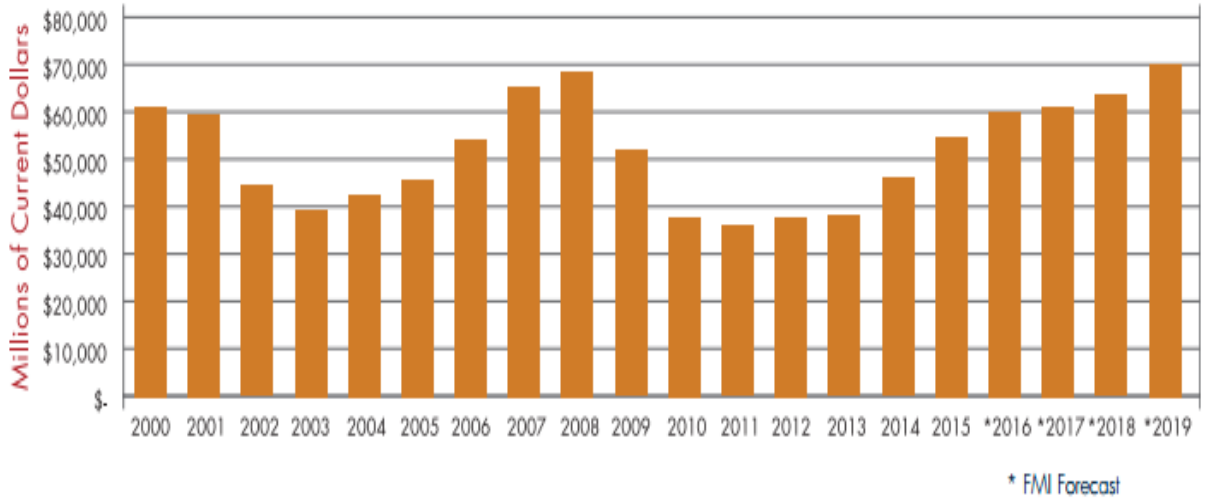


Source: FMI's Construction Outlook 2015

OFFICE CONSTRUCTION

After a five-year period of only relative increases, 2015 marks a new area for the US construction industry and is expected to continue to grow, as indicated in figure 13. In the first quarter of 2015 the market's turnover increased by the 17% compared to that of the same period in 2014 (92 million square feet), according to CoStar Statistics. The increase in employment rates was a critical factor in the development of this trend.

Figure 13: Office Constructions (2000 - 2019)

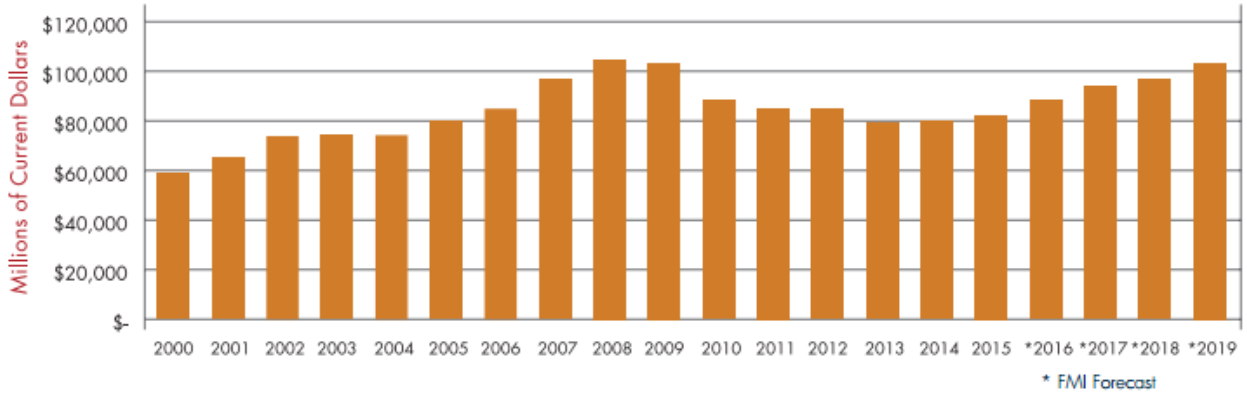


Source: FMI's Construction Outlook 2015

EDUCATION CONSTRUCTION

Figure 14 illustrates a minimal growth rate in the construction of schools and other educational buildings in the USA. In 2015 the sector reached a 6% growth rate which is estimated to grow by another 5% in 2016 and prospectively to have reached a value of $100,000 million by 2019.

Figure 14: Education Construction Forecast (2000 - 2019)

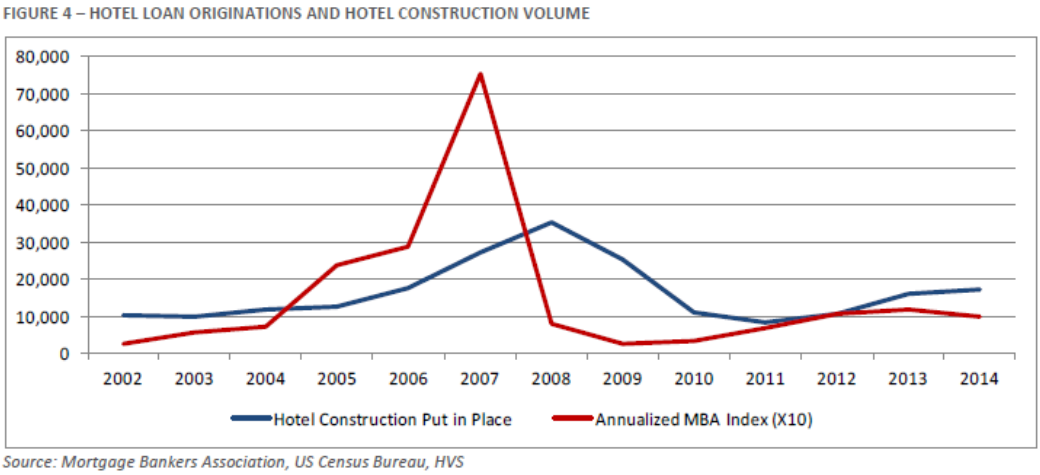


Source: FMI's Construction Outlook 2015

HOTEL DEVELOPMENT

Finally, the hotel development is an important sector to examine, the past five years the demand for hotel structures has grown at higher rate than the supply and it is in line with the global hotel conustruction trends. Figure 15 below illustrates the relationship between the value of hotel constructions put in place and the value of hotel loans. In 2008 the value of hotel loans decreased significantly, falling below hotel constructions but has started to recover since 2009.

Figure 15: Hotel Construction Volume & Hotel Loans (2002 - 2014)



Source: Mortgage Bankers Association, Census Bureau, HVS

Figure 16: Construction Forecasts Per Sector 2014 - 2019 (millions of dollars)

	2014	2015	2016	2017	2018	2019
RESIDENTIAL BUILDINGS						
Single Family	196,601	219,353	239,258	262,007	284,829	311,084
Multifamily	50,467	55,862	61,226	66,463	72,016	78,010
Improvements*	120,016	123,394	128,304	133,057	138,531	146,270
Total Residential	**367,084**	**398,610**	**428,788**	**461,526**	**495,375**	**535,364**
NONRESIDENTIAL BUILDINGS						
Lodging	16,037	18,610	20,734	22,204	23,518	24,979
Office	44,732	49,529	52,802	55,359	58,305	61,794
Commercial	57,061	65,846	70,575	74,973	78,450	83,390
Health Care	38,910	40,608	42,487	45,590	48,460	51,206
Educational	78,458	80,992	85,303	89,925	95,145	101,464
Religious	3,549	3,596	3,665	3,789	3,930	4,079
Public Safety	9,224	9,394	9,700	10,188	10,682	11,358
Amusement and Recreation	16,636	17,813	18,738	19,480	20,359	21,542
Transportation	41,719	44,782	48,784	52,593	55,855	59,971
Communication	16,072	16,343	16,836	17,381	18,063	19,050
Manufacturing	55,175	61,425	67,317	72,321	77,724	84,319
Total Nonresidential Buildings	**377,573**	**408,937**	**436,939**	**463,804**	**490,492**	**523,152**
NONBUILDING STRUCTURES						
Power	101,182	108,592	117,674	127,754	135,320	144,929
Highway and Street	84,571	85,902	89,592	91,782	93,178	94,912
Sewage and Waste Disposal	22,512	23,246	24,029	25,039	26,030	26,961
Water Supply	12,903	13,078	13,330	13,750	14,106	14,668
Conservation and Development	7,470	8,092	8,572	8,942	9,508	10,287
Total Nonbuilding Structures	**228,638**	**238,909**	**253,197**	**267,266**	**278,141**	**291,757**
Total Put in Place	**973,295**	**1,046,456**	**1,118,925**	**1,192,596**	**1,264,009**	**1,350,274**

*Improvements includes additions, alterations and major replacements. It does not include maintenance and repairs.

Source: FMI's Construction Outlook 2015

Overall the industry is expected to grow, but with a declining growth rate until 2019 especially the sector of residential buildings. Therefore, opportunities for investments are created (Marketline, 2014).

The following section defines the most commonly traded materials – characterized by their Harmonizing (HS) Codes – sourced from importers of the USA construction industry.

1.2. HARMONIZING (HS) CODES

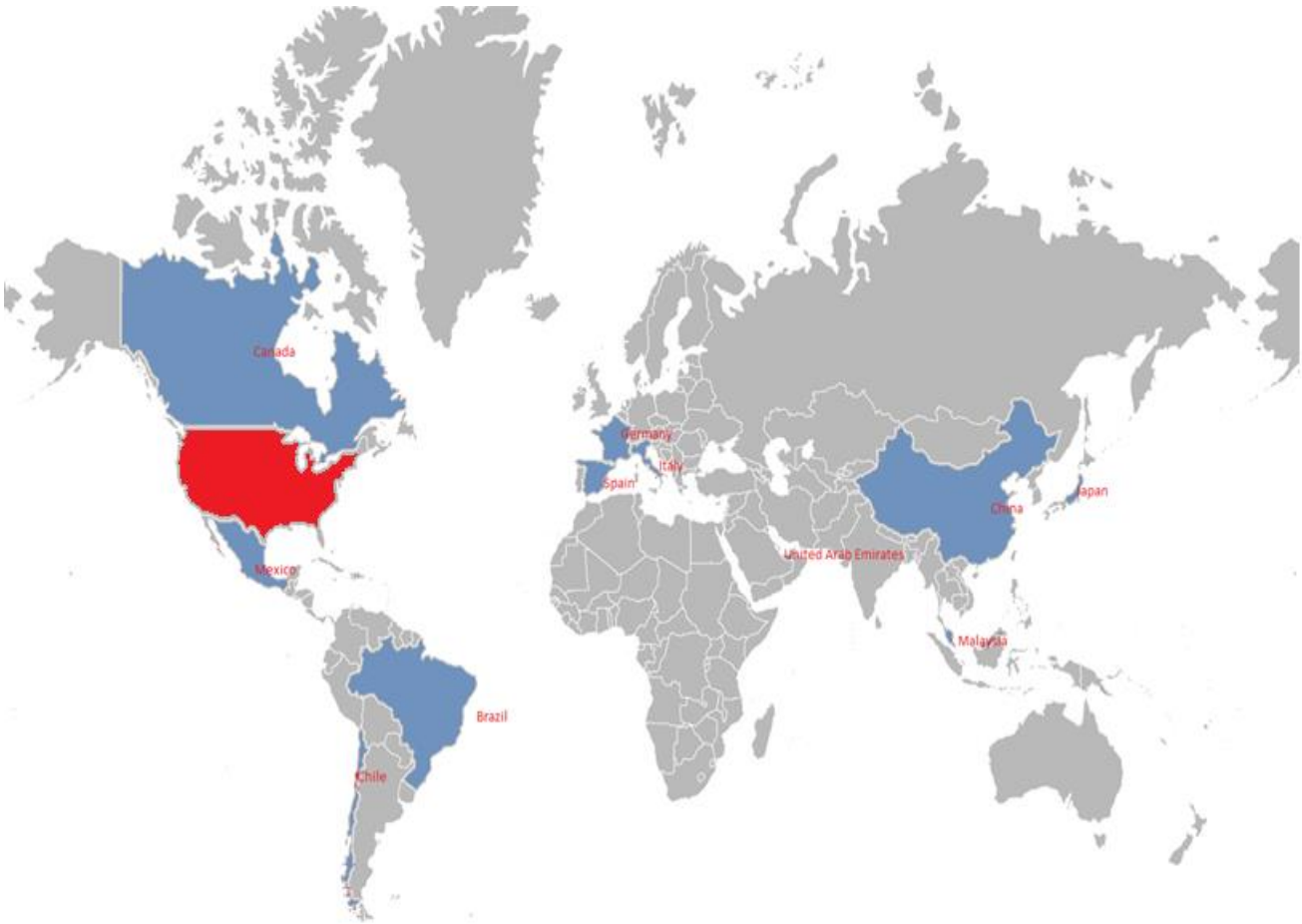
The HS codes, presented below, as defined by the International Trade Center (ITC), belong to the category for construction materials and appliances. The report will base its analysis on the specific HS Codes. The materials and appliances are summarized according to their corresponding international HS code next to which is a description of their basic properties and their major exporting countries.

HS Code	Product Label	Exporting Country
3208	Non aqueous solution of paint & varnish	**Canada, Germany, Mexico**
44	Wood and articles of wood, wood charcoal	
4402	Wood charcoal (including shell or nut charcoal), whether or not agglomerated	
4403	Wood in the rough, whether or not stripped of bark or sapwood, or roughly squared	
4407	Wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end-jointed, of a thickness exceeding 6mm	**Canada, China, Brazil, Chile**
4409	Wood (including strips and friezes for parquet flooring, not assembled) continuously shaped (tongued, grooved, rebated, chamfered, V-jointed, beaded, molded, rounded or the like) along any of its edges, ends or faces, whether or not planed, sanded or end-jointed	
68	Stone, plaster, cement, asbestos, mica etc articles	
6801	Setts, curbstones and flagstones, of natural stone	
6802	Worked monumental/building stone and art. Mosaic cube granules	
6803	Worked slate and articles of slate	**China, Italy, Mexico**
681011	Building Blocks and bricks of cement, concrete or artificial stone	
6814	Worked mica and articles of mica, nowhere else specified (nes)	
70	Glass and glassware	
7003	Cast & rolled glass, sheets/ profiles	
7004	Drawn or brown, glass in sheets	
7005	Float glass & surf grd/polished glass in sheets	
7006	Glass of 70. 03, 70.04, 70.05 bent, edge worked etc. not framed etc.	**China, Mexico, Germany**
7007	Safety glass, consisting of toughened or laminated glass	
7008	Multiple-walled insulated units of glass	
72	Iron and steel	**Canada, China, Brazil**
732410	Sinks and wash basins, stainless steel	**China, Mexico**
76	Aluminium and articles thereof	
7601	Unwrought aluminium	
7604	Aluminium bars, rods and profiles	
7605	Aluminium wire	
7606	Aluminium plates, sheets and strip, of a thickness exceeding 0.2mm	
7608	Aluminium tubes and pipes	**Canada, China, UAE, Mexico**
7609	Aluminium tube or pipe fittings	
7610	Aluminium structures nes & part of structures	
7611	Aluminium reservoirs, vats & sim container	
7616	Articles of aluminium nes	
8402	Steam or vapor boiler; super-heated water boiler	**Korea, Canada, China**
8418	Refrigerator, freezer, etc.	**Mexico, China, Korea**
8428	Lifting/handling/loading/unloading machinery (excl. lift/escalator/conve	**China, Spain**
842810	Lifts and skip hoists	**Mexico, Germany**
842820	Pneumatic elevators and conveyors	**Canada, Germany**
842840	Escalators and moving walkways	**China, Spain, Japan**

Source: International Trade Center (ITC)

The map pinpoints the geographical locations of the key supplying countries to the US market for construction materials and electrical appliances.

Figure 17: Major Exporting Countries to the US Supply Market of the Construction Industry



The following section analyzes the bilateral trade patterns between the US and the rest of the world (ROW) that supplies the US market with the necessary materials in order to satisfy the demand of the domestic construction industry. Electrical appliances often used in construction include refrigerators, freezers, elevators, escalators and boilers. The trade patterns of these appliances are also in turn analyzed in this report.

Chapter 2 | International Competitive Landscape

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

2.1. BILATERAL TRADE PATTERNS & THE INTERNATIONAL COMPETITIVE LANDSCAPE

Overall, the USA is a net importer of goods and services when it comes to international trade, meaning that at on aggregate level the US is importing more goods and services than exporting. In 2014, specifically, the total value of imports in the US added up to $2.34billion dollars. The most highly imported products to the US market are oil and gas based goods, which are imported from the Middle East and Canada and machinery and nuclear reactors, boilers (HS Code 84) and electrical equipment (HS Code 85) mainly from China and Mexico.

When referring to construction and building materials, the U.S. bilateral trade statistics indicate that with its trading partners the USA's most highly imported products are iron and steel (HS Code 72), aluminum (HS Code 76) and wood (HS Code 44). The most important HS Codes for the construction industry and their respective markets are analyzed in the forthcoming sections.

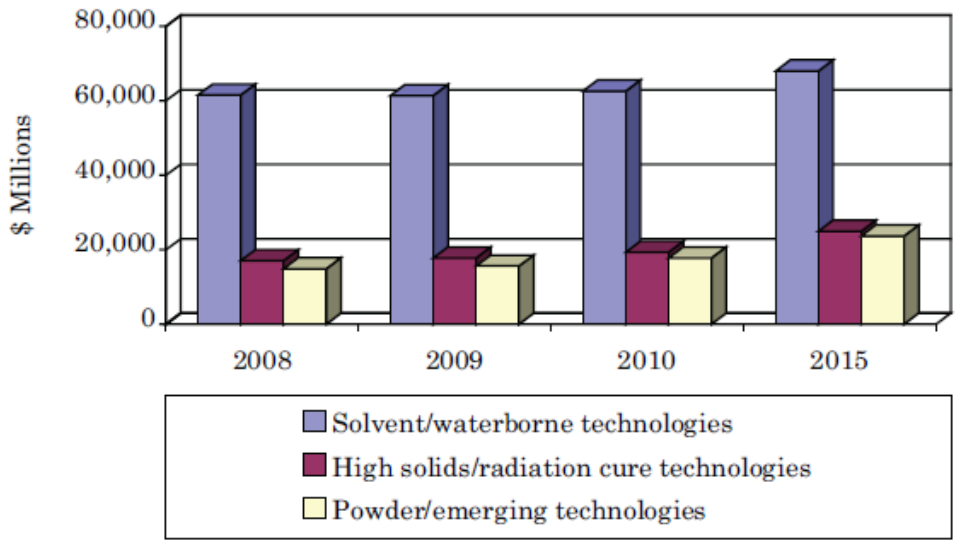
Non -Aqueous Solutions of Paints and Varnishes (HS Code 3208)

Although often disregarded, the market for paints and varnishes contributes significantly to a country's national economy and output. Paints, coatings and related products are the most commonly used substance to protect and preserve buildings and manufactured commodities against the development of rust, helping them to maintain their functionality. Other uses of paints and varnishes include the beautification or decoration of objects in construction, architecture, interior design and the automotive industry amongst others.

On an international level the market has been growing for the past five years and still remains healthy. By the end of 2010, the global market reached approximately $99.7 billion and grew at an average rate of 3.2% per year over the period 2010 – 2015, when it was estimated to reach a value of $116.6 billion (BCC Research).

The figure 18 presents an overview of the global market for paints and coatings over the 8-year period, representing an upward trend. Paints and varnishes are found in various forms, the main ones being liquids, powder based paints and varnishes. The solvent and waterborne technologies segment predominate the market, reaching a value greater than $60,000 million dollars in 2015.

Figure 18: Global Market for Paints and Coatings (2008 - 2015)

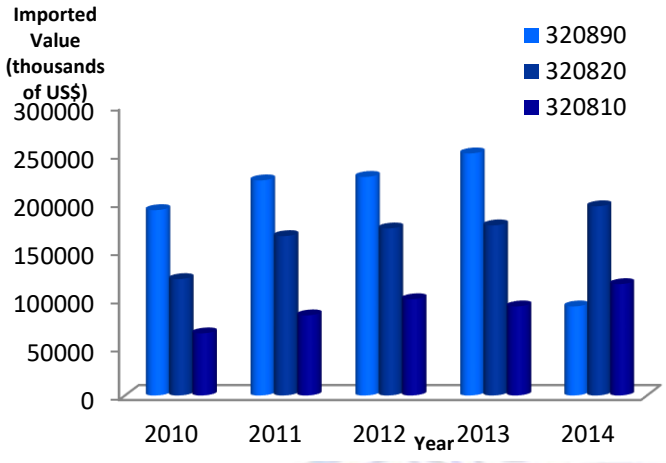


Source: BCC Research

Non-aqueous solutions of paint are those which are dissolved in a substance other than water. The main difference between them is that paint is mostly used to protect color or provide texture to objects and may be transparent; however they have long range colors. Paints have added pigments and binders that enable the change of color of the reflect light. When they are applied paints form a semi-solid layer on the surface on which they have been applied, therefore acting as a barrier against environmental conditions. Varnishes are usually transparent with little or no color with no added pigments. Their application is the final step after the paint has been applied for protection and a glossy effect.

Since the domestic production is not sufficient to satisfy the US demand, both paints and varnishes are imported in large quantities to the USA from the Rest of the World. The figure below summarizes the bilateral trade pattern which exists between the USA and the ROW for the period 2010 – 2014, based on International Trade Center (ITC) data.

Figure 19: Imported Value of Non-Aqueous Solutions of Paint and Varnish (HS Code 3208)



HS Code	Product Label
320890	Paints & varnishes based on polymers dissolved in a non-aqueous solution nes[1]
320820	Paint & varnishes based on acrylic/vinyl poly, dispersed in a non-aqueous medium
320810	Paints & varnishes based on polyesters, dispersed in a non-aqueous medium

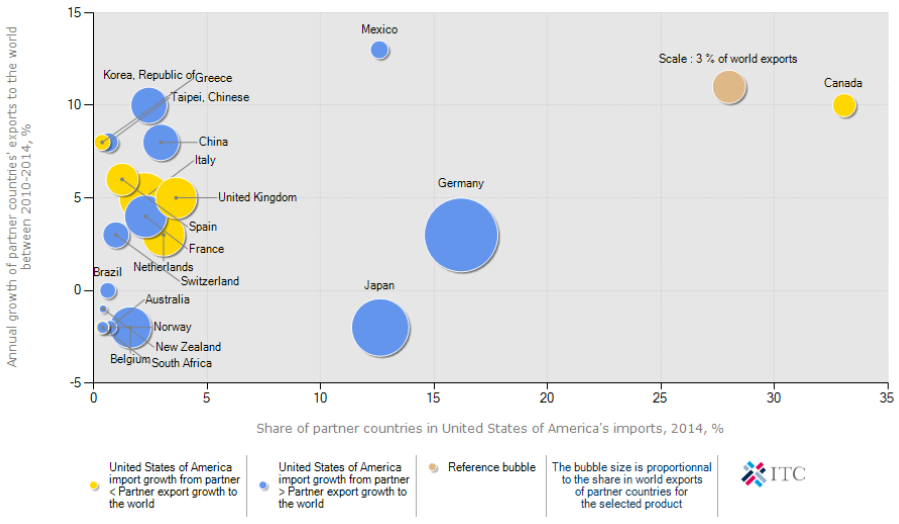
Source: International Trade Center (ITC)

Source: International Trade Center (ITC)

Paints and varnishes under the HS Code 3208 are divided into three main sub-categories: polymer based (HS Code 3208890), acrylic based (HS Code 320820) and polyester based (HS Code 320810). Acrylic based paints are commonly used for construction since they have high capability to withstand harsh weather conditions. For wooden surfaces varnishes are most commonly used; while oil based or enamel based paints are used for metal surfaces in buildings.

Figure 19 above indicates that the most highly traded paints and varnishes between 2010 and 2013 are those which are polymer based (HS Code 320890). In 2014 this pattern changed and the imported value for HS Code 320890 decreased significantly. Acrylic based paints and varnishes (HS Code 320820) are highly traded in 2014 possibly indicating an increased demand from the construction industry compared to the previous years. This is also the case for polyester based paints and varnishes.

Figure 20: Diversification of Suppliers in the US Market in 2014 (HS Code 3208)

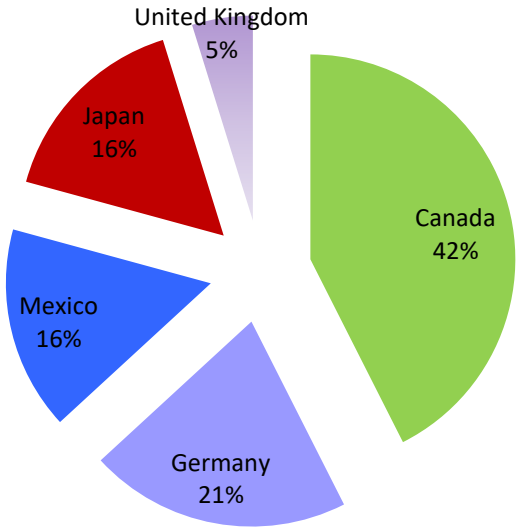


[1] Nowhere else specified

Source: International Trade Center (ITC)

The geographical diversification of suppliers to the US market for paints and varnishes under HS Code 3208 are presented in figure 20. The most dominating suppliers of the US market are Canada, Germany, Japan and Mexico, countries from four different continents. The smaller and less significant suppliers are from Western European, Scandinavia (Norway) and South Asian countries.

Figure 21: Top-five Market Holders in 2014



Source: UN COMTRADE statistics

Figure 21 summarizes the market share for each of the top-five importing countries to the US supply market as a percentage for non-aqueous paints and varnishes. Canada captures nearly half of the top-five exporting market share, followed by Germany. Canada geographically is a neighboring market and therefore trade is facilitated by NAFTA which exists between the two countries since 1988 and has significantly increased cross-border trade. Mexico became a member of the NAFTA since 1994 and has benefited from the elimination of tariff and nontariff barriers to trade. Japan shares the third position together with Mexico, holding 16% of the top-five market share. The United Kingdom represents only 5% of the top supplying market to the US.

Table 1 and Table 2 present a summary of the imported value in monetary and quantitative terms of quantity respectively, for the top-five importing countries to the US domestic market of HS code 3208.

Table 1: Imported Value by Country to the USA					
HS Code: 3208 (Non-aqueous solution of paint & varnish) **Unit: thousands of US$**					
Exporters	**2010**	**2011**	**2012**	**2013**	**2014**
World	376,589	470,360	498,88	518,502	567,039
Canada	121,681	163,739	179,392	182,142	187,575
Germany	71,631	98,058	90,395	97,248	91,842
Japan	42,844	45,510	53,255	52,505	71,635
Mexico	36,605	44,361	55,494	63,035	71,419
United Kingdom	20,368	23,973	18,592	20,297	20,618
Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics					

Overall, the market is growing on a yearly basis. Between 2013 and 2014 the annual increase of the imported value was 9.4% in monetary terms, with Canada maintaining its leading position. Most of the top competitors are found in identical places in both tables (monetary and quantitative terms) i.e. Canada, Germany, and the United Kingdom. Japan and Mexico have switched positions, indicating that the imported value of the Mexican product is of higher quality or value since less is imported in quantity but more in monetary terms. Mexican products are likely to be of a better quality rather than Japanese. This may also be due to the fact that there are less transportation costs which are a central factor in trade for this sector, since construction is one of the most cost orientated industry in an economy and loads are heavy. The countries found in identical position in both tables, indicates that the quality and awareness of the US consumers are in this decreasing order.

Table 2: Imported Quantity by Supplying Country to the USA					
HS Code: 3208 (Non-aqueous solution of paint & varnish) **Unit: tons**					
Exporters	**2010**	**2011**	**2012**	**2013**	**2014**
World	70,006	94,384	92,051	95,799	103,611
Canada	23,197	33,244	33,485	33,877	34,454
Germany	13,203	19,688	16,820	17,896	16,703
Mexico	6,568	8,690	10,119	11,556	13,021
Japan	7,915	9,171	9,648	9,646	12,929
United Kingdom	3,773	4,868	9,648	3,849	3,886
Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics					

From an aggregate perspective the market for paints and varnishes under HS Code 3208 is 80% dominated by the top competitors; it is steadily growing and is relatively open to new entrants. The following section examines the major exporting markets that supply the US for the above HS codes.

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Bilateral Trade Analysis for HS Code 3208

Non -Aqueous Solutions of Paints and Varnishes

Countries

Canada

Germany

Mexico

Japan

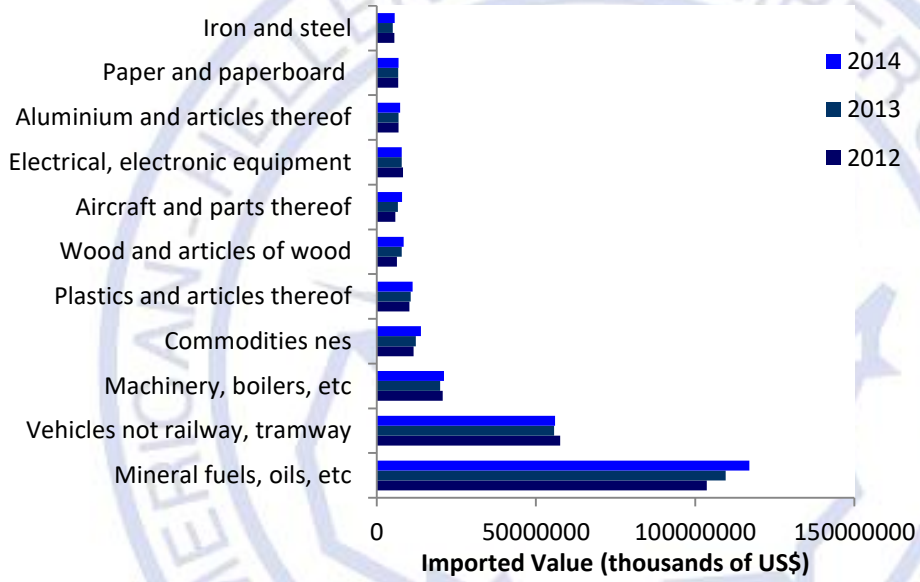
United Kingdom

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Canada

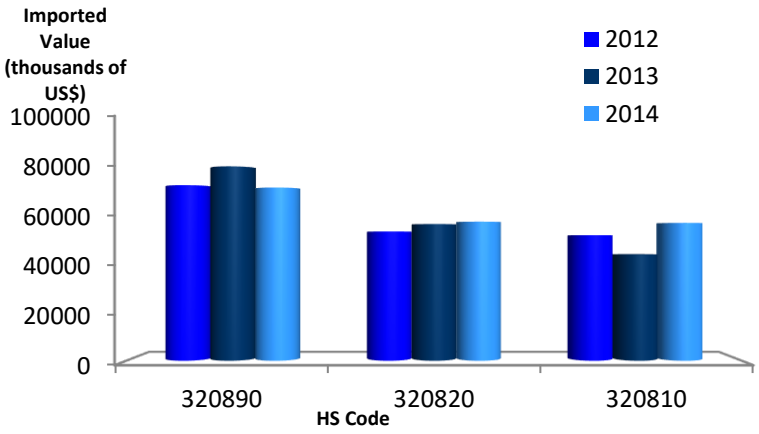
Because the two countries are geographically adjacent, bilateral trade relations between the US and Canada is particularly strong. Therefore, the Canadian exporting market has a dominant position in the US. In 2013 Canada was the United States' second largest supplier of goods with a total imported value of $346,794,030, after China. Sector trade between the two countries is summarized below; the figure indicates the most highly traded commodities some of which are materials commonly used in the construction industry, such as wood, aluminium and steel.

Figure 22: Imported Construction Materials to the USA from Canada



Source: International Trade Center (ITC)

Figure 23: Bilateral Trade between USA and Canada (HS Code 3208)



HS Code	Product Label
320890	Paints & varnishes based on polymers dissolved in a non-aqueous solutions nes
320820	Paint & varnishes based on acrylic/vinyl poly, dispersed in a non-aqueous medium
320810	Paints & varnishes based on polyesters, dispersed in a non-aqueous medium

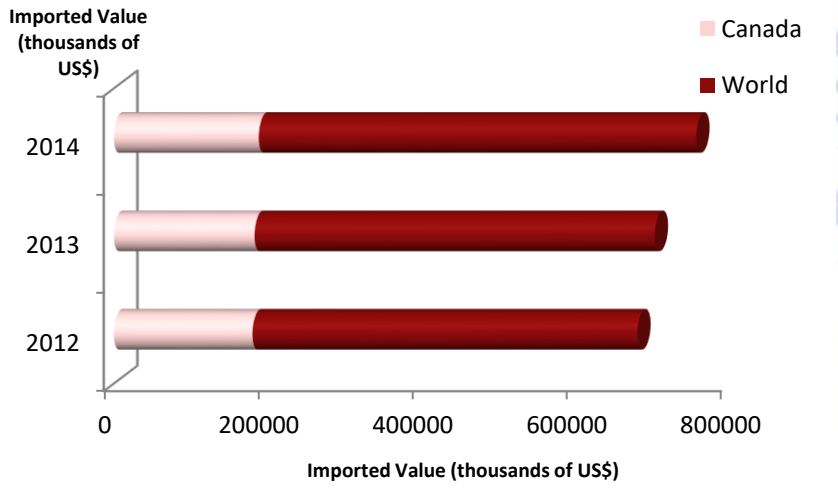
Source: International Trade Center (ITC)

Source: International Trade Center (ITC)

The analysis of the bilateral trade pattern of the top three sub-codes for paints and varnishes are presented above in figure 23. Overall for the period 2012 – 2014, polymer based paints and varnishes are the most highly traded between the two countries, the imported value of which peaks in 2013.

Acrylic based paints and varnishes (HS code 320820), which are efficient for painting decks and other wooden surfaces, is the second most highly traded HS Code between the US and Canada and following a stably growing trend. HS Code 320810 (paints and varnished based on polyester) is the third most traded sub code in the category, a trend that indicates a slight increase in the imported value and a small increase in demand for the given period.

Figure 24: USA Imported Value of Paints & Varnishes (HS Code 3208) Canada vs. World



Source: International Trade Center (ITC)

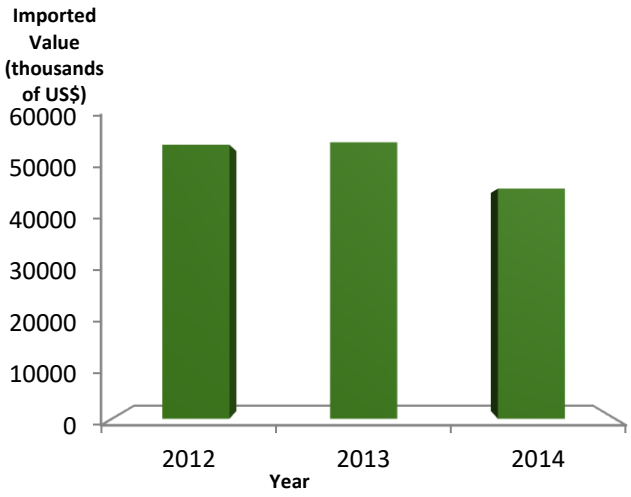
Figure 24 presents the proportion of the imported value for totality of the sub-codes under HS Code 3208 imported from Canada, relative to the total. The fact that the overall imported value follows an increasing trend indicates that the specific market is growing, in parallel to the construction industry which is presently recovering from the economic recession. Canada has a stable position in this market, with a marginally growing proportion and an imported value approximated at $200,000 in 2014.

Germany

Germany is the largest European economy that has an openness to trade indicator as a percentage of GDP at 85% in 2015 (World Bank, 2015). Germany therefore trades extensively to global markets and the USA in particular. At the beginning of 2015 the trade balance between the two countries was negative reaching $5.298.1 indicating that the US imports goods with greater value than Germany does. In addition, Germany recorded the highest surplus worldwide and the biggest capital exported globally with the fourth largest nominal GDP according to the World Bank Statistics (2014). Amongst its most popular traded products are vehicles (HS Code 87), machinery (HS Code 84), pharmaceuticals (HS Code 30) and aircrafts (HS Code 90).

For the paints and varnishes market, the top traded HS Code is 320890 which are polymer based. This trend remained stable for the two years 2012 – 2013 and in 2014 the imported value has decreased by approximately $10,000, as indicated in figure 25A.

Figure 25A: Bilateral Trade between USA and Germany (HS Code 320890)

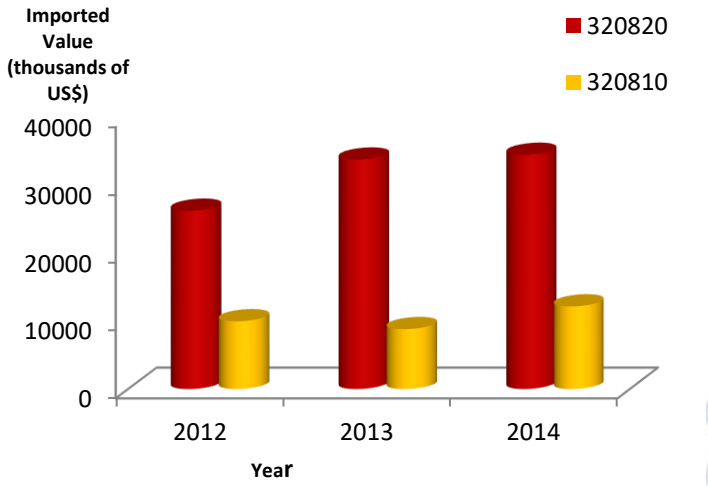


Product code	Product label
320890	PAINTS AND VARNISHES (INCL ENAMELS & LACQUERS) BASED ON SYNTHETIC POLYMERS,ETC IN A NONAQUEOUS MEDIUM,NESOI
320820	Paints & varnished based on acrylic/vinyl poly, dispersed in a non-aqueous medium
320810	Paints &varnishes based on polyesters, dispersed in a non-aqueous medium

Source: International Trade Center (ITC)

Source: International Trade Center (ITC)

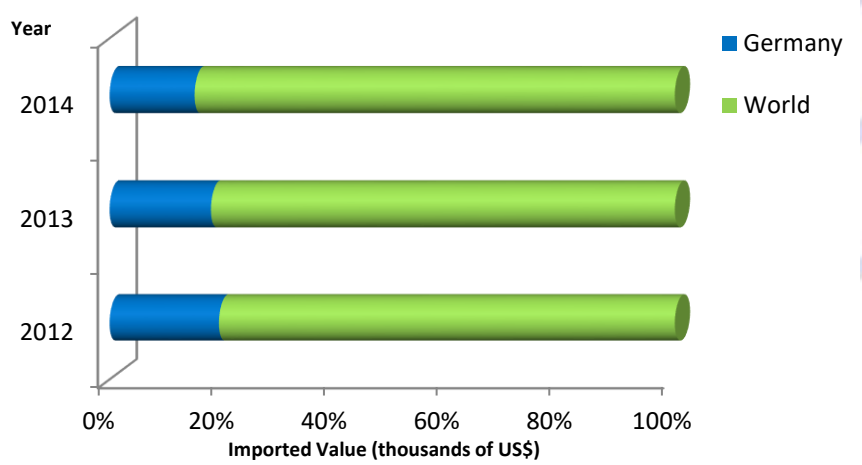
Figure 25B: Bilateral Trade between USA and Germany (HS Code 3208)



Source: International Trade Center (ITC)

Figure 25B presents the bilateral trade pattern for the remaining two HS codes in the market and indicate that the acrylic based paints are highly imported with a value reaching $35,000 in 2014, compared to the polyester based paints whose imported value in 2014 is approximated at $15,000.

Figure 26: USA Imported Value Germany vs. World (HS Code 3208)



Source: UN COMTRADE statistics

The figure indicates that paints and varnishes imported from Germany hold a relatively stable market share, at 20% of the total imported value.

Mexico

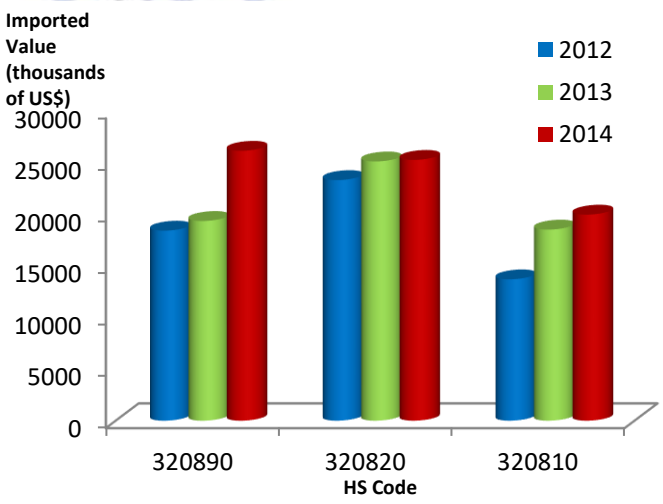
Mexico has the most free trade agreements than any other country and strong relations with the US. Their strong bilateral trade and economic relations have been reinforced by the NAFTA agreement - the largest free trade region in the world directly enforcing bilateral trade patterns and thus influencing the lives of consumers.

Consequently, in 2013 the two-way trade between the two countries in both goods and services was more than $550 billion with nearly 80% of Mexico's exports in 2013 going to the US. Mexico is the US's second largest export market after Canada and third largest trading partner after Canada and China (US Department of State, 2015).

Amongst the most highly imported products to the US are vehicles (HS Code 87), electronic equipment (HS Code 85) and machinery (HS Code 84) all of which are heavy in weight.

As for the paints and varnishes which Mexico supplies to the US market, their imported values range from $15M to a little under $30M The paints based on polymers (HS Code 320890) are once again the most highly traded from Mexico to the US. Additionally, the HS code follows an increasing trend. The difference in imported value between 2013 and 2014 is equal to a value of $5M. Paints and varnishes based on acrylic have a stable second position at $25M and the third HS Codes are the ones based on polymers. This HS Code also has an increasing positive trend which ranges from $14M to $20M for the three year period.

Figure 27: Bilateral Trade between USA and Mexico (HS Code 3208)



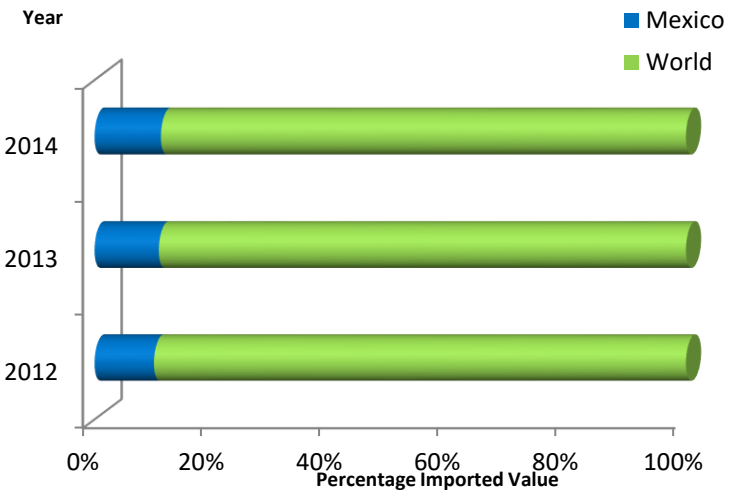
HS Code	Product Label
320890	Paints & varnishes based on polymers dissolved in a non-aqueous solutions nes
320820	Paint & varnishes based on acrylic/vinyl poly, dspr in a non-aqueous medium
320810	Paints & varnishes based on polyesters, dispersed in a non-aqueous medium

Source: International Trade Center (ITC)

Source: UN COMTRADE statistics

Figure 28 indicates that only 15% of the total imported value from the HS Code 3208 to the US is imported from Mexico, indicating that the other competitive countries in the category have a stronger presence in the US.

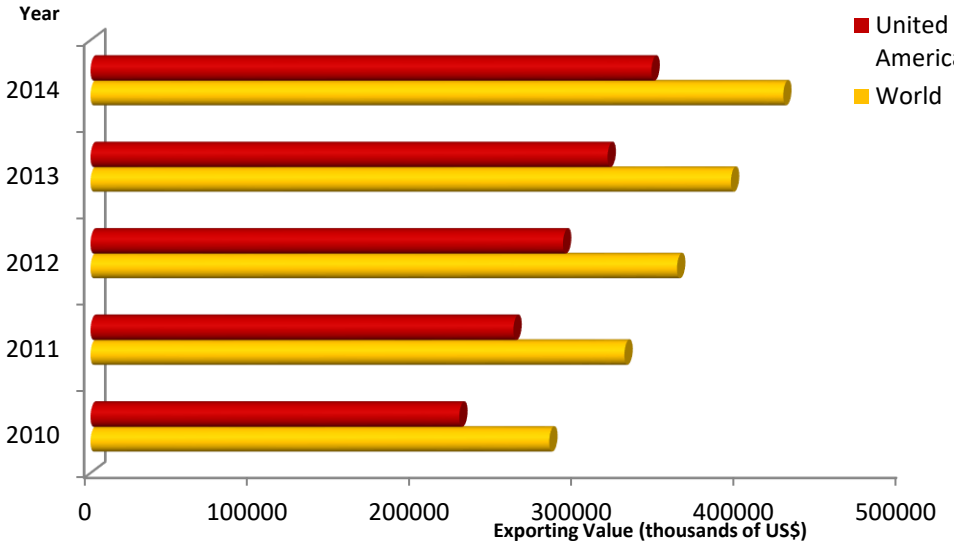
Figure 28: Percentage of US Imported Value Mexico vs. World (2012 - 2014)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 29 below looks at the exporting value from Mexico to the US and to the world in total, from which it is evident that the vast majority of the Mexican exports (more than $300M in value) are destined to the US, a trend which has presented a stable increasing pattern during the 5-year period (2010 - 2014).

Figure 29: Mexican Exporting Value USA vs. World (HS Code 3208)



Source: UN COMTRADE statistic

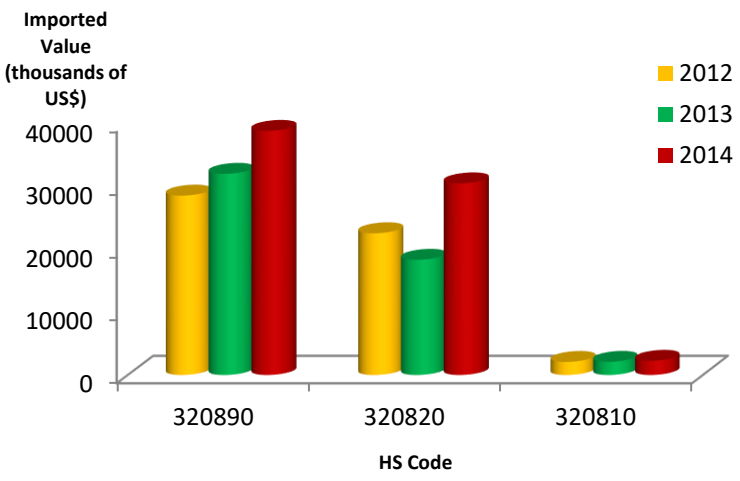
Japan

As a global economy, Japan is amongst the largest in terms of nominal GDP and also in terms of Purchasing Power Parity (PPP) according to the IMF statistics. At present there is no official free-trade agreement between the US and Japan, however the bilateral trade patterns between the two countries are strong and mutually advantageous. According to the Congressional Research Service, (2014) the two economies are "highly integrated via trade" and in 2013 Japan was the 4th largest supplier of imported goods to the US.

Data from the United States Trade Representative Office, Japanese imports add up to a value of $138.5 billion in 2013, accounting for 6.1% of the total US imports, a 17.4% increase from 2003.

The bilateral trade pattern for the paints and varnishes market, is presented below. Overall the market is also expanding from 2012 - 2014, particularly for HS code 320890 (polymers paints and varnishes) which is the most highly imported. Its imported value reaches $40M in 2014. For the second most highly traded HS code, which are acrylic based paints and varnishes, also increasing in imported value approximately between the same period. Finally the polymer paints and varnishes under HS code 320810 contribute minimally to the overall bilateral trade pattern between Japan and the US. Their imported value is below $5M for the three-year period presented below.

Figure 30: Bilateral Trade between USA and Japan (HS Code 3208)

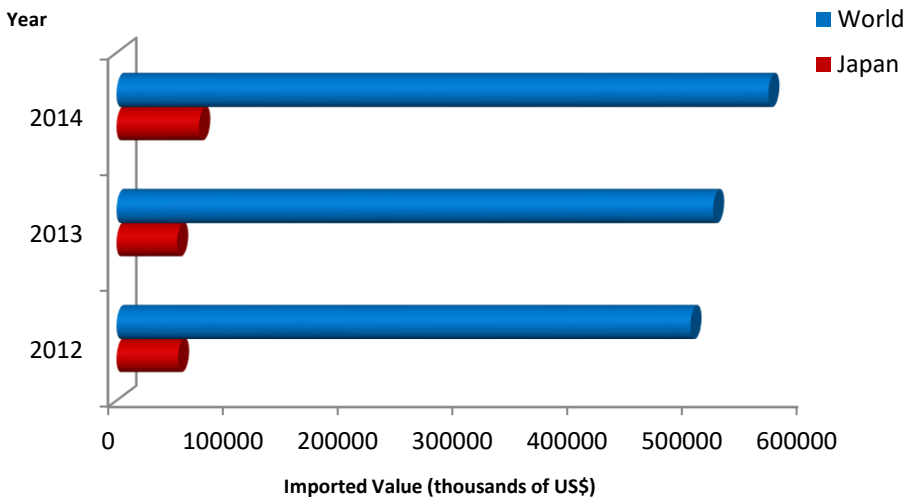


HS Code	Product Label
320890	Paints & varnishes based on polymers dissolved in a non-aqueous solution nes
320820	Paint & varnishes based on acrylic/vinyl poly, dispersed in a non-aqueous medium
320810	Paints & varnishes based on polyesters, dispersed in a non-aqueous medium

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 31: USA Imported Value from Japan vs. World (HS Code 3208)



Source: UN COMTRADE statistics

Overall, it is evident that the market shareof Japanese products do not have a predominant or particularly competitive position in the US paints and varnishes market, as other markets are stronger in terms of production or geographical position. Its growing trend however suggests that the growth trend exists and can be strongly enforced by the possibility of a free-trade agreement between the two nations. The agreement, which has been under negotiation for some time, will enforce the economic and political effectiveness, and.

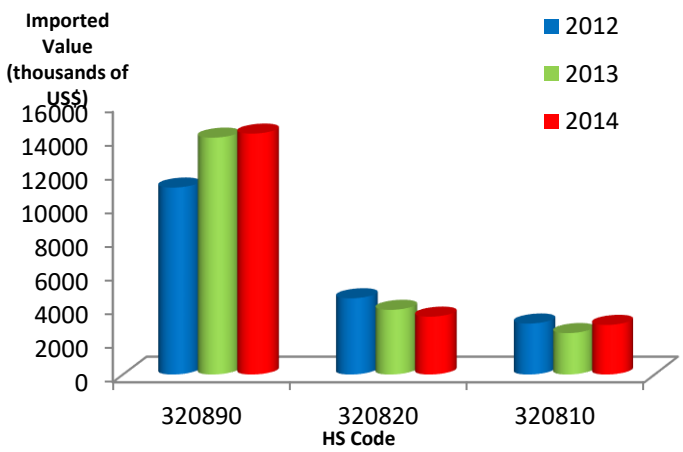
United Kingdom

The United Kingdom (UK) is heavily industrial. It is and the first industrialized country, the second largest economy in Europe by nominal GDP and one of the world's most globalized economies. The UK economy is largely based on exporting machinery (HS Code 84), mineral fuels and oils (HS Code 27), vehicles (HS Code 87) and pharmaceutical products amongst others.

Although the UK, as is the case for the whole of Europe, does not have a free- trade agreement with the United States; bilateral trade between the two countries is strong partly as a result of the shared history.

The bilateral trade pattern, between the two countries, for the specific market is once again dominated by polymer based paints and varnishes, which are dissolved in a non- aqueous solution, in terms of monetary imported value. Between 2012 and 2013 a significant expansion of the market was realised with an increase of approximately $3M in the imported value of polymer based paints. Due to this fact, the UK manages to maintain a position amongst the top competitors of the US paints and varnishes market.

Figure 32: Bilateral Trade between USA and United Kingdom (HS Code 3208)



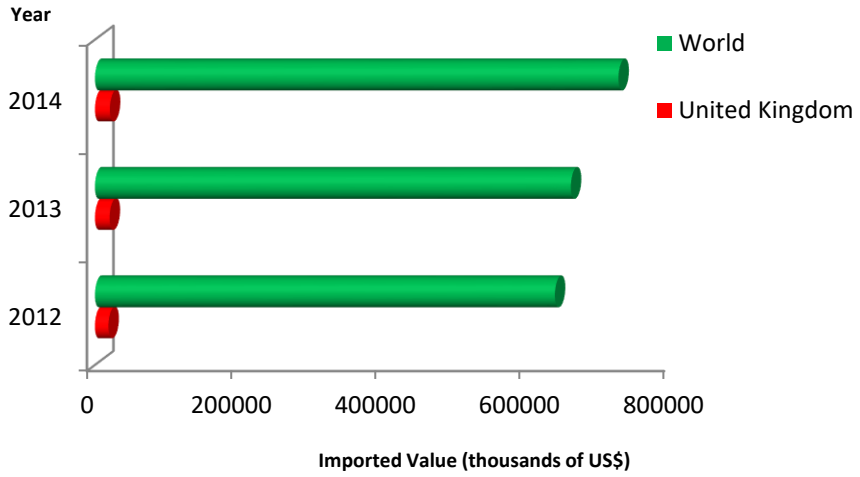
HS Code	Product Label
320890	Paints & varnishes based on polymers dissolved in a non-aqueous solution nes
320820	Paint & varnishes based on acrylic/vinyl poly, dispersed in a non-aqueous medium
320810	Paints & varnishes based on polyesters, dispersed in a non-aqueous medium

Source: International Trade Center (ITC)

Source: International Trade Center (ITC)

The remaining two sub-codes in the category are relatively insignificant in their contribution to the bilateral trade pattern on the whole. Their contribution is estimated to reach only 25% (or $4M) of HS code 320890 and does not show signs of expansion but contraction and maturity.

Figure 33: USA Imported Value United Kingdom vs. World (HS Code 3208)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 33 above presents the overall contribution of the UK market to the US importing market. The TTIP agreement which aims to cut tariffs and eliminate barriers between Europe and the US has the potential to facilitate trade in all sectors including that of the paints and varnishes dissolved in non-aqueous solutions, which are of primary importance to the construction sector.

Wood and Articles of wood, wood charcoal (HS Code 44)

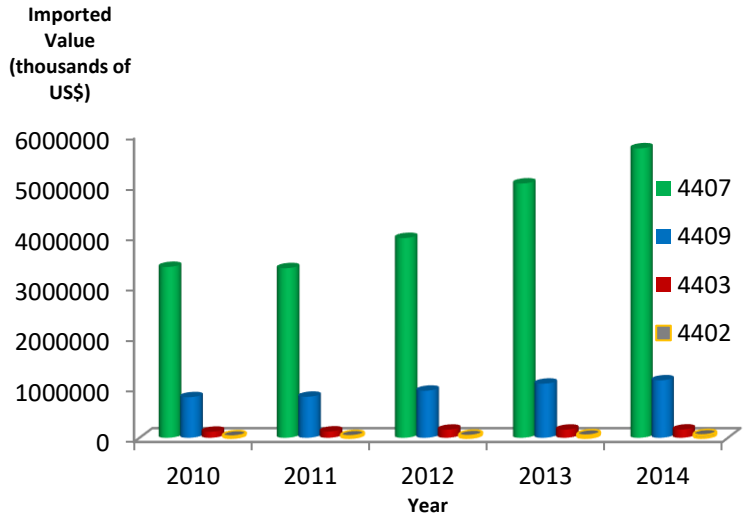
Wood is an extensively used material in the construction and architectural exterior and interior design of residential and commercial building structures around the world and even more so in the US. As a general trend, it is observed that wood is becoming increasingly popular building material because of its numerous advantages.

Amongst the most important advantages of wood as a construction material is its strong structure that allows it to remain strong in extreme weather conditions. Its strength to weight ratio is 20% higher than that of structural steel. In addition wood has proved to be both a sound and heat insulator, much more so than steel and aluminium. Furthermore, wood is cost-effective and can be easily and quickly worked with and aesthetically pleasing to the eye. It is also environmentally friendly because it removes carbon from the atmosphere.

For the above reasons, wood is being increasingly used as a substitute of steel or iron in the structural framework of tall buildings. It is in New York and Portland where the first all-wood high-rise buildings are being constructed. The domestic production of wood in the US is not sufficient to satisfy the domestic demand, even though the US does itself export certain HS codes of wood to neighboring countries such as China and Canada i.e. its top importers. According to the Euromonitor Report (2012), the US imports of wood accounted for 15% of the market in 2012. In addition, the US market for wood and its related products reached US$125.7 billion in 2012, decreasing by 27% (or 5% per year) during the period 2006- 2012.

The bilateral trade pattern from the imported value of wood from the world, for the given period 2010 – 2014, is presented in the figure below. The most highly traded product is HS code 4407 defined as wood sawn or chipped lengthwise, the type of wood that is often used for construction. The imported value for the HS code 4407 follows an increasing pattern which reaches a value of more than $3B in 2010 and by 2014 has almost doubled in value.

Figure 34: USA Imported Value for Wood and related articles (HS Code 44)



HS Code	Product Label
4402	Wood charcoal (including shell or nut charcoal)
4403	Wood in the rough
4407	Wood sawn/chipped lengthwise, sliced/peeled
4409	Wood continuously shaped along any edges

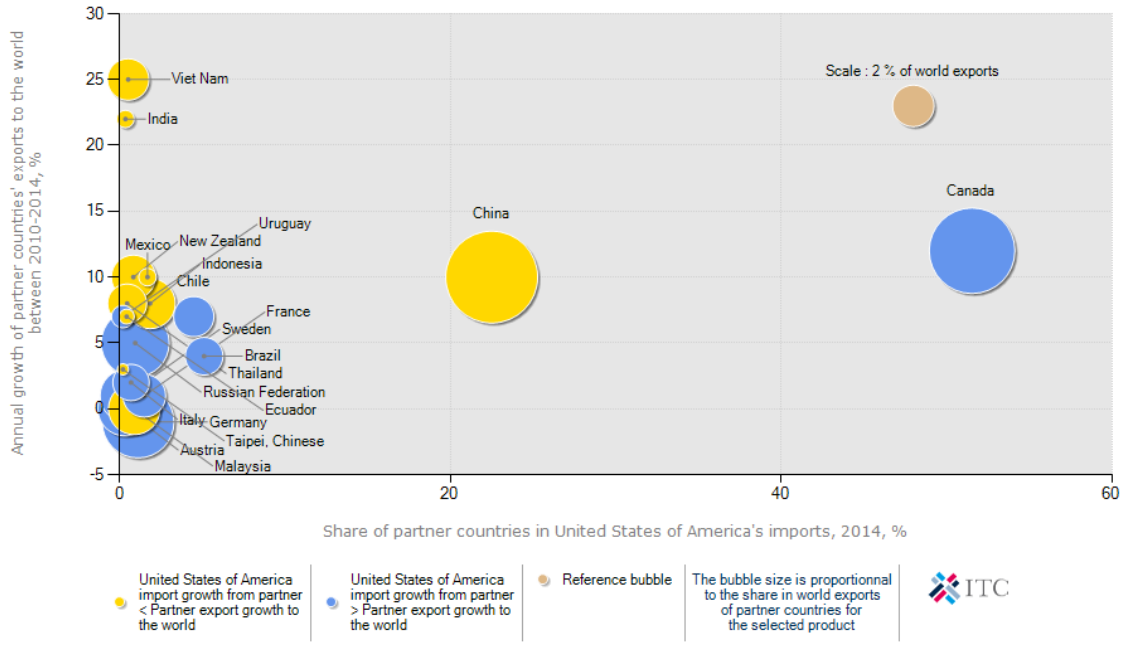
Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

The second most highly imported type of wood to the US supply market is HS code 4409, which includes wood that is continuously shaped along the edges. However this sub-code is relatively insignificant in terms of its contribution to the overall bilateral trade pattern. Its imported value is inferior to $1B in 2010 and only marginally increases during the 5-year period leading up to 2014.

The category "wood in the rough" (HS code 4403) includes all wood raw materials. It is defined as wood such as logs, as well as, wood intended for primary purposes such as for pulp, sawn wood and wood-based panels. This is also the case with the HS code 4402, defined as wood charcoal, which its imported value is near negligible.

Figure 35: Diversification of Suppliers in the US Market in 2014 (HS Code 44)



Source: International Trade Center (ITC)

The diversification of suppliers in terms of their geographical position, are once again distributed across the different continents. It is interesting to note that the top supplying countries of wood to the US are also the ones which supply the market with paints and varnishes, analyzed in the previous section, i.e. Canada and China.

Table 3 summarizes the top-5 importers to the US market for wood and its related articles, categorized under the HS code 44.

Table 3: Imported Value by Country to the USA

HS Code: 44 (Wood and articles of wood, wood charcoal)
Unit: thousands of US$

Exporters	2010	2011	2012	2013	2014
World	1138,638	11220,073	12893,501	15206,331	16486,667
Canada	5435,933	5265,675	6318,384	7884,047	8499,565
China	2769,162	2800,212	3166,170	3320,211	3711,320
Brazil	608,331	543,076	626,454	741,992	843,994
Chile	518,217	572,632	563,615	700,601	741,477
Indonesia	245,234	236,929	274,605	306,090	306,064

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

As the primary importer, Canada captures just over 50% of the total imported value, while China as the second largest importing country in monetary terms capturing 22.5% of the market.

Brazil, Chile and Indonesia are also found amongst the top competitors of the market, contributing only marginally to the monetary imported value of HS Code 44. These three countries present a common trend in their exportation of wood and more precisely pulp (under HS Code 4403). More precisely, their exports have more than doubled during the period 1997 – 2007 according to the Journal of International Commerce & Economics (2009).

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Bilateral Trade Analysis for HS Code 44

Wood and articles of wood, wood charcoal

Countries

Canada

China

Brazil

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

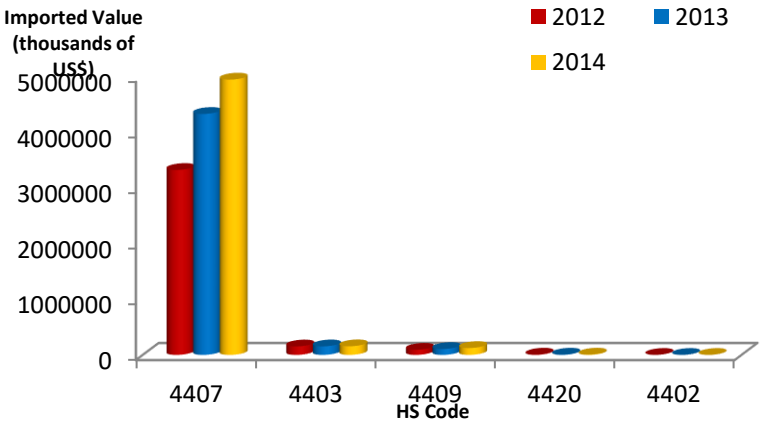
Canada

As previously stated the countries' geographical position and the NAFTA both present an advantage which encourages extensive trade between the two countries particularly for products with high transportation costs.

The bilateral trade pattern between these trade partners has been significantly growing from 2012 – 2014. Canada manages to maintain the leading position in the market by primarily trading HS Code 4407 over the three-year period. In 2014 the imported value of this sub-code reaches $5,000,000 as compared with the respective value in 2012 which is estimated at $4,500,000.

The remaining four HS codes in figure 36A below, have an imported value which is inferior to $500,000 and therefore do not contribute significantly to the overall bilateral trade pattern between the US and Canada for the given period. Figure 36B illustrates the trend of the primarily imported HS Code 4407, which is regularly used within the construction industry.

Figure 36A: Bilateral Trade between USA and Canada (HS Code 44)

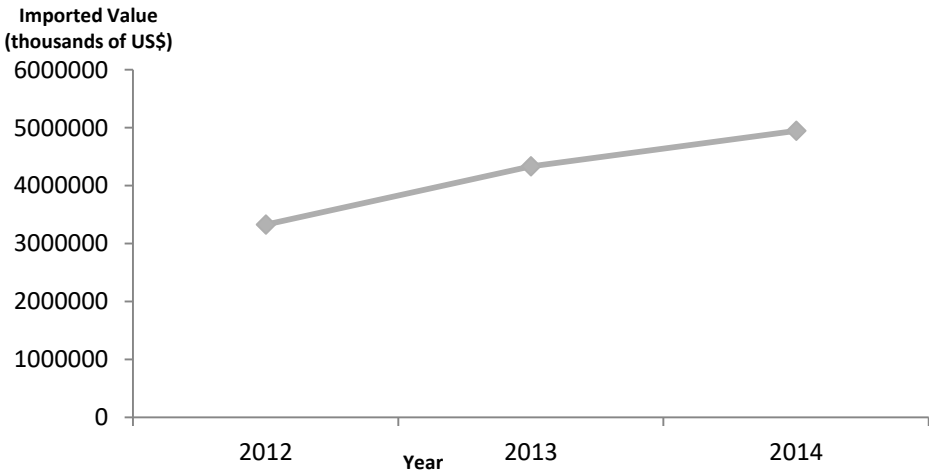


HS Code	Product Label
4402	Wood charcoal (including shell or nut charcoal)
4403	Wood in the rough
4407	Wood sawn/chipped lengthwise, sliced/peeled
4409	Wood continuously shaped along any edges
4420	Wood marquetry & inlaid wood; caskets & cases or cutlery of wood

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 36B: Bilateral Trade between USA and Canada (HS Code 4407)



Source: International Trade Center (ITC)

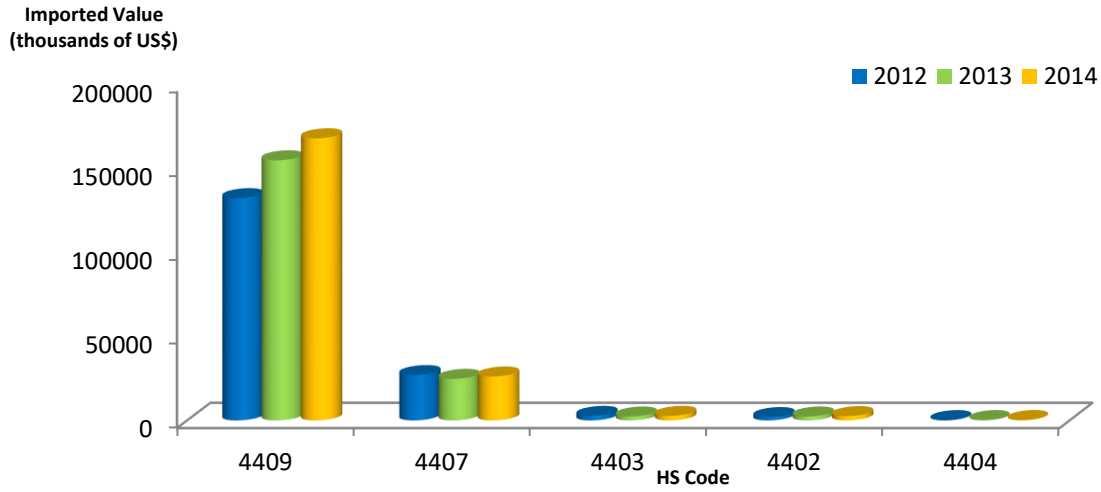
AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

China

Since 2014, China and the US are the world's two largest economies, according to the International Monetary Fund. China is also the second largest exporting country to the US for the HS Code 44. China, also, manages to maintain a stable and dominating position amongst the major exporters of wood and its related articles, by exporting a different HS Code from Canada.

The Chinese market is comparatively smaller in monetary terms; however it dependents on exporting the HS Code 4409 – wood that is continuously shaped along the edges – to the US and which is frequently used in construction. HS Code 4407 is imported to the US from China in significantly less quantities and as the figure below indicates its imported value for the three-year period does not exceed the annual value of $30million.

Figure 37: Bilateral Trade between USA and China (HS Code 44)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Brazil

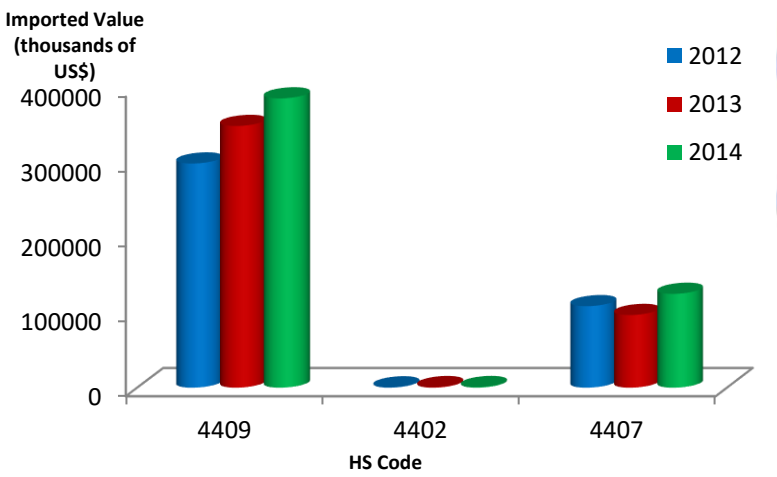
The Agreement on Trade and Economic Cooperation put in place in 2011, is an official free-trade agreement that aims to facilitate trade between the two largest economies of the western hemisphere and provides the framework to deepen their cooperation.

In 2013, Brazil was the US's 16th largest supplier of goods, adding-up to a value of $27.6 billion; accounting for 1.2% of the overall imports of that year and which marked a 54% increase from 2003, according to the statistics provided by the Office of the United States Trade Representative.

Many of the largest export categories from Brazil to the US are materials used in different parts of the construction process, amongst which are iron, steel ($3.0 billion) and machinery ($1.9 billion). The agricultural sector plays a strategic part at the economic growth of Brazil's economy with exported value adding up to a total of $3.4 billion in 2013.

The bilateral trade pattern for wood between the two countries for the period 2012 – 2014 is presented below. Wood continuously shaped along the edges under the HS code 4409 is again the predominantly traded sub-code. Wood sawn or chipped, i.e. HS code 4407, is the second most traded category with an imported value equal to approximately a quarter to that of HS Code 4409 for the same period.

Figure 38: Bilateral Trade between USA and Brazil (HS Code 44)

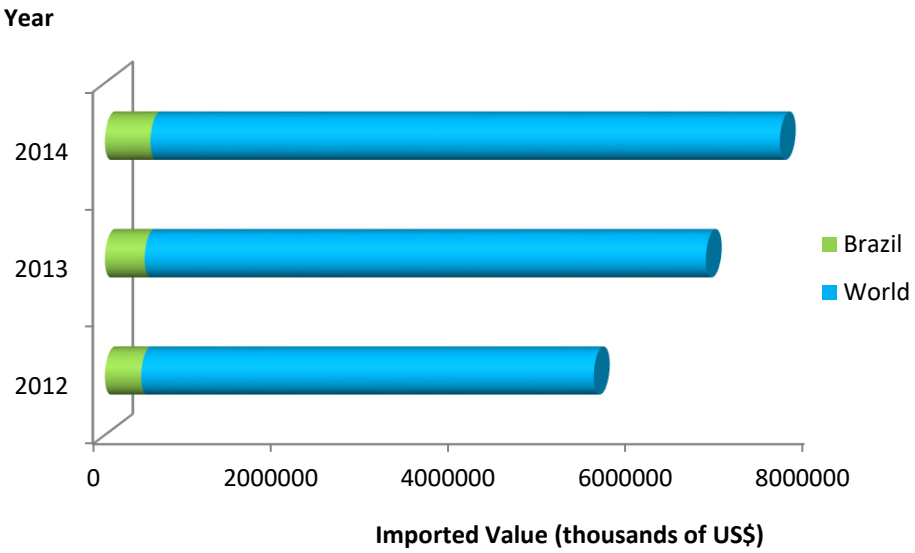


Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 39 presents an overview of the Brazilian exported value to the US versus the total imported value from the world. It indicates that the Brazilian contribution is limited but shows signs of potential growing; while, the overall exporting market is growing. This growing trend maybe partly due to the increase of demand from the construction and architectural sectors

of the US economy which is currently growing, and the increased tendency of US citizens to use wood in the interior and exterior surfaces of buildings.

Figure 39: USA Imported Value Brazil vs. World (HS Code 44)



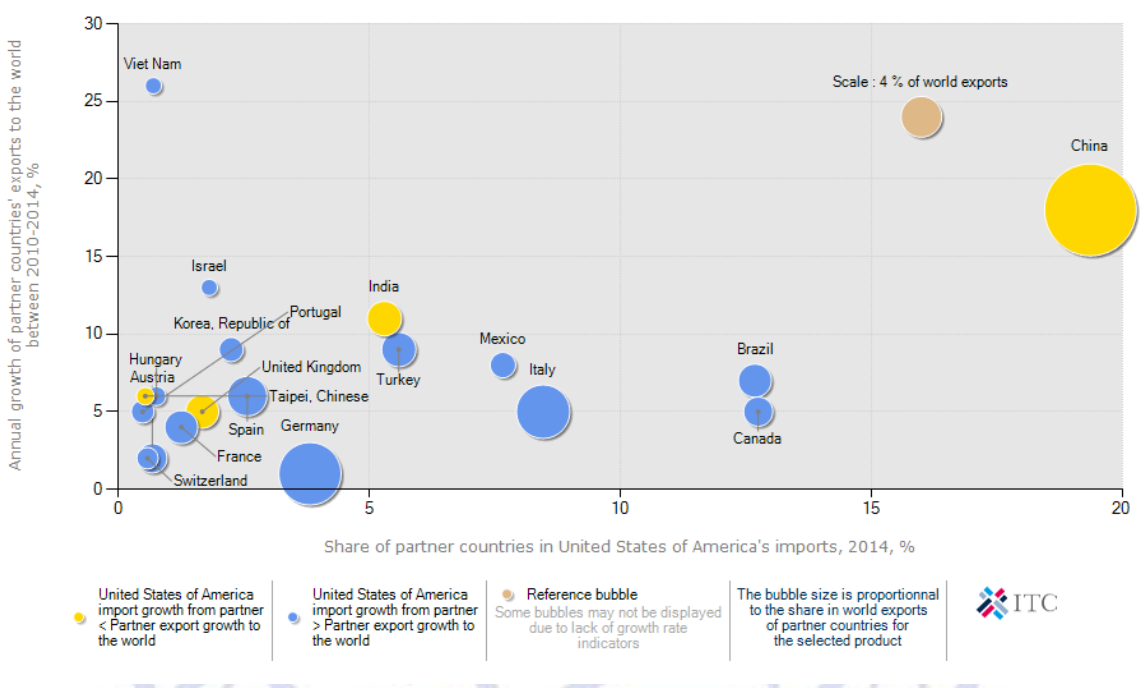
Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

In conclusion the wood importing market seems to be a material which is potentially growing in line with the construction industry.

Stone, Plaster, Cement, Asbestos, Mica, etc. Articles (HS Code 68)

The raw materials included under the HS Code 68 are diverse; however they are all used in the first stages of construction for protective, insulation and decorative purposes. The diversification of suppliers of HS code 68 to the US market is presented in the figure below. China, Brazil and Canada are again amongst the most important trading partners, which are then followed by Italy and Mexico. Italy is an interesting market for further analysis since it is the only European country amongst the major exporters.

Figure 40: Diversification of Suppliers in the US for HS Code 68



Source: Trade USA- International Trade Center (ITC)

Table 4 summarizes the total exporting market for the HS Code 68, where the main categories are stone, plaster, cement, asbestos and mica for the period 2010 – 2014 in monetary terms. For all this period China leads the market and in 2014 captures 20% of the total imported value, while Canada and Brazil both capture just over 10% of the market. Mexico is another Latin American country which as a NAFTA member is able to expand into new markets relatively quickly. From 2010 – 2014 the Mexican imported value for HS Code 68 grew by 47.5%.

Table 4: Imported Value by Country to the USA					
HS Code: 68 (Stone, plaster, cement, asbestos, mica, etc. articles) **Unit: thousands of US$**					
Exporters	**2010**	**2011**	**2012**	**2013**	**2014**
World	4,658,781	5,091,938	5,501,072	6,193,653	6,712,206
China	953,553	979,360	1,050,463	1,191,168	1,300,044
Canada	658,827	771,107	807,339	841,247	855,859
Brazil	855,859	585,192	643,079	816,568	851,383
Italy	351,369	374,418	419,372	536,138	568,316
Mexico	348,780	375,683	397,050	448,815	514,458
Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics					

The sub-code 6801 that consists of various types of natural stone, including setts, curbstones and flagstones usually used for paving roads is presented in table 5 below and describes the top-importing countries according to country. The Indonesian exporting market to the US has rapidly grown. More precisely, between 2011 and 2012 has grown by a factor of 54, while the following year the market grew by 384%. Canada's contribution has been relative unstable during this period.

Table 5: Imported Value by Country to the USA					
HS Code: 6801 (Setts, curbstones and flagstones, of natural stone) **Unit: thousands of US$**					
Exporters	**2010**	**2011**	**2012**	**2013**	**2014**
World	6,727	7,931	14,939	19,749	26,560
India	385	3,532	5,388	7,988	11,396
Turkey	135	109	235	300	3,895
Indonesia	18	14	762	2,931	3,158
China	2,383	1,932	2,245	3,184	3,087
Canada	1,008	676	4,275	3,028	2,918
Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics					

Tables 6 and 7 are related to the materials used in the construction industry in terms of volume and monetary value respectively. HS Code 6802 is mainly worked stone used for building and monumental purposes, the market for which has been growing period the period 2012 – 2014, indicating an increased demand for construction from Latin American, Asian and European countries.

HS Code 6804 is a category which also grew in 2014 and which is based on stones and ceramic products.

Table 6: Imported Quantities by Country to the USA

HS Code: 6802 (Worked monumental/building stone & art. Mosaic cube, granules)
Unit: tons

Exporters	2012	2013	2014
World	2,824,487	3,183,028	3,880,599
Brazil	682,718	851,248	1217,677
Turkey	593,477	585,732	778,978
China	555,247	678,918	714,156
India	313,081	336,873	343,187
Italy	231,510	282,663	341,831

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

Table 7: Imported Value by Country to the USA

HS Code: 6804 (Mill/grind stones, grinding wheels, abrasives/ceramics)
Unit: thousands of US$

Exporters	2012	2013	2014
World	327,037	322,731	351,003
China	58,939	62,499	68,969
Japan	43,102	46,435	44,784
Germany	40,430	40,777	39,302
Korea	29,124	30,391	35,797
Italy	29,370	30,020	34,515

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Bilateral Trade Analysis for HS Code 68

Stone, Plaster, Cement, Mica etc. articles

Countries

China

Italy

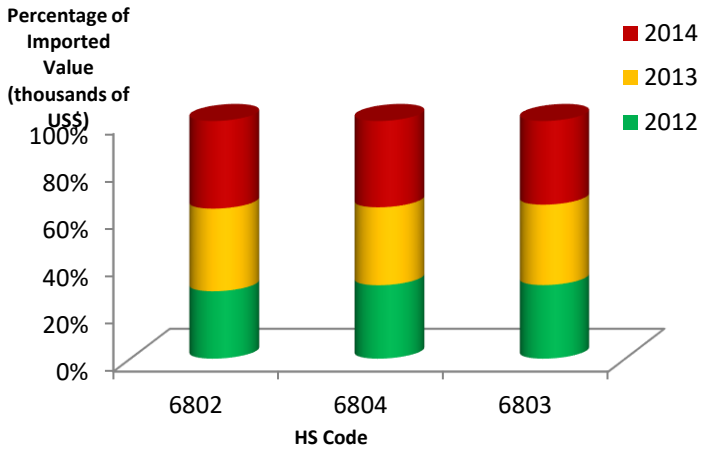
Mexico

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

China

The three most highly exported HS codes to the US in this category are presented below, all of which grew in demand between 2012 and 2014. Worked monumental and building stone in the form of mosaic cubes or granules, is the most highly exported product to the USA from China in 2014. HS Code 6803, defined as worked slate and related articles, is commonly used in walls and roofing, and is the second most highly exported value for the examined 3-year period. The category 6804 includes a variety of materials and equipment used at the processing of stones and ceramic materials.

Figure 41: USA Imported Value for Top-Three 68 HS-Codes



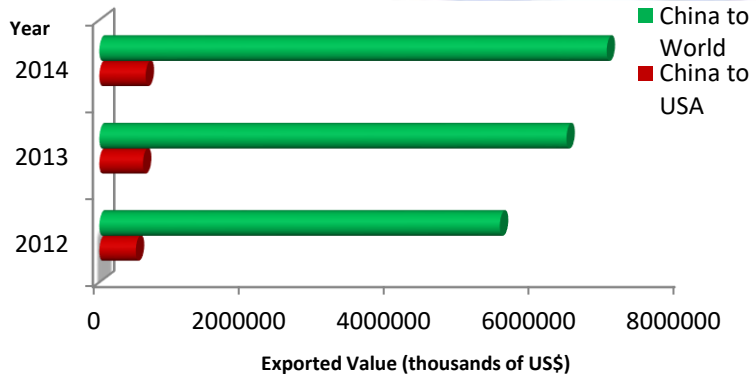
HS Code	Product Label
6802	Worked monumental/building stone &art; mosaic cube, granules
6803	Worked slate and articles of slate
6804	Mill/grind stones, grinding wheels, abrasives/ceramics

Source: International Trade Center (ITC)

Source: International Trade Center (ITC)

The figure below indicates the exported value of the products under the HS Code of 68 is steadily growing since 2012. This indicates that net prices have risen; resulting to higher profit margings. However, there cannot be a correlation between price and quality.

Figure 42: Exported Value from China to the USA vs. World



Source: International Trade Center (ITC)

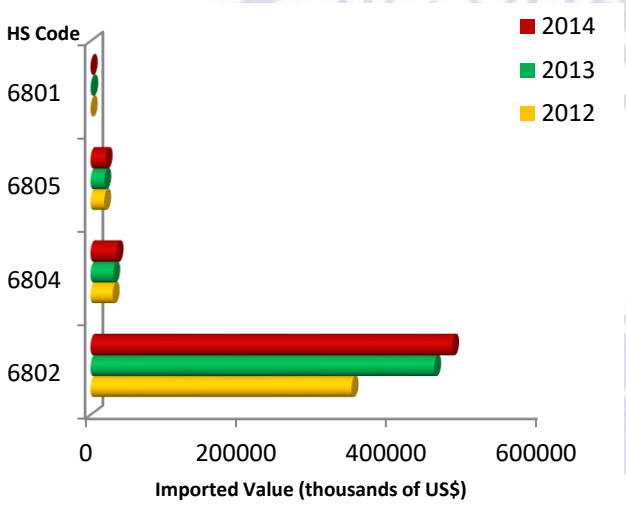
AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Italy

The bilateral trade pattern between the US and Italy differs in its structure since it is one of the strongest European economies. The two-way trade in 2014 accounted for $59 billion according to the statistics presented by the United States Department of State statistics, the main categories includes engineering products, textiles and clothing and machinery.

For this specific market bilateral trade between the US and Italy is mainly supported by HS Code 6802 and thus Italy is able to maintain relatively strong position amongst the top competitors of the construction stone market.

Figure 43: Bilateral Trade between the USA and Italy (HS Code 68)



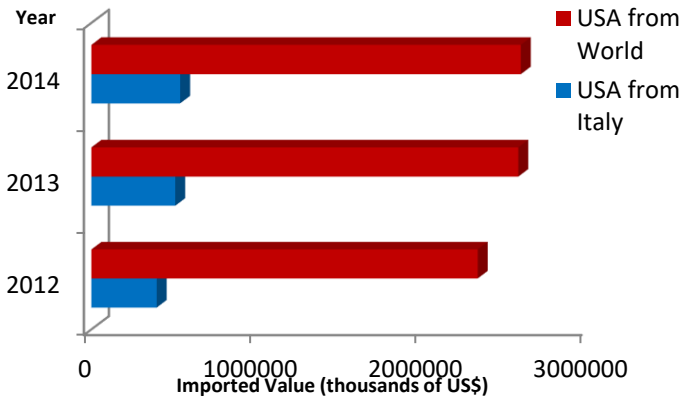
HS Code	Product Label
6801	Setts, curbstones and flagstones, of natural stone
6802	Worked monumental/building stone &art; mosaic cube, granules
6803	Worked slate and articles of slate
6804	Mill/grind stones, grinding wheels, abrasives/ceramics
6805	Abrasive pdr/grn, on a base of tex mat, paper/paperboard etc.

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

The second most highly imported HS Code from Italy to the US is the grinded stone, abrasives or ceramic category, although its imported value is comparatively insignificant. To be precise the imported value of HS Code 6802 in 2014 reached the $500 million, having grown since 2012 by 30%.

Figure 44: USA Imported Value Italy vs. World (HS Code 68)



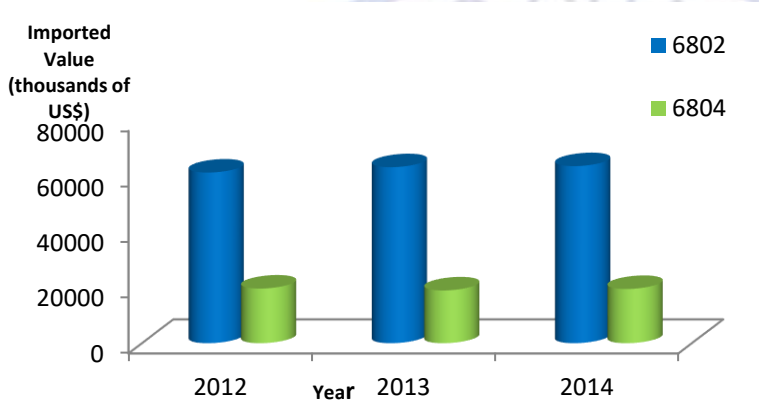
Source: International Trade Center (ITC)

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Mexico

Mexico is the smallest market amongst the top competitors in the US market for the HS code 68 and thus it is interesting for further analysis . The same HS Codes are dominantly imported to the US from Mexico; possibly due to its geographical location and the NAFTA agreement that ensures that trade patterns remain relatively small but stable.

Figure 45: Bilateral Trade between USA and Mexico (HS Code 68)



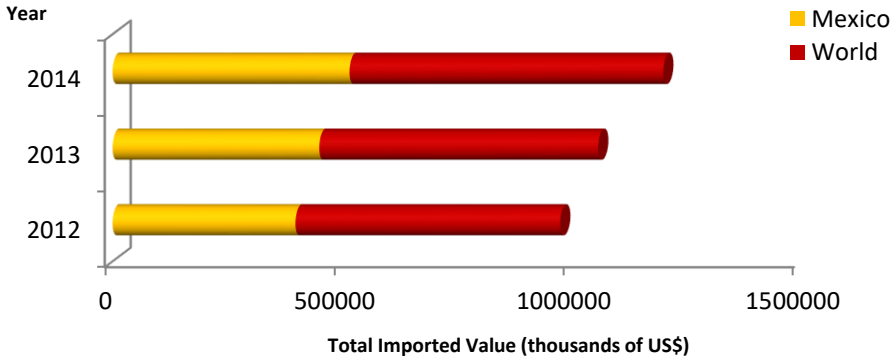
HS Code	Product Label
6802	Worked monumental/building stone & art; mosaic cube, granules
6804	Mill/grind stones, grinding wheels, abrasives/ceramics

Source: International Trade Center (ITC)

Source: UN COMTRADE statistics

Overall, the Latin American and Mexican stone industry and exports have been growing since the mid-1990s and with worked or grinded stone used for building. The primary HS Code that Mexico exports to the US, is worked monumental or building stone under the HS Code 6802; followed by the HS Code 6804 with a comparatively low imported value at an average of $20million during the period 2012 – 2014. The figure indicates a growing trend for the exporting market under the HS Code 68; overall, a similar trend on a smaller scale is followed by the Mexican market.

Figure 46: US Imported Value Mexico vs. World (HS Code 68)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

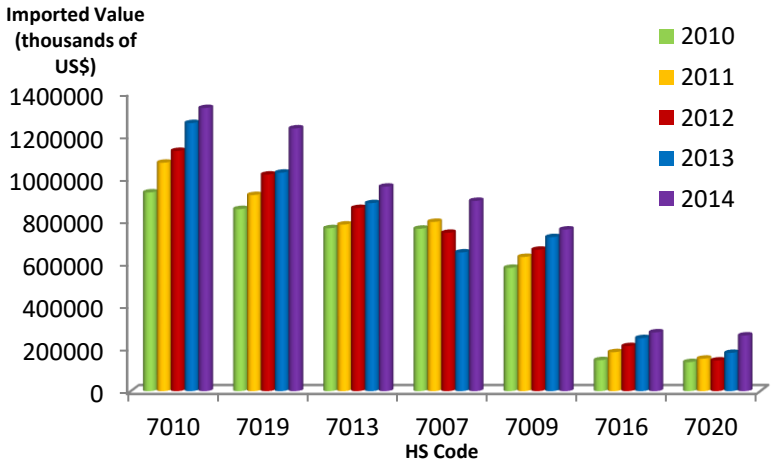
Glass and Glassware (HS Code 70)

The glass and glassware market is also diverse in its structure and in its designated use. Urbanization has resulted in the increase of demand for complex glass products as well as for safer residential and commercial structures, as a result of which the glass industry has grown during the past years. Global exports decreased significantly in 2009 during the economic crisis but quickly recovered at the beginning of the following year, making the market elastic and dependent on economic cycles (Euromonitor, 2013).

HS code 7019is defined as glass fibers is a frequently used material in the construction in the interior and exterior design of residential and commercial buildings. Amongst its advantageous in construction, glass is a material that maintains the connection with the outside world, by also allowing sunlight to enter, while being economic and environmentally friendly and therefore has become increasingly used in modern constructions.

Figure 47: USA Imported Value of Top 70 HS Codes

HS Code	Product Label
7010	Carboy, bottle & other container of glass
7019	Glass fibres (including glass wool) and articles thereof
7013	Glassware used for table, kitchen, toilet, office, etc.
7007	Safety glass, consisting of toughened or laminated glass
7009	Glass mirrors
7016	Glass paving block for building/construction, glass cube, etc.
7020	Articles of glass nes
Source: International Trade Center (ITC)	

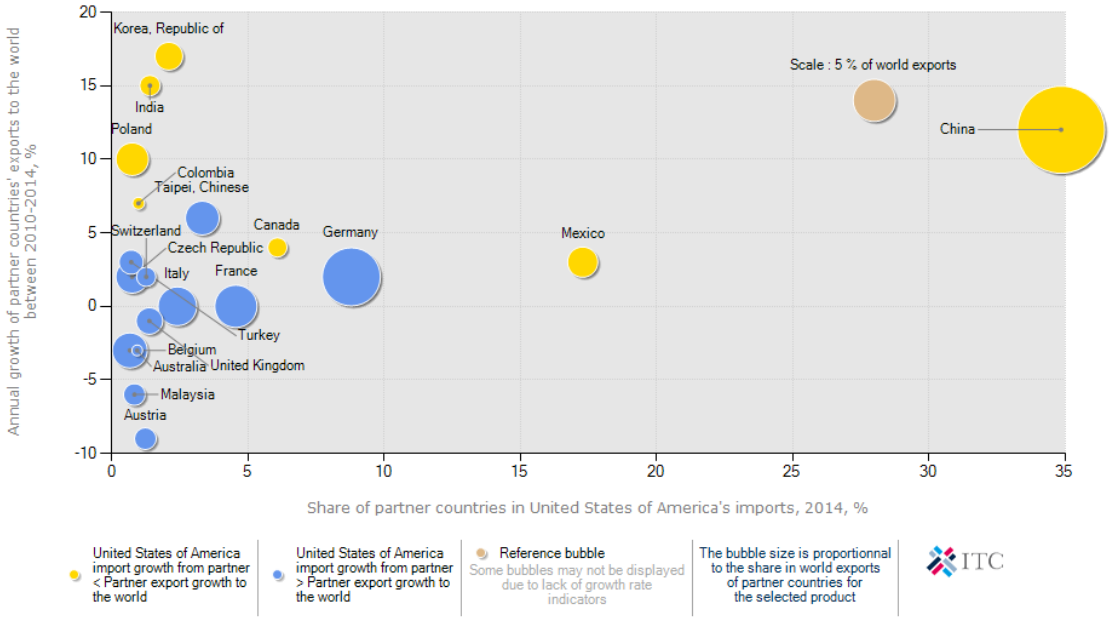


Source: UN COMTRADE statistics

HS Code 7013 is a sub-code used in the interior design of a building, in the table, kitchen or the office and consists of the second most imported country of interest to this section. Different types of safety glass (under HS Code 7007) are also imported in high quantities from the world to the US the period 2010 – 2014 presents an increasing trend in imported value approximated at $billion, as for the rest of the HS Codes presented in the figure above.

The final HS Code in this category of primary interest to the construction sector is imported in much smaller quantities but with a trend which is following an upward path during the 5-year period.

Figure 48: Diversification of Suppliers in the US Market in 2014 (HS Code 70)



Source: International Trade Center (ITC)

The primary exporter is once again China with a leading role in the U.S. importing market and a primary producer of glass globally, capturing 30% of the total imported value to the US. Germany and France are two European countries which are among the top importing countries to the US, although their individual market share is equal to less than 10%. Canada does not contribute significantly to the overall importing market of glass.

Table 8: Imported Value by Country to the USA

HS Code: 70 (Glass and glassware)

Unit: thousands of US$

Exporters	2010	2011	2012	2013	2014
World	5,354,698	5,709,886	5,961,750	6,185,681	6,939,389
China	1,629,234	1,816,449	1,957,933	2,094,111	2,094,111
Mexico	1,067,349	1,099,417	1,098,648	1,154,368	1,200,207
Germany	522,991	510,152	523,199	515,132	610,806
Canada	378,926	383,837	376,538	354,502	422,573
France	262,526	281,817	271,151	286,724	316,686

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Bilateral Trade Analysis for HS Code 70

Glass and Glassware

71

Countries

China

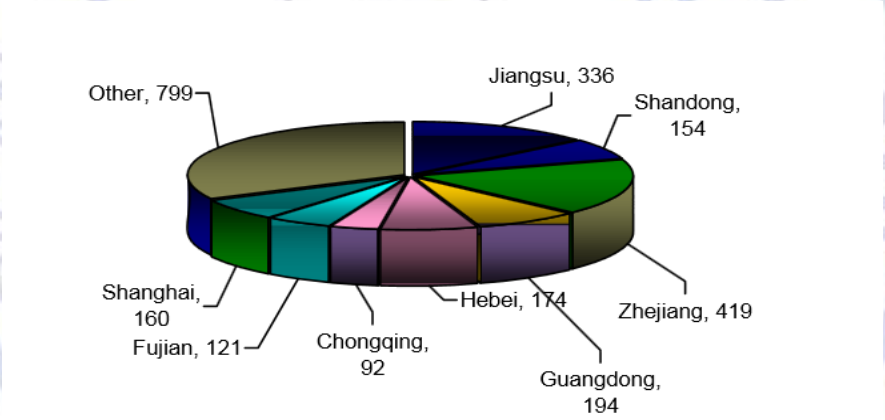
Mexico

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

China

China's glass industry began to develop in 1992, however it is only since the 1980s that China's glass industry has begun to open up to trade by implementing market-orientated economic reforms. Partly explained by the increase in demand from various industries of the economy such as construction (such as float glass) and automobile production, but also the country's economic development, China has managed to become the world's leading glass producer and consumer of glass capturing 40% of the global market share (China Glass Industry Market Report, 2011). The main glass producing provinces are Shandong, Jiangsu, Zhejiang and Canton according to the figure 49 below which presents the regional concentration of Sizable Industry Enterprises in 2010.

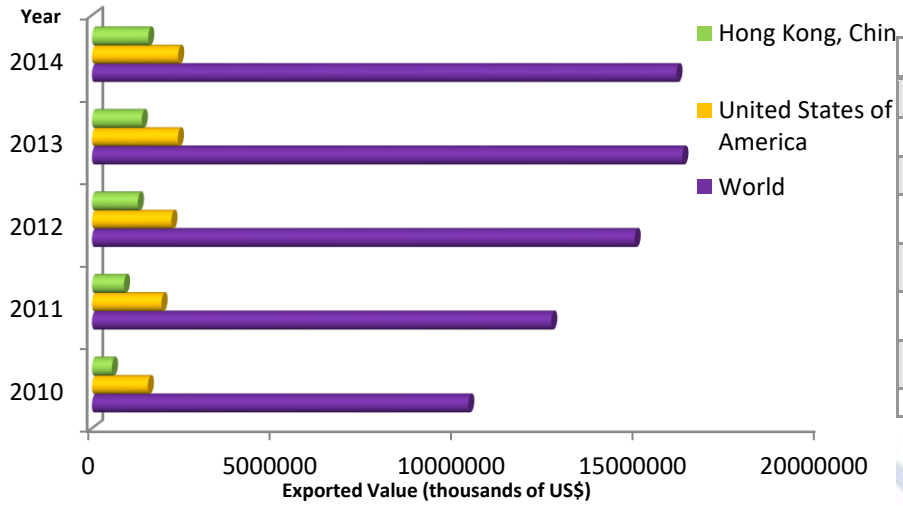
Figure 49: Regional Concentration of Sizable Glass Industry Enterprises in 2010



Source: National Bureau of Statistics of China

Another characteristic of the glass industry according to the same report is its high concentration since according to statistics the top 10 companies capture approximately 60% of the total domestic production (2010).

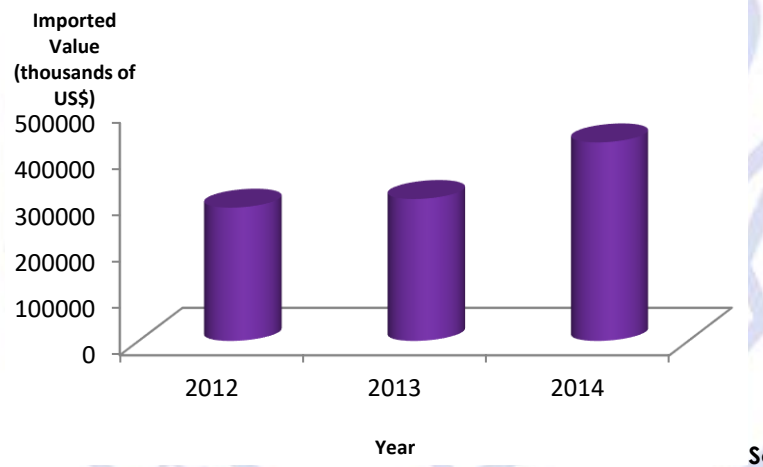
Figure 50: Main Exporting Countries of HS Code 70 in terms of Exporting Value



HS Code	Product Label
7002	Glass in balls, unworked
7003	Cast & rolled glass, sheets/profiles
7004	Drawn or blown glass, in sheets
7005	Float glass & surf grd/polished glass in sheet
7006	Glass of 70.03, 70.04, 70.05 bent, edge worked etc not framed etc
7007	Safety glass, consisting of toughened or laminated glass
7008	Multiple-walled insulating units of glass
Source: International Trade Center (ITC)	

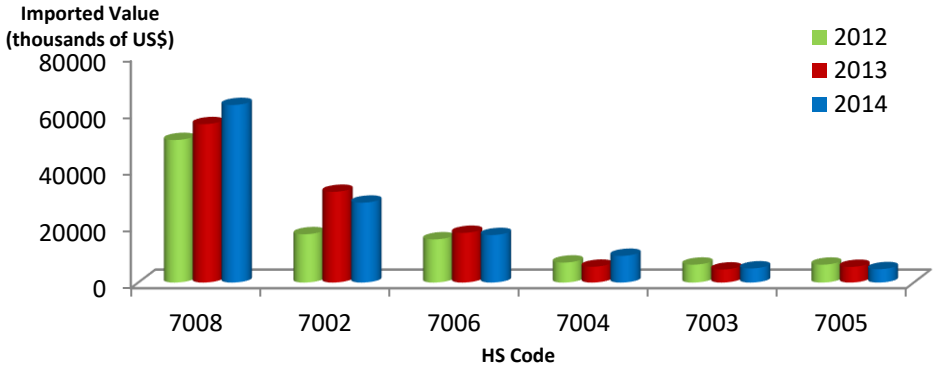
Source: International Trade Center

Figure 51A: Bilateral Trade between USA and China (HS Code 7007)



Source: UN COMTRADE statistics

Figure 51B: Bilateral Trade between USA and China (HS Code 70)



Source: Trade USA / US CENSUS BUREAU – UN COMTRADE Statistics

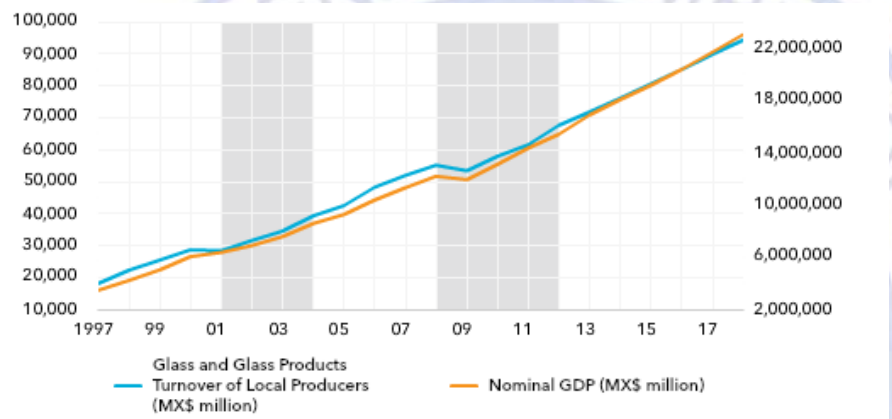
The bilateral trade patterns for the HS Code 70 between China and USA for the time period 2012 – 2014, are presented in the above two figures. The overall imported value for 2013 and 2014 has remained stable. Figure 51A presents the trade pattern for HS Code 7007 - defined as safety glass from toughened or laminated glass. The trend of the imported value is positive and in 2014 reaches a value superior to $400 million. Figure 51B gives an overview of the top imported HS Codes in the category. HS Code 7008 contributes the most at the total exported value reaching the $60million in 2014 with a growing trend. The rest of the sub-codes in figure 51B have a relatively insignificant imported value contribution, some of which present declining trends of the three- year period. This indicates that the raw and less processed codes of glass show a declining trend; while, the more highly manufactured are increasingly exported in large quantities.

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Mexico

According to the Euromonitor International Statistics, the Mexican market value for glass and glass products reached $65.5 billion in 2012 and is expected to reach a value of $94.3 billion by 2018, growing at an average annual rate of 6%. Domestic demand and exports both in this industry rely heavily on the construction industry. The turnover of local producers of the glass industry is presented in the figure below and is compared to the nominal GDP for the period 1997 – 2018.

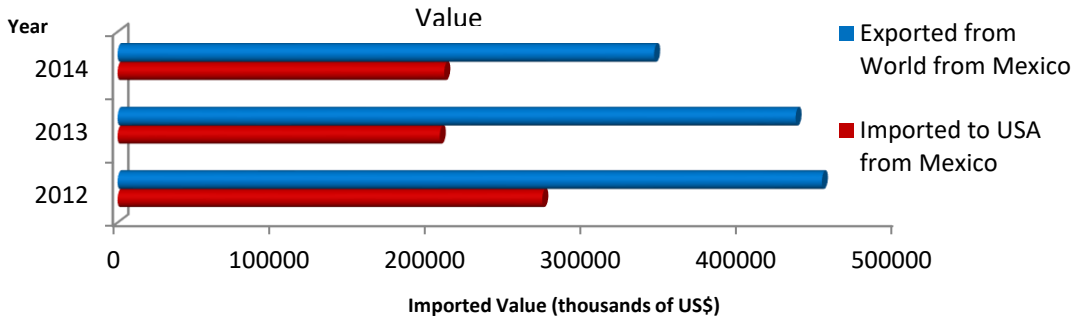
Figure 52: Production versus Nominal GDP 1997 – 2018 (HS Code 70)



Source: Euromonitor Report, 2013

Figure 53 below indicates that the majority of the Mexican exported value from the glass industry is imported to the USA.

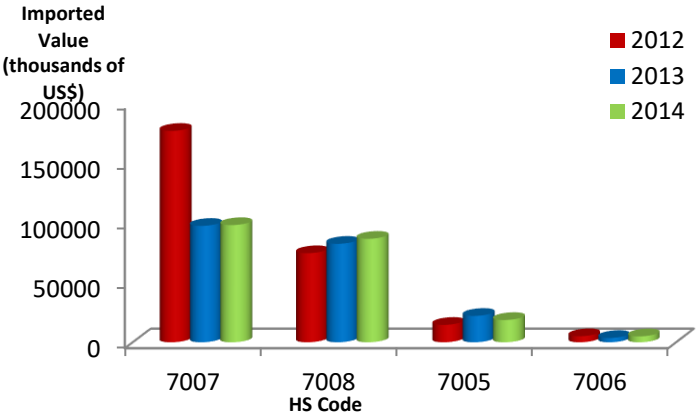
Figure 53: Exported Value from Mexico to USA vs. World



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Mexico holds the 2nd position, at the US supply market for glass under HS Code 70, after China and is marginally growing each year. In comparison to the Chinese market; however in terms of exported value, the Mexican market's contribution is half in value and captures only 16% of the US supply market in 2014.

Figure 54: Bilateral Trade between USA and Mexico (HS Code 70)



HS Code	Product Label
7005	Float glass & surf grounded/polished glass in sheet
7006	Glass of 70.03, 70.04, 70.05 bent, edge worked etc. not framed etc.
7007	Safety glass, consisting of toughened or laminated glass
7008	Multiple-walled insulating units of glass
Source: International Trade Center (ITC)	

Source: UN COMTRADE statistics

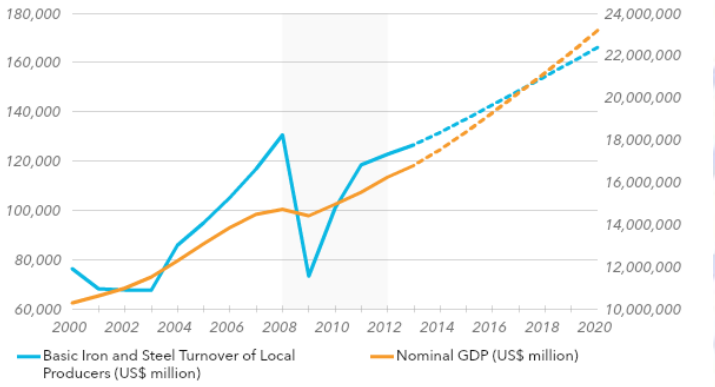
As is the case in the respective Chinese market, HS Codes 7007 and 7008 are the most highly exported products from 2012 – 2014. The imported value of HS Code 7007; however has significantly fallen by approximately $75million since 2013, in contrast to that of China that follows a growing trend. The demand for HS Code 7008 is growing in monetary terms as the figure above indicates.

Iron & Steel (HS Code 72)

Skyscrapers are structures which have the ability to change the image of modern cities. New York City and Chicago are large metropolitan cities with the largest number of skyscrapers, which are made from a steel frame. Due to its high durability and low cost steel, is used in a wide range of activities in the building of skyscrapers and other construction activities. Before its development particularly during the industrial revolution iron was used in architecture, although it was soon considered to be weak under tension and was substituted by steel.

As a result of the recovery of the construction and transport equipment industries, which led to the increase in demand for high-strength steel, the US market for iron and steel grew by 3% in 2013 compared to the previous year, reaching a value of US$164 billion (Euromonitor, 2014). Figure 55 below illustrates the growth and projected growth of the industry in terms of turnover of local producers and forecasts a linear growth pattern leading up to 2020.

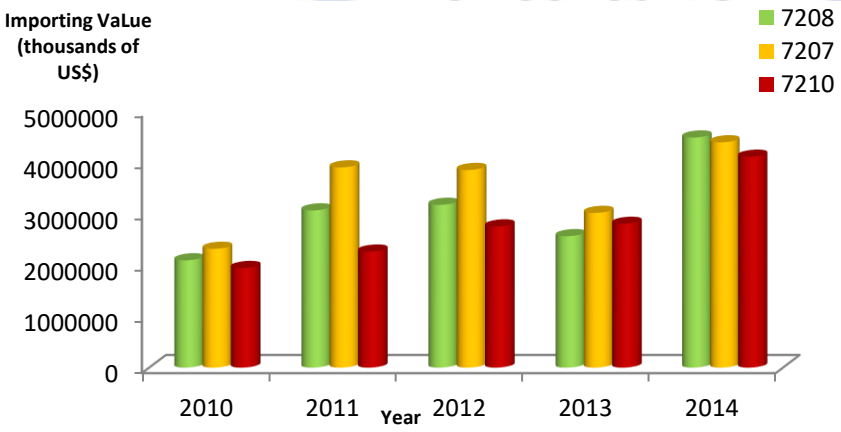
Figure 55: Production of the Iron and Steel Industry vs. Nominal GDP 2000 - 2020



Source: Euromonitor, 2014

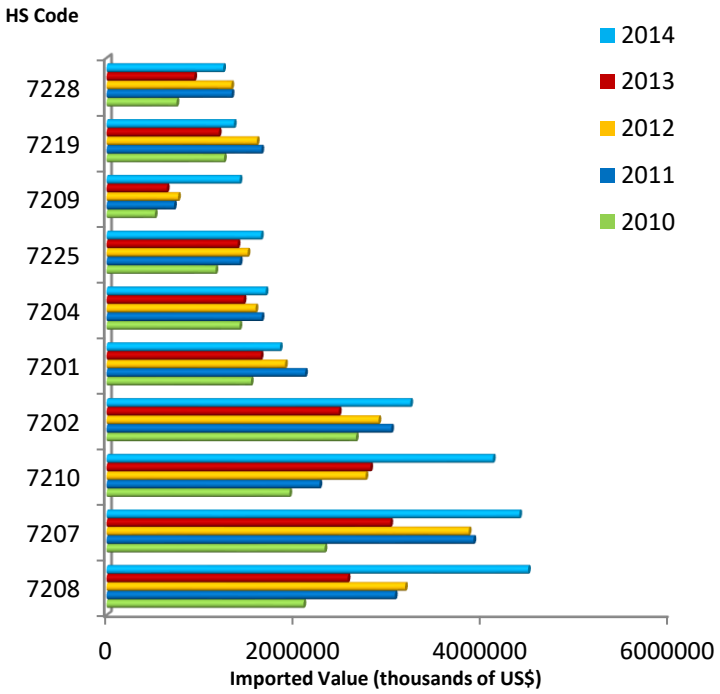
In the same year, the value of exports to the US from abroad increased by 2% and reached a value of $39.4 billion, while the demand for steel in 2013 reached a value of 107 million tones.

Figure 56: US Imported Value for Iron and Steel (HS Code 72)



Source: UN COMTRADE statistics

Figure 57: US Imported Value for Iron and Steel (HS Code 72)



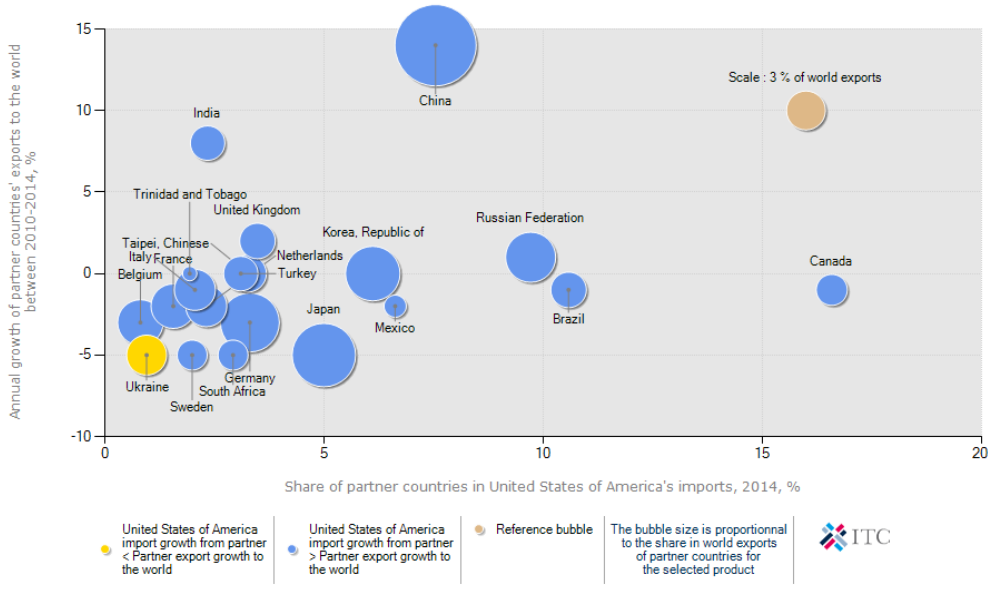
HS Code	Product Label
7201	Pig iron and spiegeleisen in pigs
7202	Ferro-alloys
7204	Ferrous waste and scrap; remelting scrap ingots or iron or steel
7207	Semi-finished products of iron or non-alloy steel
7208	Flat-rolled products of iron/ non-alloys, width >/= 600 mm hr not, clad
7209	Flat-rolled prod of iron/non-alloy steel wd>/=600mm,cr,not clad
7210	Flat-rolled products of iron/ non-alloys, width >/= 600 mm, clad, platted or coated
7219	Flat-rolled products of stainless steel, of a width of 600mm or more
7225	Flat-rolled products of other alloy steel, of a width of 600mm or more
7228	Bars & rods ,other alloy steel; hollow drill bars, etc.

Source: International Trade Center (ITC)

Source: UN COMTRADE statistics

The bilateral trade patterns for steel and iron categorized under HS Code 72 is presented above along with the overall increasing pattern for which semi-finished or flat-rolled products of iron or non-alloy steel have the highest imported value.

Figure 58: Diversification of Suppliers in the USA Market for Iron & Steel (HS Code 72)



Source: International Trade Center (ITC)

The diversification of suppliers to the US market is diverse in its form. Canada is the primary importing nation capturing just below 25% of the total imported value, as presented in the following section. Latin American countries (Brazil and Mexico) and large Asian producers (Russia and China), are the most dominant.

Table 9: Imported Value by Country to the USA					
HS Code: 72 (Iron and Steel)					
Unit: thousands of US$					
Exporters	**2010**	**2011**	**2012**	**2013**	**2014**
World	21,461,520	28,375,124	29,012,850	2,5314,310	34,181,993
Canada	5,212,835	5,769,296	5,492,097	5,051,493	5,670,738
Brazil	1,445,877	3,483,612	3,550,685	2,984,427	3,617,247
Russia	1,341,069	1,740,488	2,062,423	1,639,932	3,320,900
China	1,026,110	1,483,724	1,547,783	1,540,049	2,579,153
Mexico	1,826,991	2,156,590	1,802,588	1,920,145	2,264,298
Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics					

Table 10 below presents the percentage growth rates of the iron and steel imports to the US for the top-five importing countries, compared to that imported from the world in total.

Table 10: Imported Growth in Value to the USA by Country					
HS Code: 72 (Iron and Steel)					
Unit: Percentage (%)					
Exporters	**Between 2010 - 2011**	**Between 2011 - 2012**	**Between 2012 - 2013**	**Between 2013 - 2014**	**Imported Value in 2014 (thousands of US$)**
World	32	2	-13	35	34,181,993
Canada	11	-5	-8	12	5,670,738
Brazil	141	2	-16	21	3,617,247
Russia	30	18	-20	103	3,320,900
China	45	4	0	67	2,579,153
Mexico	18	-16	7	18	2,264,298
Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics					

Bilateral Trade Analysis for HS Code 72

Iron and Steel

Country

Canada

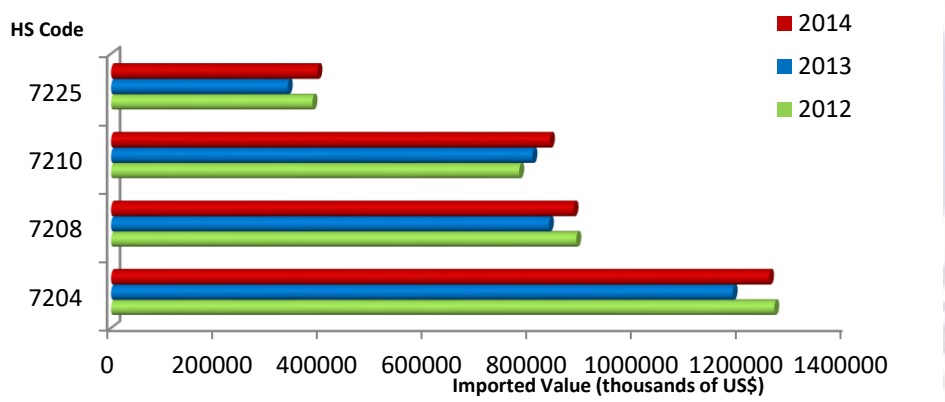
AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Canada

The Canadian market for iron contracted by 12% in 2013 (Euromonitor, 2015), as a result of the fall in demand both from the construction (which also contracted by 2% in 2013) and automobile industries and an overall decrease of exports to the world. This phenomenon resulted in a further decrease in the price of steel as a result of the oversupply of steel; however this pattern is expected to reverse as the economy picks-up and recovers from the economic recession.

The bilateral trade pattern between the US and Canada does not follow this contacting trend as indicated for the majority of its most highly imported sub-codes. However to a large extent US market relies on Canada for ferrous waste and scrap of materials under the HS Code 7204 with an imported value of approximately $1.25 billionand flat-rolled products of iron and non-alloys under HS Code 7208.

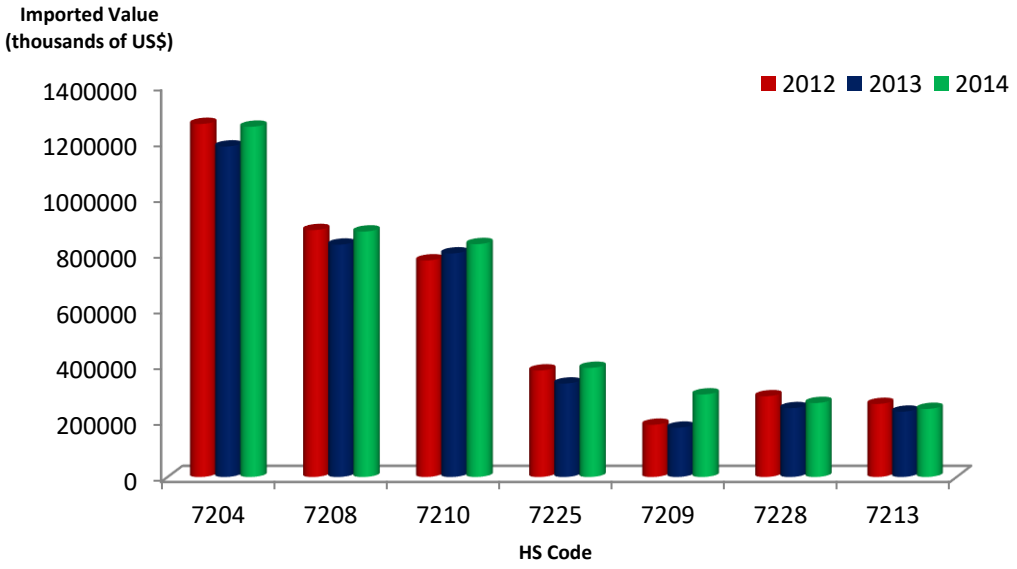
Figure 59A: Bilateral Trade between USA and Canada for Top Iron & Steel HS Codes



Source: UN COMTRADE statistics

HS Code	Product Label
7204	Ferrous waste and scrap; re-melting scrap ingots or iron or steel
7208	Flat-rolled products of iron/ non-alloys, width >/= 600 mm hr not, clad
7210	Flat-rolled products of iron/ non-alloys, width >/= 600 mm, clad, platted or coated
7225	Flat-rolled products of other alloy steel, of a width of 600mm or more
Source: International Trade Center (ITC)	

Figure 59B: Bilateral Trade between USA and Canada for Iron & Steel (HS Code 72)



Source: UN COMTRADE statistics

HS Code	Product Label
7201	Pig iron and spiegeleisen in pigs
7202	Ferro-alloys
7204	Ferrous waste and scrap; re-melting scrap ingots or iron or steel
7207	Semi-finished products of iron or non-alloy steel
7208	Flat-rolled products of iron/ non-alloys, width >/= 600 mm hr not, clad
7209	Flat-rolled prod of iron/non-alloy steel wd>/=600mm,cr,not clad
7210	Flat-rolled products of iron/ non-alloys, width >/= 600 mm, clad, platted or coated
7219	Flat-rolled products of stainless steel, of a width of 600mm or more
7225	Flat-rolled products of other alloy steel, of a width of 600mm or more
7228	Bars & rods ,other alloy steel; hollow drill bars, etc.
Source: International Trade Center (ITC)	

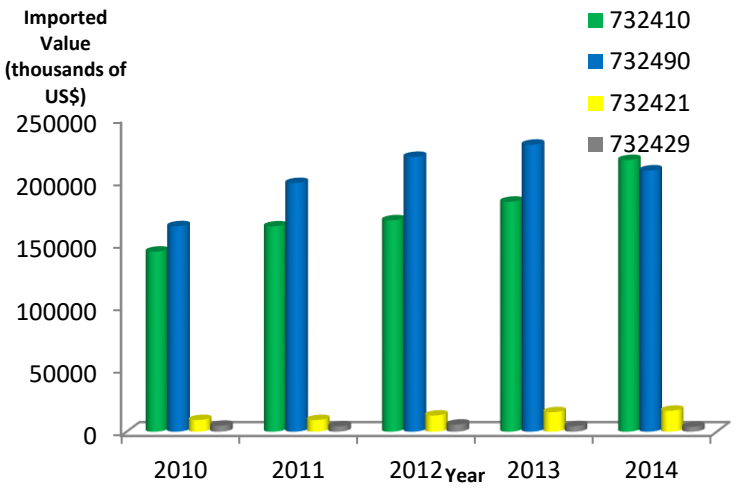
The rest of the HS Codes imported from Canada contribute minimally to the total imported value for the given period 2012 – 2014. HS Codes 7209 and 7210, defined as flat-rolled products of iron, non alloys also present an increasing trend during this period.

Sink and wash basins, stainless steel (HS Code 732410)

Sinks, wash basins and related sanitary parts are appliances of residential but also commercial buildings often made from stainless steel because of its anti-rust and corrosion properties. Therefore sinks and wash basins under HS Code 732410 can be considered as a relative product of the category iron and steel.

Figure 60 presents the overall trend of HS Code 732410 and its related products. During the 5-year period, sinks and wash basins of stainless steel are highly imported to the US and present an increasing imported value which in 2014 reached $200million. Sanitary ware, is the only HS Code in this category that is highly imported; however, its demand has fallen in 2014.

Figure 60: Imported Value of HS Code 732410



HS Code	Product Label
732410	Sinks & wash basins, stainless steel
732421	Baths, cast iron, enameled or not
732429	Baths iron or steel, nes
732490	Sanitary ware and parts thereof, nes, (ex. Bedpans, douche cans)
Source: International Trade Center (ITC)	

Source: International Trade Center (ITC)

Table 11 summarizes the top importing nations for this category of products indicating that in 2014 China captures half of the importing market, while Malaysia has just entering the US supply market in 2012 and is rapidly growing, doubling its imported value between 2013 and 2014. Canada on the other hand is losing market share from new competitors.

Table 11: Imported Value by Country to the USA
HS Code: 732410 (Sink and wash basins, stainless steel)
Unit: thousands of US$

Exporters	2010	2011	2012	2013	2014
World	143,742	163,873	168,741	183,578	216,837
China	99,097	118,911	125,121	96,901	101,058
Mexico	22,545	20,896	21,601	38,598	36,626
Malaysia	0	0	385	12,663	23,974
Thailand	16	0	0	3,776	14,258
Canada	22,545	9,036	7,316	6,859	6,615

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Bilateral Trade Analysis for HS Code 732410

Sinks and wash basins

Countries

China

Mexico

Malaysia

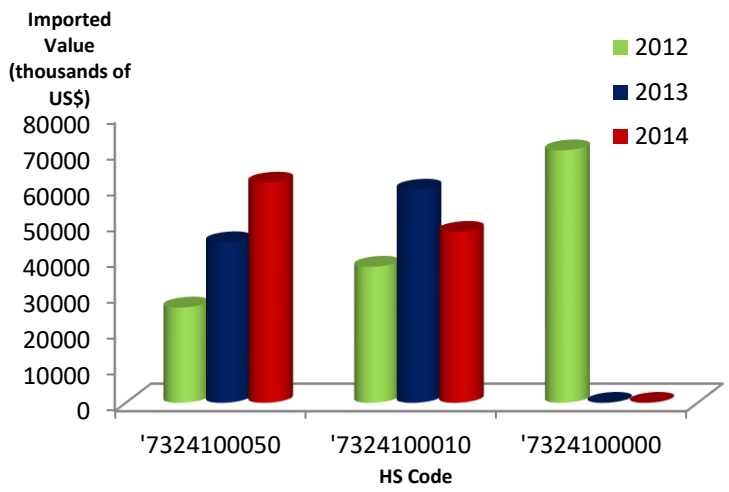
AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

China

As the primary importer of HS Code 7324100 to the US supply market, China is an interesting market to study. The specific HS Code is further broken down into the sub-categories presented in the figure below. Sinks and wash basins of stainless steel (HS Code 73242100050) present an increasing imported value to the US during the three-year period, while sinks with one or more basins (HS Code 7324100010) follows an unstable trend during the same period.

Figure 61: Bilateral Trade between USA and China for Sinks & wash basins (HS Code 732410)

HS Code	Product Label
7324100010	Sinks of stainless steel with one or more drawn bowls (basins)
73242100050	Sinks and wash basins of stainless steel
7324100000	Sinks and wash basins of stainless steel
Source: International Trade Center (ITC)	



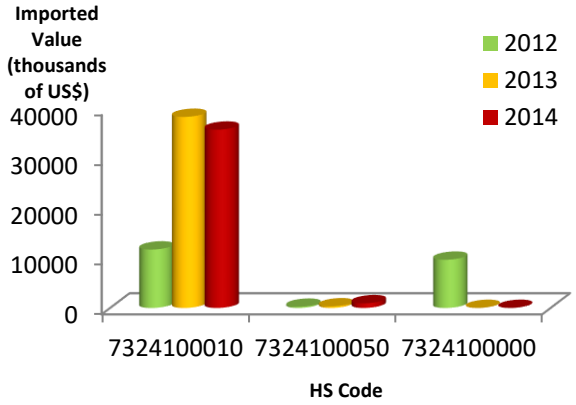
Source: International Trade Center (ITC)

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Mexico

The Mexican supply market is the 2nd in size of exported value; however it is substantially smaller, capturing approximately 15% of the market overall. Figure 62 below indicates that it is able to compete against China and maintain a dominating position by primarily importing sub-codes to the US market.

Figure 62: Bilateral Trade between USA and Mexico Sinks & wash basins (HS Code 732410)



HS Code	Product Label
7324100010	Sinks of stainless steel with one or more drawn bowls (basins)
73242100050	Sinks and wash basins of stainless steel
7324100000	Sinks and wash basins of stainless steel
Source: International Trade Center (ITC)	

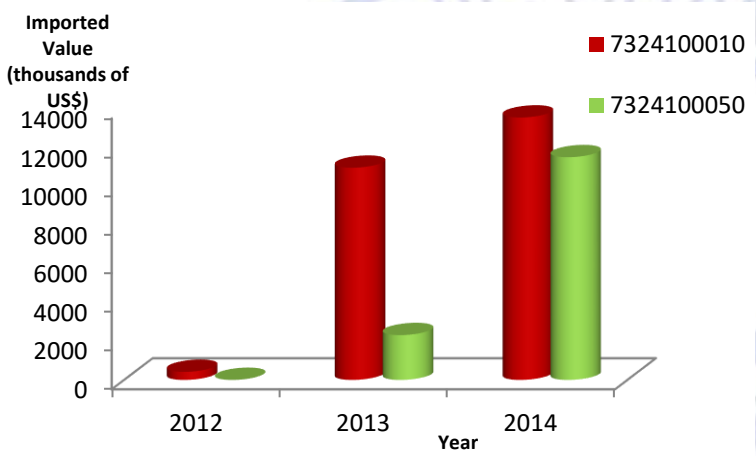
Source: UN COMTRADE statistics

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Malaysia

Malaysia entered the USA appliances market for sinks and wash basins made of stainless steel in 2013 and is growing fast in terms of its exported value, as illustrated below. HS Code 7324210050 increased by $10million between 2013 and 2014; while, the HS Code 7324100010 increased marginally by $2million during the same period.

Figure 63: Bilateral Trade between USA and Malaysia (HS Code 732410)

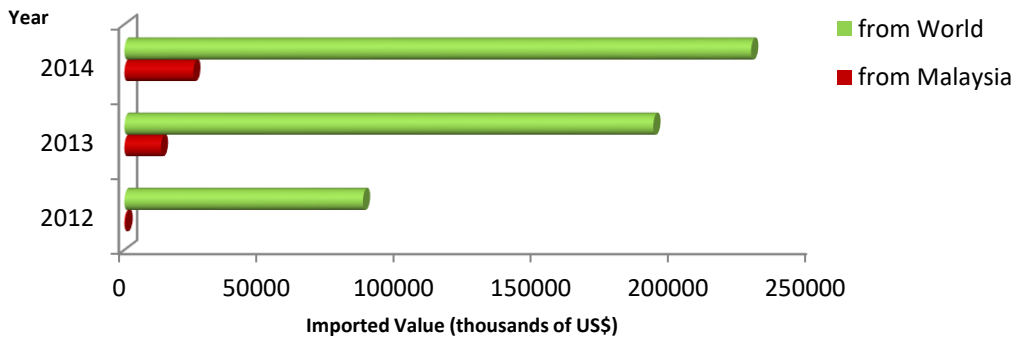


HS Code	Product Label
7324100010	Sinks of stainless steel with one or more drawn bowls (basins)
73242100050	Sinks and wash basins of stainless steel
Source: International Trade Center (ITC)	

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

The figure below illustrates the growth of the Malaysian exports to the US market in relation to the total global imported value. It is evident that Malaysia's position in the US Market of Appliances is becoming stronger with the potantial to grow even further and compete against the largest exporters in the upcoming years.

Figure 64: USA Imported Value Malaysia vs. World (HS Code 732410)

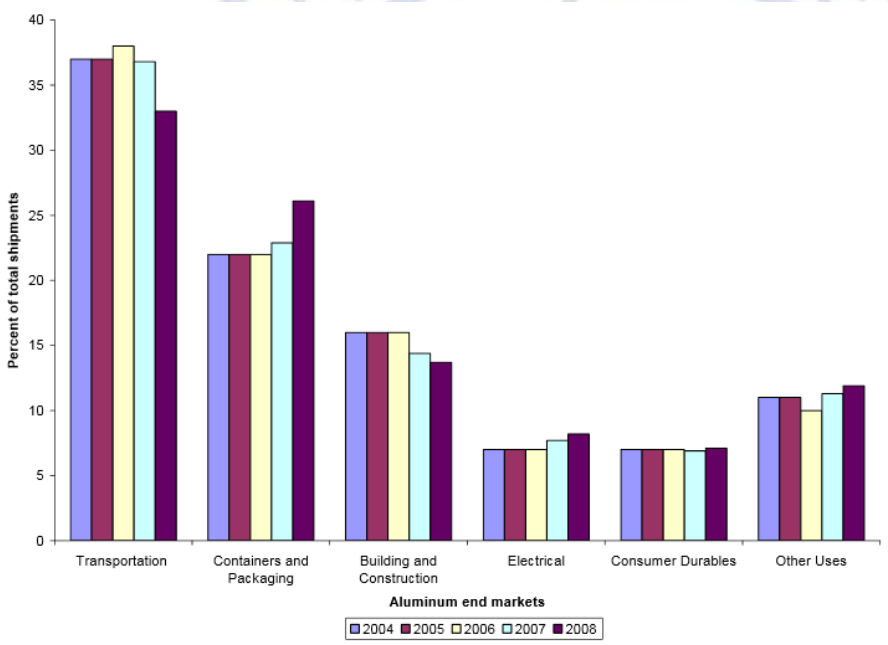


Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Aluminium and Articles thereof (HS Code 76)

The global market for aluminium realized a significant growth, during the last decades, and in 2014 its growth rate reached the7%, due to the increased demand from the construction, engineering and transportation industries, particularly during the fourth quarter of the year. In 2015, it was expected to grow by 6% reaching a value of 58 million tons, according to data from the Aluminium Association. Aluminium, due to its multiple forms (wires, tubes, pipes, containers etc.), is easy to work with and therefore, it is a widely used material in the construction industry for various applications that span from exterior structures to interior decorations of buildings; making it the second most popular metal. Germany and France are both amongst the largest growing markets of aluminium worldwide.

Figure 65: US Consumers of Aluminium by sector (2004 -2008)



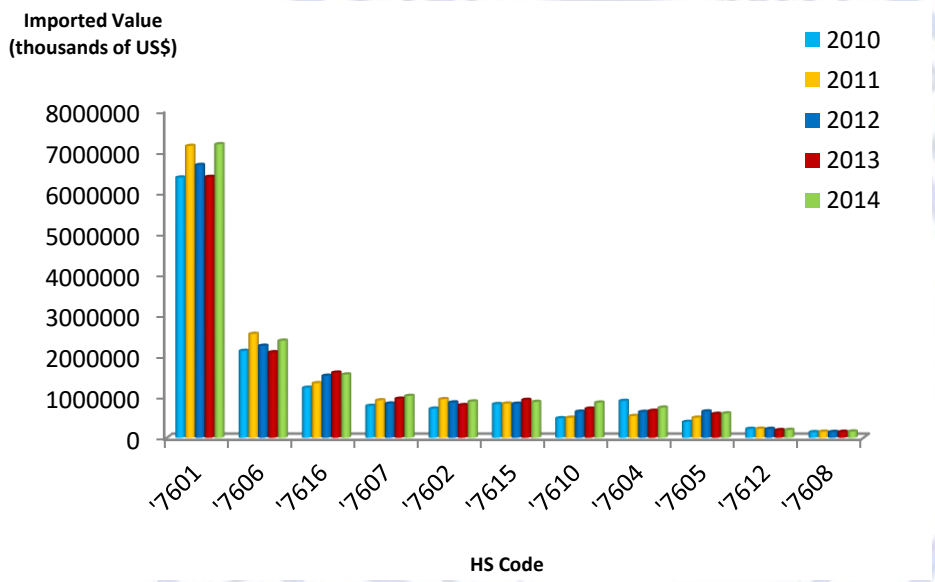
HS Code	Product Label
7601	Unwrought alumimum
7606	Aluminum plates, sheets and strip, of a thickness exceeding 0.2mm
7616	Articles of aluminum nes
7607	Aluminum foil of a thickness not exceeding 0.2mm
7602	Aluminum waste and scrap
7615	Aluminum table, kitchen, household articles
7610	Aluminum structure nes &part of structures
7604	Aluminum bars, rods and profiles
7605	Aluminum wire
7612	Aluminum container (cap <= 300l)
7608	Aluminum tubes and pipes
7609	Aluminum tube or pipe fittings
7614	Aluminum stranded wire, cables, plaited bands, not electrically insulated
7603	Aluminum powders and flakes
7613	Aluminum containers for compressed or liquefied gas
7611	Aluminium reservoirs, vats & sim container (cap >300l)

Source: International Trade Center (ITC)

Source: United States International Trade Commission, 2010

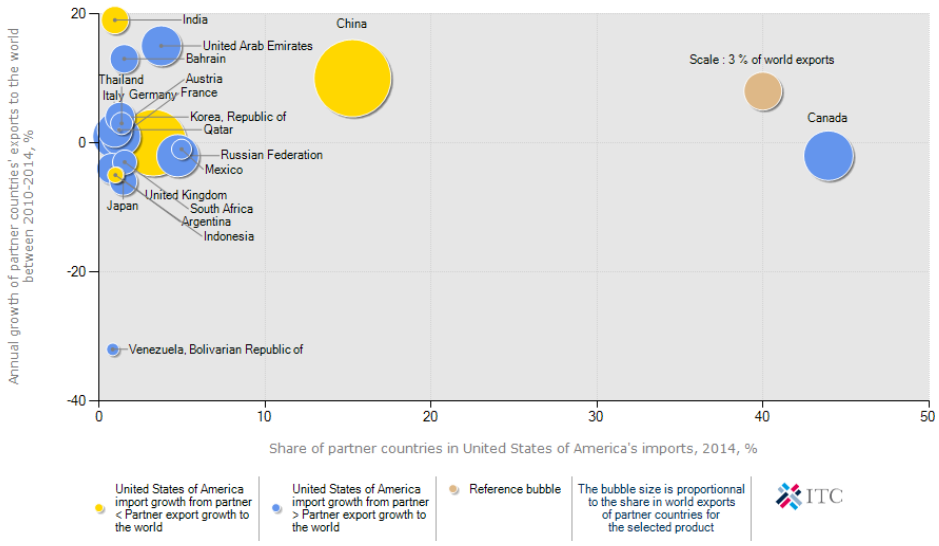
The US importing aluminium market is presented below for the period of 2010 – 2014; the majority of the imported value from the world is under the HS Code 7601 that is defined as unwrought aluminium, which is "obtained by casting without further hot or cold working".

Figure 66: USA Imported Value of Aluminium and Articles thereof (HS Code 76)



Source: UN COMTRADE statistics

Figure 67: Diversification of Suppliers in the US Market Aluminium & articles thereof (HS Code 76)



Source: International Trade Center (ITC)

The distribution of suppliers in 2014 of aluminium and articles is illustrated in the above figure. Apart from Canada (which captured 71% of the importing market in 2008 according to the ITC statistics), the majority of the suppliers to the US market are Asian countries (China, Korea, Russia and the United Arab Emirates), which are clustered together. The growth in imported value to the US for the given period 2010 - 2014 of the top competitors is presented at table 12.

Table 12: Imported Growth in Value to the USA by Country

HS Code: 76 (Aluminium and Articles thereof)

Unit: Percentage (%)

Exporters	Between 2010 - 2011	Between 2011 - 2012	Between 2012 - 2013	Between 2013 - 2014	Imported Value in 2014 (thousands of US$)
World	10	-2	-2	9	16,677,494
Canada	6	-12	0	7	7,330,680
China	-9	8	24	9	2,548,340
Mexico	21	23	-22	9	830,121
Russia	22	14	-28	50	791,731
United Arab Emirates	240	-9	-3	6	625,539

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

Bilateral Trade Analysis for HS Code 76

Aluminium and articles thereof

Countries

Canada

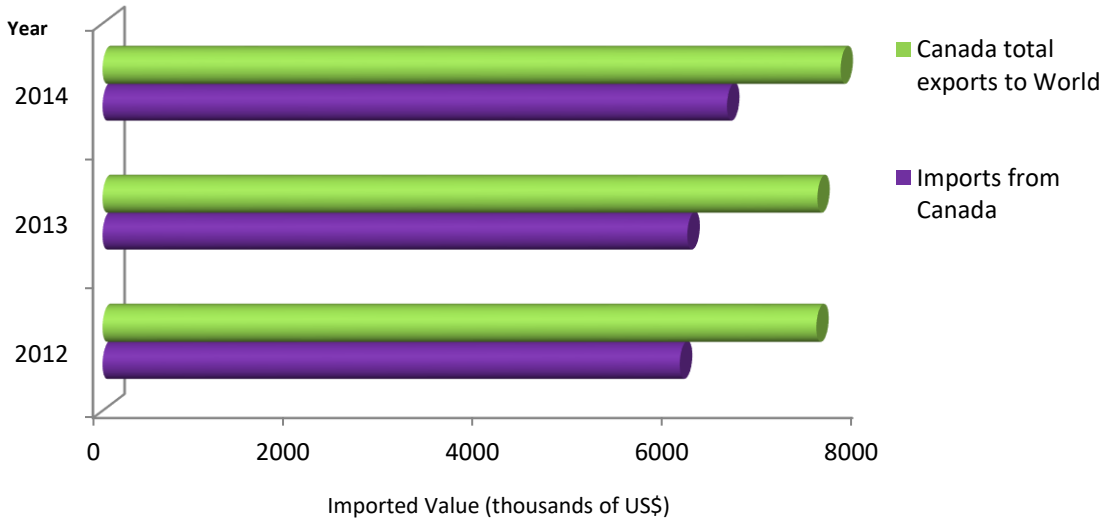
China

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Canada

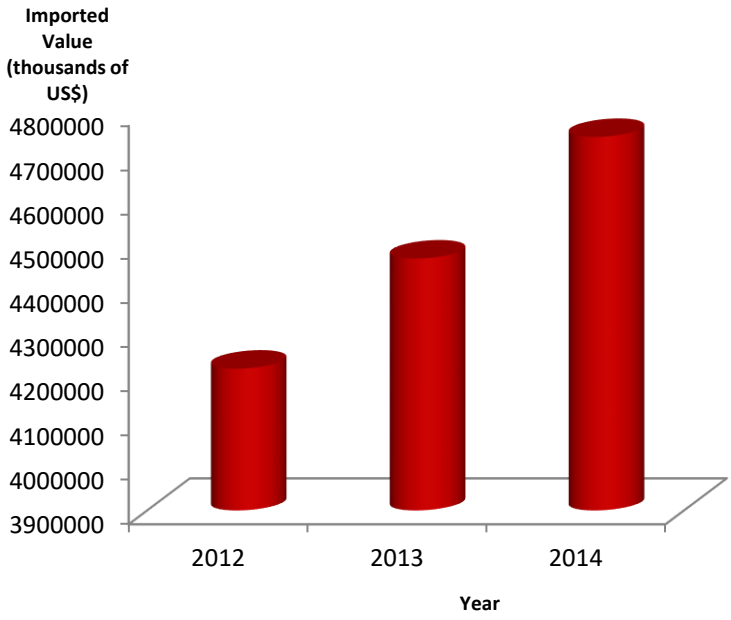
The aluminum industry was the first to be established in Canada making it the 4th largest producer and one of the primary exporters worldwide. It is interesting to note that the Canadian market depends on the demand from the US market to supply its production. North America, as a whole, has become the largest consumer of aluminium. The figure below illustrates that the majority of the Canadian exports of HS Code 76 are destined to the US for the three-year period 2012 – 2014. The figure also indicates that the value of exported of Canadian goods to the world has remained relatively stable; while their exported value presents a marginally positive trend.

Figure 68: Canadian Exports to USA vs. World (HS Code 76)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 69A: Bilateral Trade between USA and Canada HS Code 7601 (2012 - 2014)



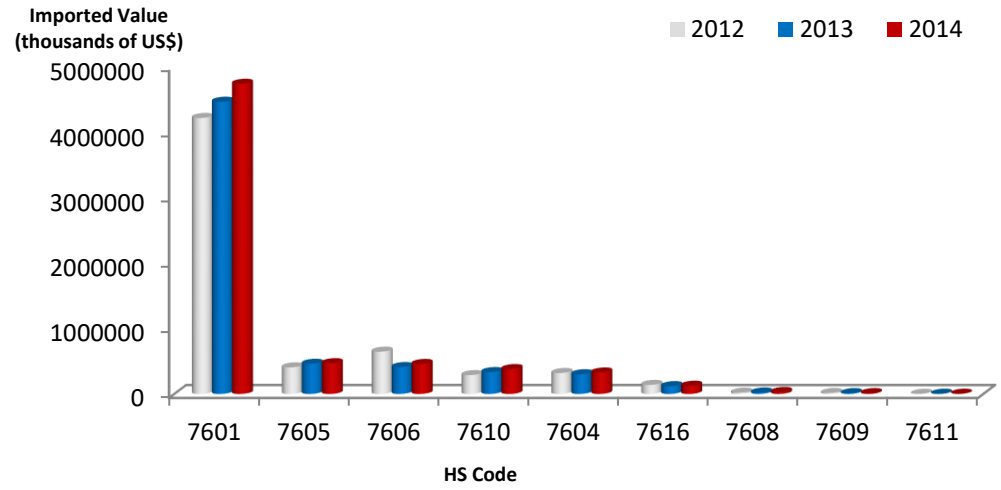
HS Code	Product Label
7601	Unwrought alumimum
7606	Aluminum plates, sheets and strip, of a thickness exceeding 0.2mm
7616	Articles of aluminum nes
7607	Aluminum foil of a thickness not exceeding 0.2mm
7602	Aluminum waste and scrap
7615	Aluminum table, kitchen, household articles
7610	Aluminum structure nes &part of structures
7604	Aluminum bars, rods and profiles
7605	Aluminum wire
7612	Aluminum container (cap <= 300l)
7608	Aluminum tubes and pipes
7609	Aluminum tube or pipe fittings
7614	Aluminum stranded wire, cables, plaited bands, not electrically insulated
7603	Aluminum powders and flakes
7613	Aluminum containers for compressed or liquefied gas
7611	Aluminium reservoirs, vats &sim container (cap >300l)

Source: International Trade Center (ITC)

Source: International Trade Center (ITC)

Figure 69A presents the bilateral trade pattern for the HS Code 7601 defined as unwrought (unprocessed) aluminium to the US from China, which follows an increasing trend and reaches an imported value of $4.8billion in 2014. Figure 69B presents the majority of the exported HS Codes from the Canadian market to the US, for which the imported values are relatively insignificant. More specifically, the imported values for the secondary most highly imported HS Codes in monetary terms (aluminium wires and aluminium sheets and bars) average at $5billion for the given period.

Figure 69B: Bilateral Trade between USA and Canada HS Code 76 (2012 - 2014)



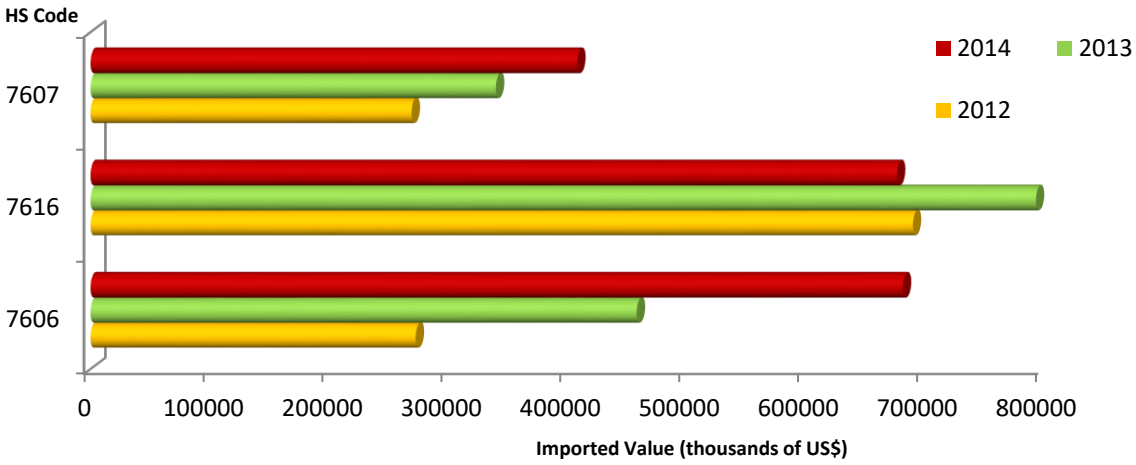
Source: International Trade Center (ITC)

China

China is the primary consumer of aluminium within the Asian market and the second largest supplying market to the US. Figure 70 below represents the bilateral trade pattern between the two countries for the given period 2012 – 2014.

In fact, in order for the Chinese market to compete with Canada, which has a geographical advantage resulting in lower transportation costs and dominates the market, China manages to differentiate its market by exporting the diverse HS Codes presented below. For HS Codes 7606 and 7607, which are processed aluminium plates, sheets or strips (with an exported value of $700million in 2014) and foil strips (with an imported value of $400million in 2014) of varied thicknesses, the market presents a growing trend during the three-year period. HS Code 7616 (which includes articles of aluminium that are not categorized under any other category) follows a random trend during this period and the most dominating. Its imported value in 2013 reached the highest point at $800million.

Figure 70: Bilateral Trade between the USA and China (HS Code 76)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

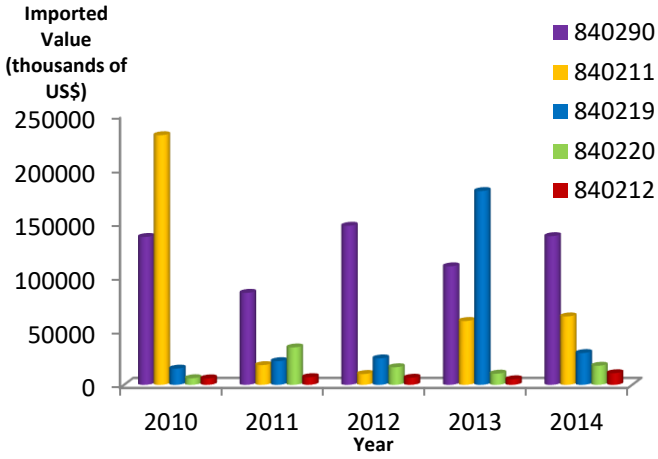
HS Code	Product Label
7607	Aluminium foil of a thickness not exceeding 0.2mm
7606	Aluminum plates, sheets and strip, of a thickness exceeding 0.2mm
7616	Articles of aluminum nes

Source: International Trade Center (ITC)

Steam or Vapor boiler, super-heated water boiler (HS Code 8402)

The bilateral trade pattern for this category of appliances is unstable and does not present a clear pattern of growth. In 2014, the most highly imported HS Code to the US is 840290, which consists of parts of steam or vapor generating boilers with an imported value of approximately $140million, followed by the HS Code 840211, which is defined as water boilers with high steam production per hour. The HS Code 840219, defined as super-heated water boilers, presents a significant decrease in imported value between 2013 and 2014.

Figure 71: USA Imported Value for HS Code 8402 (2010 - 2014)

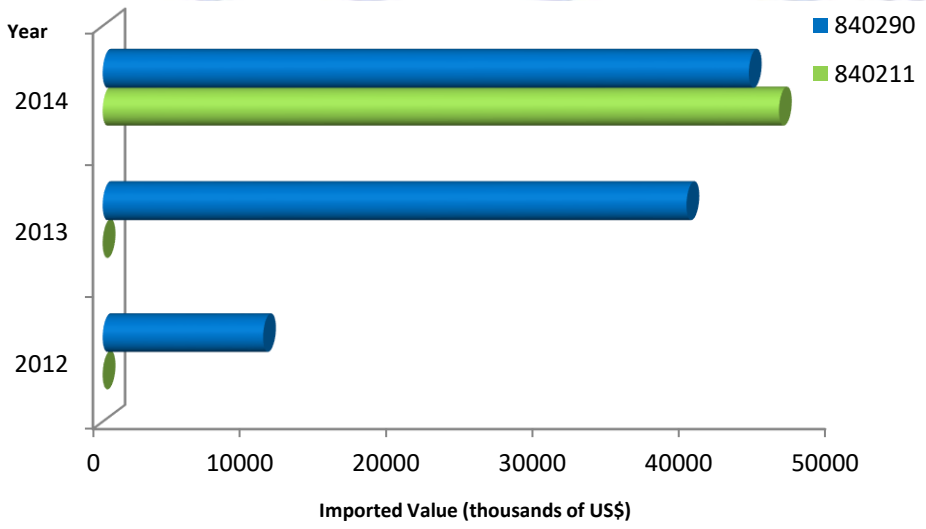


HS Code	Product Label
840290	Parts of steam or vapor generating boilers nes
840211	Water tube boilers with a steam production exceeding 45T per hour
840212	Water tube boilers with a steam production not exceeding 45T per hour
840219	Vapor generating boilers nes, including hybrid boilers
84020	Super-heated water boilers

Source: International Trade Center (ITC)

Source: UN COMTRADE statistics

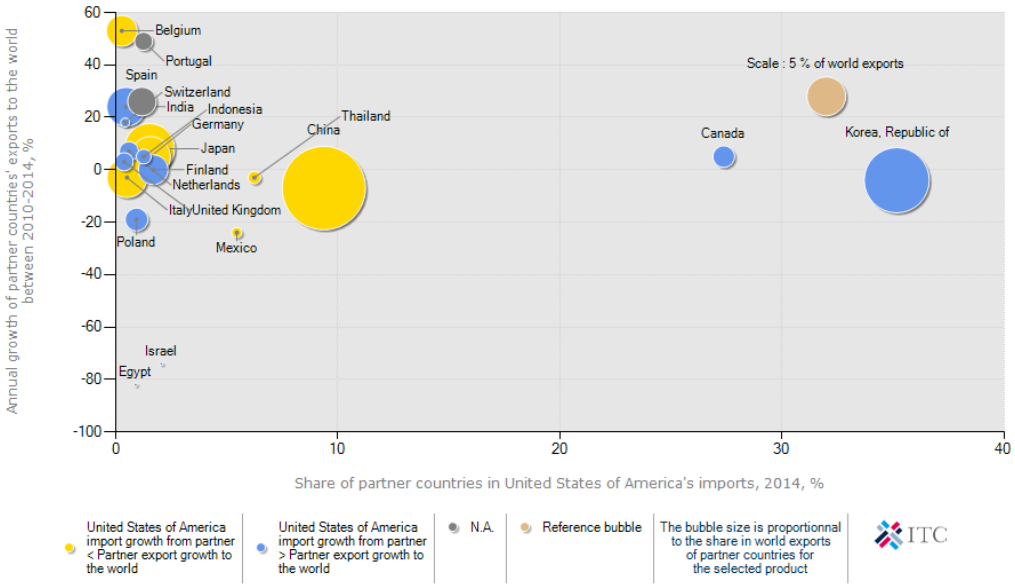
Figure 72: Imported Value of Steam or vapor boiler; super-heated water boiler (Tops HS Codes)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

The diversification of suppliers in 2014 is analyzed in the following section where Korea and China lead the suppliers towards the US Market. The suppliers from Thailand and Mexico are also dominant in the US market, which according to data from the ITC are capturing an increasing proportion of the market. Smaller suppliers are mainly Western and European economies.

Figure 73: Diversification of Suppliers in the USA Market for Steam or Vapour boilers



Source: International Trade Center (ITC)

The following tables summarizes the imported market trend for steam and vapor boilers during the given period 2012 – 2014 categorized by the leading supplying countries to the US. The overall importing market is unstable since, as table 14 indicates, during the tree-year period there has been a significant growth between 2012 and 2013, while the preceding year presents a 29% contraction of the market. In 2013, Canada is the only market which has contracted, following the global trend of the steam or vapor boiler market and capturing approximately 35% of the total imported value in the following year.

Table 13: Imported Value by Country to the USA

HS Code: 8402 (Steam or vapor boiler; super-heated water boiler)

Unit: thousands of US$

Exporters	2012	2013	2014
World	204,744	363,824	258,921
Korea	13,011	39,876	91,066
Canada	66,954	204,974	70,898
China	17,803	22,853	24,256
Thailand	5,948	874	16,159
Mexico	14,533	9,843	14,112

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

Table 14: Imported Growth in Value to the USA by Country			
HS Code: 8402 (Steam or vapor boiler; super-heated water boiler)			
Unit: Percentage (%)			
Exporters	**Between 2012 - 2013**	**Between 2013 - 2014**	**Imported Value in 2014 (thousands of US$)**
World	78	-29	258,921
Korea (Republic of)	206	128	91,066
Canada	206	-65	70,898
China	28	6	24,256
Thailand	-85	1,749	16,159
Mexico	-32	43	14,112
Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics			

Bilateral Trade Analysis for HS Code 8402

Steam or Vapor boiler, super-heated water boiler

107

Country

Republic of Korea

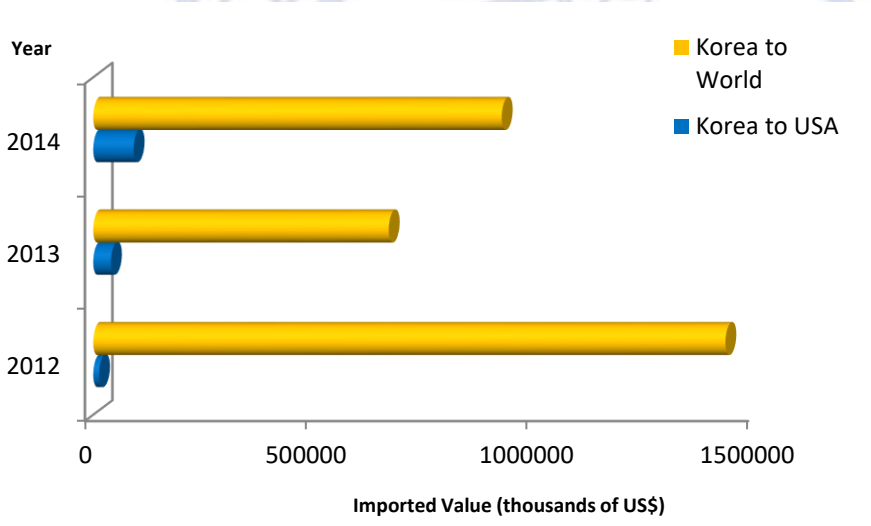
AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Republic of Korea

The Korean is the leader of the specific market (HS Code 8402), capturing just below 50% of the total imported value in 2014. It is interesting to note, however, the growth rate of Korean exports to the US in relation to the total value of exports to the world during the period 2012 – 2014. Disregading the flunctuation of the imported products to the US Market; Korean exporters realize a steady positive growth rate.

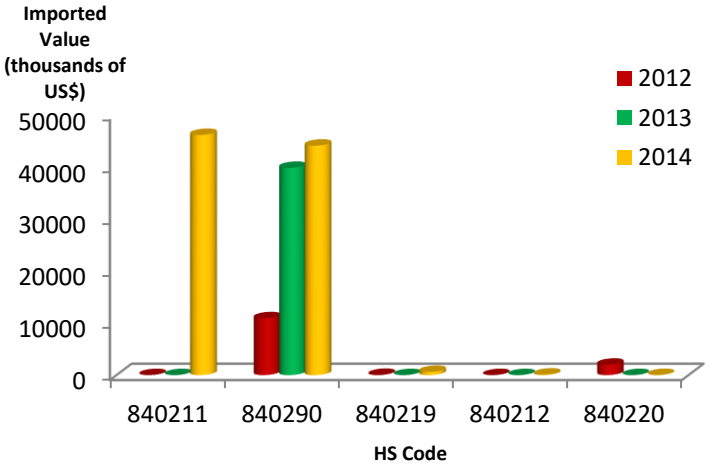
The bilateral trade pattern between the US and Korea is summarized in figure 73 indicating that the two most highly imported HS Codes are 840290 and 840211, both presenting growing trends reaching the value of $50million in 2014.

Figure 74: Korean Exports to USA vs. World for HS Code 8402 (2012 - 2014)



Source: International Trade Center (ITC)

Figure 75: Bilateral Trade between USA and Korea (HS Code 8402)



HS Code	Product Label
840290	Parts of steam or vapor generating boilers nes
840211	Water tube boilers with a steam production exceeding 45T per hour
840212	Water tube boilers with a steam production not exceeding 45T per hour
840219	Vapor generating boilers nes, including hybrid boilers
84020	Super-heated water boilers

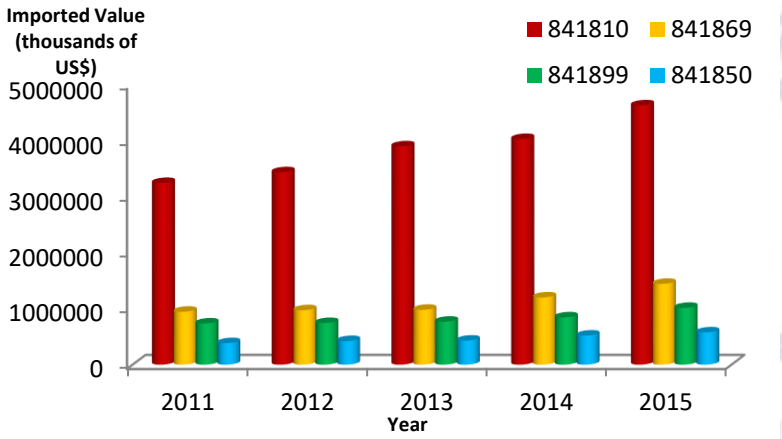
Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Refrigerator, fridges etc. (HS Code 8418)

Since demand for the specific industry is growing, so are the relevant imports in order to satisfy domestic demand. Figure 76 below presents the imported value for the top four 8418 HS Codes for the given period 2011 – 2015. It is evident that the imported value for HS Code 841810, defined as combined refrigerators fitted with separate external doors, is the most dominating sub-code in the category. During the specific period the imported value increases by approximately $billion reaching a value of $4billion in 2015. It is interesting to note that the other three sub-codes, related to refrigerators and related equipment, present a decreasing trend and a much smaller imported value.

Figure 76: US Imported Value of Top HS Codes 8418 (2011 - 2015)



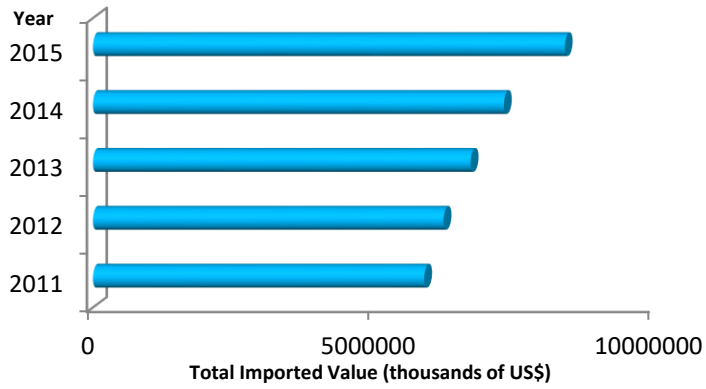
HS Code	Product Label
841810	Combined refrigerator-freezers, fitted with separate external doors
841869	Refrigerating or freezing equipment nes
841899	Parts of refrigerating or freezing equipment, nes
841850	Refrigerating or freezing display counters, cabinets, show-cases, etc

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

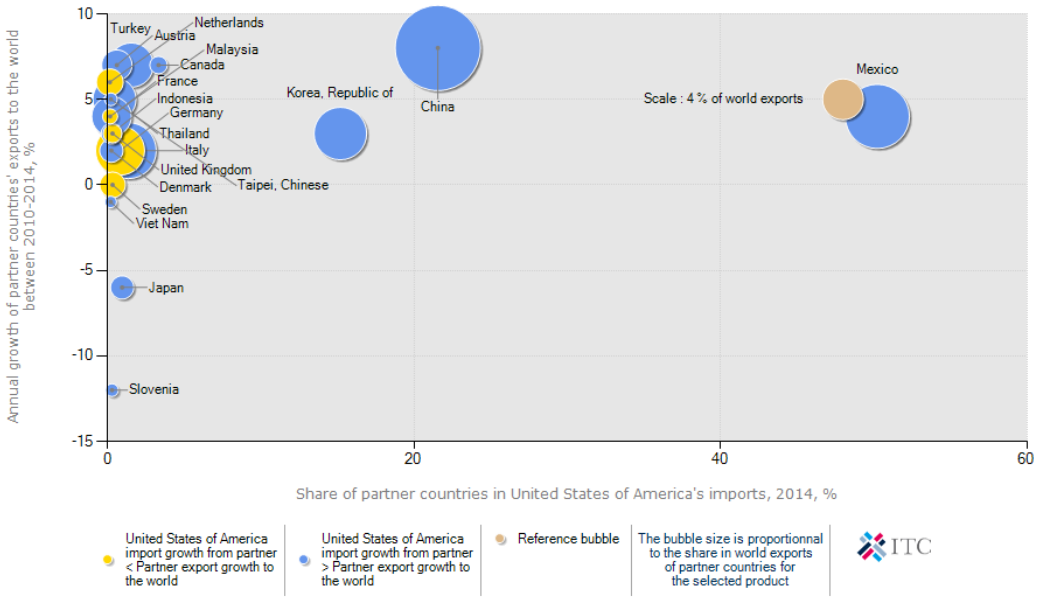
The overall trend of the market however is increasing for the same period, suggesting that the increase in imported value for the combined freezers and refrigerators under HS Code 841810 is much greater than the decrease from the single refrigerator units. This trend also indicates that as appliances become more efficient, the US citizens have a clear preference towards to combined units of fridges and refrigerators.

Figure 77: Imported Value of Top HS Codes 8418 (2011 - 2015)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 78: Diversification of Suppliers in the US Market for Refrigerators & Freezers (HS Code 8418)



Source: International Trade Center (ITC)

The figure above presents the diversification of the suppliers for HS Code 8418 in 2014, with Mexico being the most dominant exporting country towards the USA, followed by the Asian countries. Table 15 summarizes the top-five exporting nations and their relative contribution to the US Market, for the given period 2011 – 2015. In fact Mexico has a competitive advantage, due to its geographical location, and manages to capture exactly 49.3% of the US importing market in 2015. The subsequent competitors for the market i.e. China and Korea together capture 36.8% of the US importing market in monetary terms.

Table 15: Imported Value by Country to the USA

HS Code: 8418 (Refrigerators, fridges etc.)

Unit: thousands of US$

Exporters	2011	2012	2013	2014	2015
World	5889,383	6233,554	6714,637	7305,916	8392,318
Mexico	3167,546	3244,294	3475,936	7305,916	4134,045
China	921,129	1106,548	1285,641	1575,374	1834,911
Korea (Republic of)	1036,248	1076,596	1126,903	1110,609	1256,918
Canada	188,155	201,657	207,048	243,837	271,564
Italy	77,782	73,546	90,699	99,420	168,344

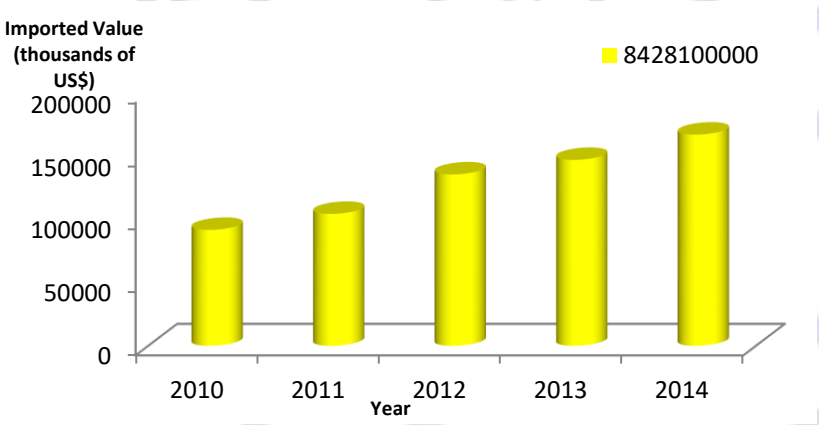
Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

Lifts and Skips Hoists (HS Code 842810)

According to Euromonitor, the industry for lifting and handling equipment for the six-year period of 2006 – 2012 contracted significantly by 7% (the downfall was particularly influential for suppliers which produce long-term capital-intensive good) as a result of the contraction of the US real estate and construction industries. In 2009 the construction industry was at its lowest point, resulting in the decrease of demand from the equipment under H code 842810. It is forecasted that the demand for lifting and handling equipment is going to grow as the economy recovers and local producers' turnovers boosts. For the period 2013 – 2018 the industry is estimated to grow by 4% annually reaching a value of $30.5 billion in the US.

The domestic production however does not satisfy demand, resulting in the following trade pattern in terms of exported value illustrated in figure 79. The bilateral trade pattern since 2009 is steadily recovering in line with the construction and related industries. The US imported value for the products under the HS Code 842810, defined as passenger or freight elevators which are not in continuous action, reaches $150million, an increase of approximately 50% compared to its corresponding value in 2010.

Figure 79: USA Imported Value of HS Code 842810 (2010 - 2014)

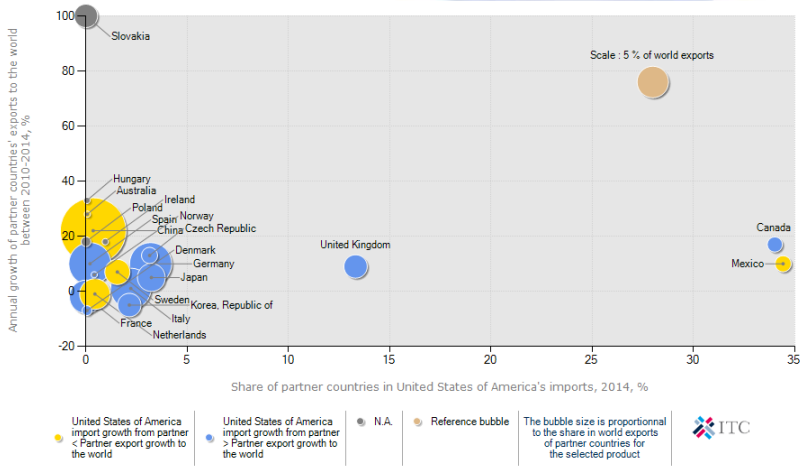


HS Code	Product Label
842810	Passenger or freight elevators other than continuous action, skip hoists

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 80: Diversification of Suppliers to the US market in 2014 (HS Code 842810)



Source: International Trade Center (ITC)

The diversification of suppliers for this particular HS Code, is dispersed in terms of their geographical location. Apart from the leaders, as summarized in table 15 above, smaller suppliers mainly include heavily industrial European economies such as Germany and France. Table 16 presents the same exporting countries in terms of volume measured in tons.

Table 16: Imported Value by Country to the USA

HS Code: 842810 (Lifts and skip hoists)
Unit: thousands of US$

Exporters	2010	2011	2012	2013	2014
World	90,894	103,268	134,005	145,135	164,717
Mexico	44,621	46,136	59,466	52,803	56,718
Canada	30,335	30,570	33,850	45,053	56,045
United Kingdom	2,271	10,254	13,071	21,743	21,947
Japan	1,139	2,638	2,659	2,288	5,339
Germany	3,310	4,304	9,691	7,338	5,281

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

Table 17: Imported Quantity by Supplying Country to the USA

HS Code: 842810 (Lifts and skip hoists)
Unit: tons

Exporters	2010	2011	2012	2013	2014
World	12,628	15,432	18,796	20,357	23,260
Mexico	6,199	6,894	8,341	7,406	8,009
Canada	4,215	4,568	4,748	6,319	7,914
United Kingdom	315	1,532	1,833	3,050	3,099
Japan	158	394	373	321	754
Germany	460	643	1,359	1,029	746

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Bilateral Trade Analysis for HS Code 842810

Lifts and Skip hoists

115

Countries

Mexico

Germany

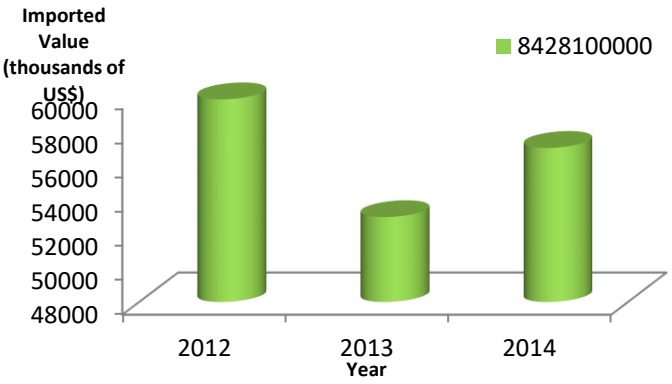
AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Mexico

According to the Euromonitor, the industry for lifting and handling equipment grew by an average of 67% over the period 2006 – 2012, reaching a value of $11.1 billion and is forecasted to increase at 8% turnover in the forthcoming period 2012 – 2018, as a result of increased investments in construction and the automotive industry. In addition 58% of the market in 2012 came from imports. According to the Euromonitor report, the domestic industry is highly concentrated noting that the top five companies generate 77% of production.

Mexico is the US's largest importer of lifts and hoists under the HS Code 842810. The bilateral trade pattern between the two countries presents an unstable trend for the given market, which in 2014 reaches a value of approximately $58million capturing 1/3 of the US imported value in the same year.

Figure 81: Bilateral Trade between Mexico and USA for HS Code 842810 (2012 - 2014)

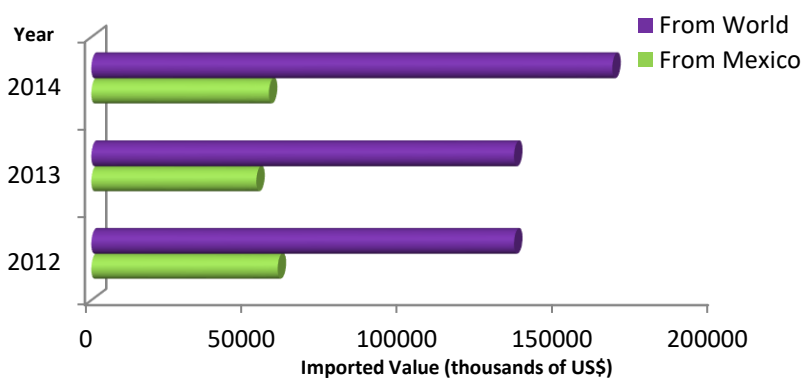


HS Code	Product Label
842810	Passenger or freight elevators other than continuous action, skip hoists

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 82: USA Imported Value HS Code 842810 Mexico vs. World



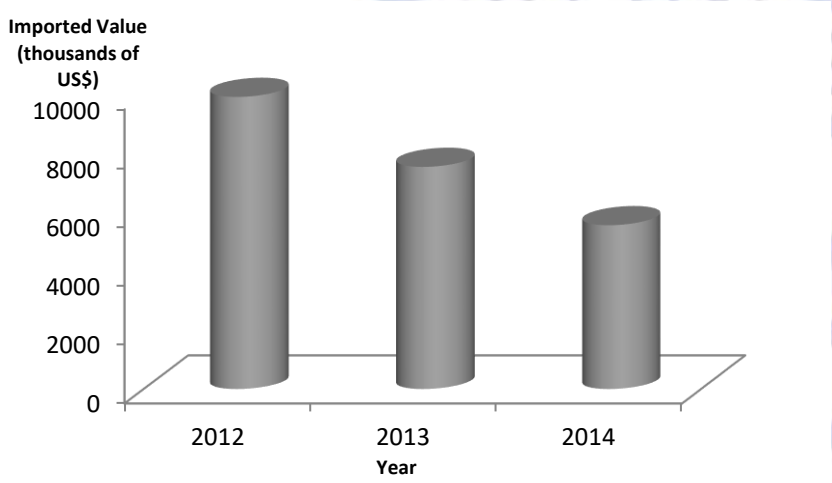
Source: Trade USA- USCENSUS BUREAU – UN COMTRADE

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Germany

Germany is the only European country that is found amongst the top importing competitors in the given market. The bilateral trade pattern, for the period 2012 – 2014, is contracting significantly (with a value reaching $6million in 2014) indicating that it is challenging and particularly demanding for European markets to compete against the giants of the emerging industrialized countries, also known as the Asian Tigers.

Figure 83: Bilateral Trade between USA and Germany (HS Code 842810)



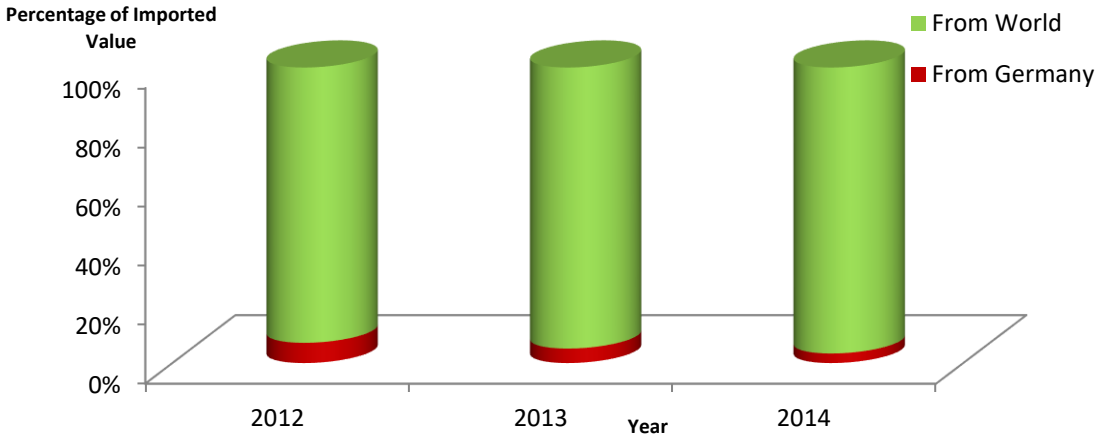
HS Code	Product Label
842810	Passenger or freight elevators other than continuous action, skip hoists

Source: International Trade Center (ITC)

Source: International Trade Center (ITC)

Figure 84 reassures this relationship since it indicates that for the same period the contribution of German imports to the USA as a ratio of the total imported value from the world is decreasing.

Figure 84: USA Imported Value of HS Code 842810 Germany vs. World

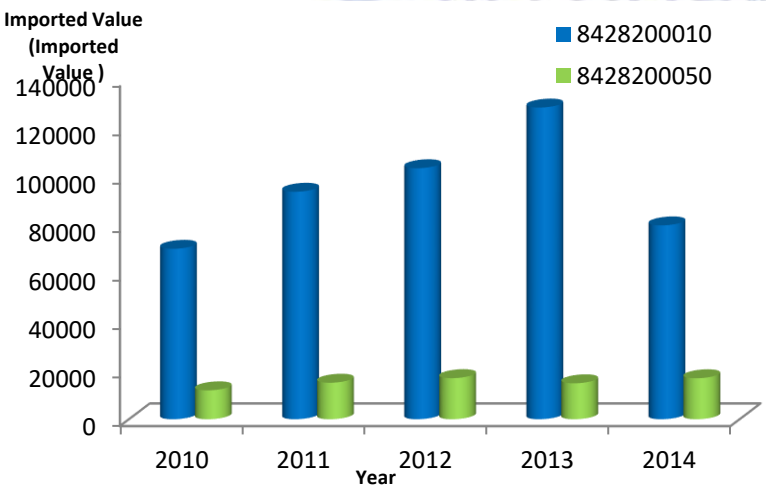


Source: International Trade Center (ITC)

Pneumatic elevators and conveyors (HS Code 842820)

Pneumatic elevators and conveyors are distinguished from the above category, the imported value of which is presented in the figure below. Again a similar unstable pattern is recognized particularly for the case of conveyors. In contrast the US imported value from the world for elevators is relatively stable during the examined period 2010 – 2014, however it is minimal near insignificant in terms of value and in 2014 reached the $20million.

Figure 85: USA Imported Value of HS Code 842820 (2010 - 2014)



HS Code	Product Label
8428200010	CONVEYORS,PNEUMATIC,NESOI
8428200050	ELEVATORS, PNEUMATIC,NESOI

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Table 18 presents the leading countries which supply the US market with HS Code 842820 for the given period 2010 – 2014. Canada captures approximately 33% of the total imported value from the world to the US, which is then followed by Germany and Japan, both of which have a much lower contribution.

Table 18: Imported Value by Country to the USA

HS Code: 842820 (Pneumatic elevators and conveyors)
Unit: thousands of US$

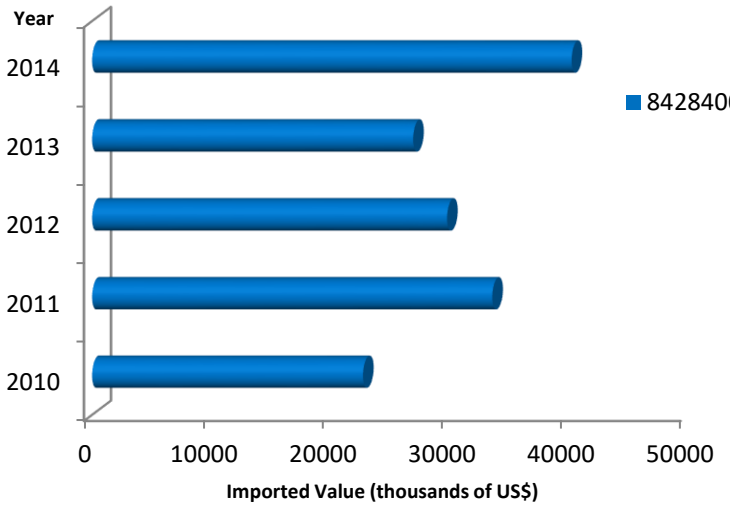
Exporters	2010	2011	2012	2013	2014
World	80,273	106,708	117,245	139,758	93,616
Canada	35,666	51,906	24,422	35,551	31,320
Germany	8,561	9,984	16,287	19,612	16,046
Japan	6,778	4,574	13,185	16,953	14,113
Italy	12,101	7,432	4329	9,871	6,681
Switzerland	1,159	15,868	16123	7,388	5,585

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

Escalators and Moving Walkways (HS Code 842840)

Under the same category of products i.e. lifting equipment and related products, HS Code 842820 defined as escalators and moving walkways are mostly found in commercial building structures rather than residential. This HS Code also presents a similar pattern in terms of their US imported value for the period 2010 -2014. Although in 2014 the imported value has increased significantly compared to its imported value in 2013 (at $40million), its monetary value during the period is unstable and greatly fluctuates, as a result of the unstable demand from the respective industries.

Figure 86: USA Imported Value of HS Code 842840 (2010 - 2014)

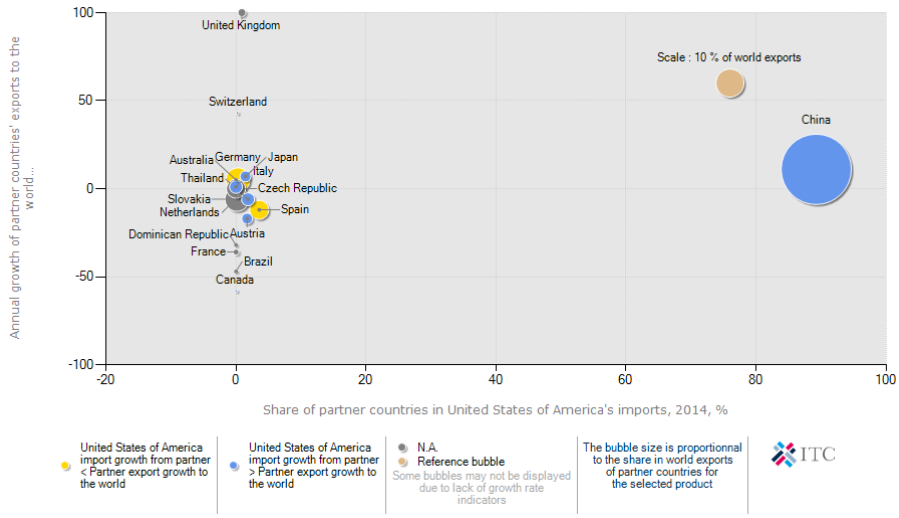


HS Code	Product Label
842840	ESCALATORS AND MOVING WALKWAYS

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 87: Diversification of Suppliers of the US Market in 2014 (HS Code 842840)



Source: International Trade Center (ITC)

Nevertheless, as the table below indicates, China does manage to maintain a stable and leading position in terms of the total imported value from the world. Spain as well as the other top importers (Thailand, Austria and Japan) is insignificant in the proportion of the market that the capture. Japan is the only other market worth comment on, since it has recently managed to penetrate the US market of escalators and moving walkways having the potential to gain greater market share, even though in 2014 captured only 1.46% of the market.

Table 19: Imported Value by Country to the USA

HS Code: 842840 (Escalators and moving walkways)
Unit: thousands of US$

Exporters	2010	2011	2012	2013	2014
World	21,948	32,257	27,931	25,620	37,489
China	14,471	19,169	25,211	19,876	33,465
Spain	4,880	9,017	773	2,423	1,342
Thailand	188	430	699	634	694
Austria	816	1,372	857	1,733	645
Japan	102	0	0	0	548

Source: International Trade Center (ITC) calculations based on UN COMTRADE statistics

Bilateral Trade Analysis for HS Code 842840

Escalators and Moving Walkways

Country 123

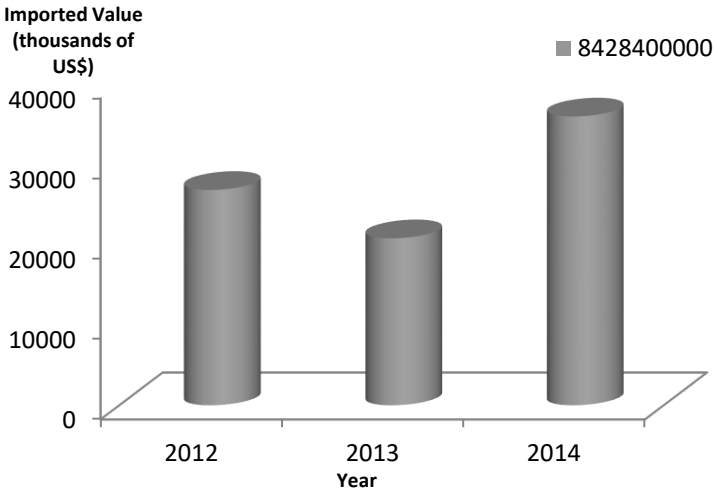
China

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

China

The bilateral trade pattern between China and the US is presented below and verifies China's dominant position amongst its competitor in the given period 2012 – 2014.

Figure 88: Bilateral Trade between USA and China HS Code 842840 (2012 - 2014)

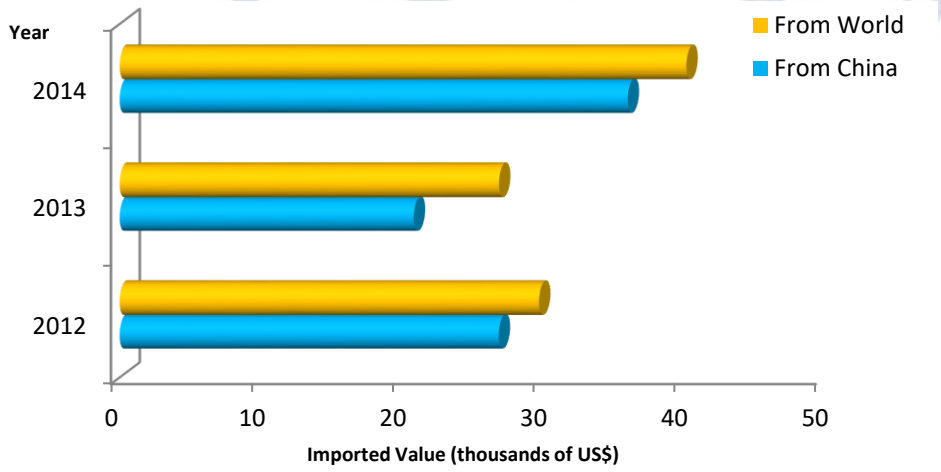


HS Code	Product Label
842840	ESCALATORS AND MOVING WALKWAYS

Source: International Trade Center (ITC)

Source: International Trade Center (ITC)

Figure 89: US Imported Value from China vs. World 2012 - 2014 (HS Code 842840)



Source:
International Trade Center (ITC)

2.2. KEY INSIGHTS

- Non-aqueous solutions of paints and varnishes are an important global market, acrylic-based paints showed important signs of growth in 2014, although demand for polymer-based paints decreased in the same year

- The category sawn or chipped wood presents an increase in demand during the past years, in terms of imported value, possible as coming from the construction industry

- The imported value for HS Code 68 (stone, plaster, cement and related products) is growing steadily and is mainly dominated by Asian countries

- Worked building stone and related products are also highly imported products which Brazil capturing one third of the market in 2014

- The most highly imported HS Code 72 are semi-finished products of iron or non-alloy steel across the period 201 -2014 with major exporter Canada and Brazil

- The imported market for glass and glassware is growing for most of the imported HS Codes for the given period 2010 -2014

- China remains the dominant global glass market (followed by the US, Japan and Germany) and is highly dependent on the construction industry. The glass industry is expected to divert its production further to Latin American countries (Brazil) and India.

- The importing market for aluminium grew at a 6% rate in 2014, with the most dominant suppliers being China and Canada

- Refrigerators and freezers which are combined in the same unit and are the most popular amongst US consumers in households and therefore have the highest imported in the category

- In 2012 strongly Malaysia entered the US importing market of sinks and wash basins and is now found amongst the top-five players in the industry
- Lifts and skip hoists importing market also presents a growing trend, as a result of the comeback of the construction industry as a whole.

- The market for steam or vapor boilers is unstable market which tends to import parts rather than the finished products and which is dominated by the Korean exporting market and other Asian economies such as China and Thailand

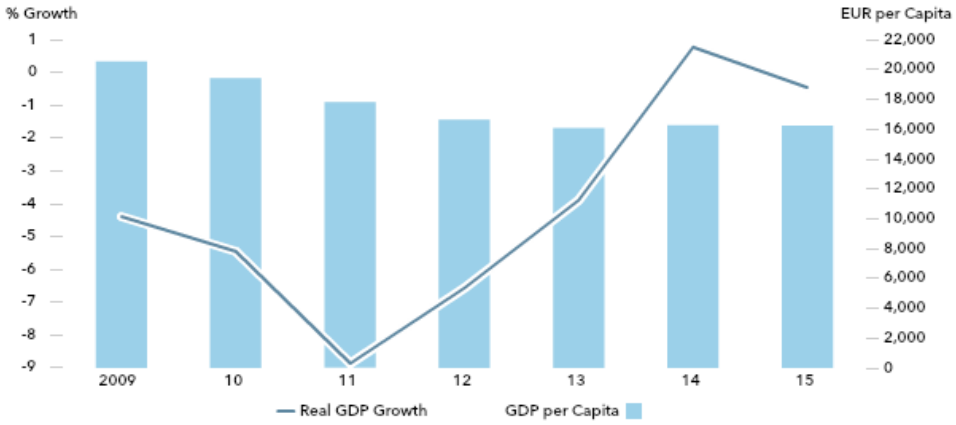
Chapter 3 | Greek Market Analysis

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

3.1. OVERVIEW OF THE GREEK ECONOMY

In 2015, the Greek economy continues to be in recession after a long consecutive period of contraction in terms of real GDP according to the Euromonitor statistics (2016). In 2014 the country's total GDP was valued at $238 billion (ibid.) and marked the first positive annual growth rate in terms of GDP after seven years of contraction at 0.8%; however in 2015 the economy fell back into decline.

Figure 90: Real GDP Growth and GDP per Capita (2009 - 2015)

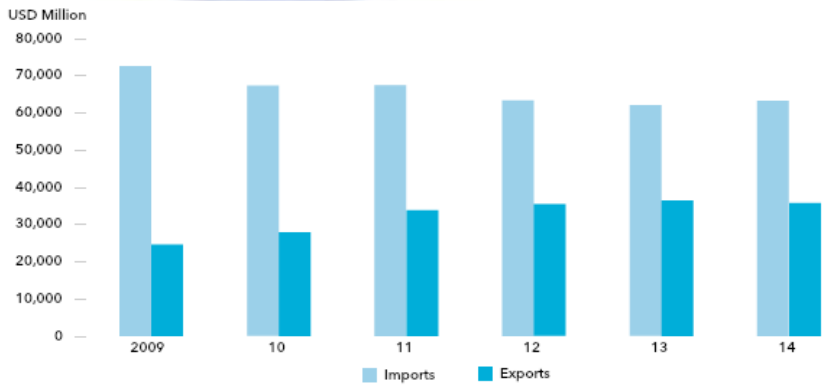


Source: Euromonitor, 2016

This situation led to a continuous decline in the construction industry according to the Greek Institute for Economic and Industrial Research, as a result in private and public investments in the sector. In 2013 the Greek construction industry was approximated at 4% of GDP and a value of €8.1 billion, compared to its respective value in 2006 valued at €22.5 billion corresponding to 11% of GDP, averaging to a 30% decrease from 2007 - 2013.

In 2015 overall exports decreased by 19.2% and represented just 14.9% of total GDP, leaving the economy heavily reliant on its imports so to satisfy domestic demand in the majority of the economy's sectors as illustrated below. Given this economic climate, the raw materials heavily used in the construction industry and some appliances in commonly found in modern residential and commercial building structures, show opposite signs of growth.

Figure 91: Imports vs. Exports in Greece (2009 - 2014)



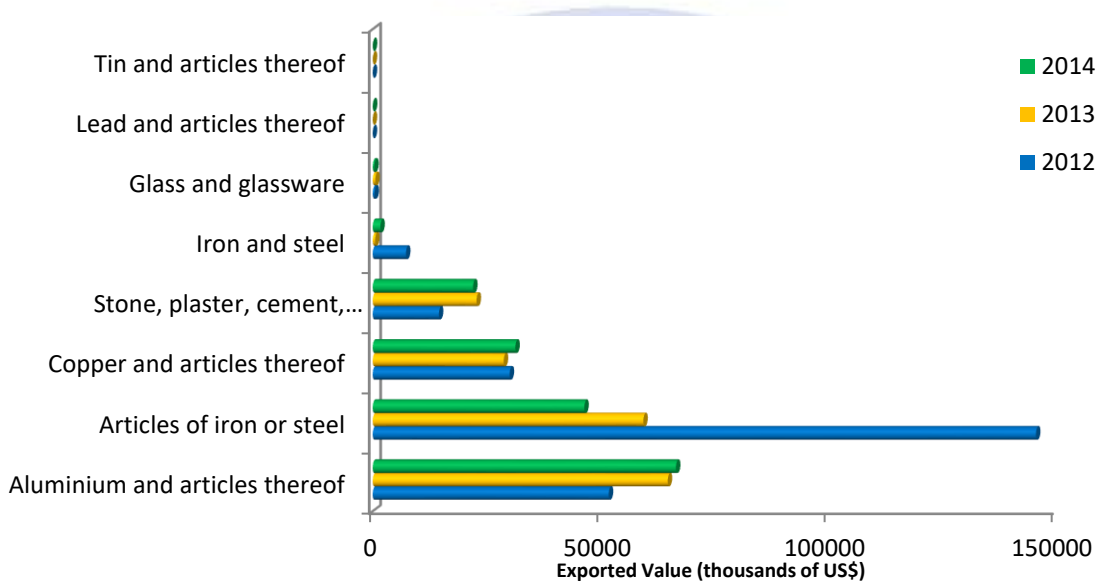
Source: Euromonitor, 2016

3.2. GREEK EXPORTING MARKET TO WORLD

CONSTRUCTION MATERIALS

The Greek exporting market for construction materials does not follow a steady trend for the past three years and the exported values vary greatly for the different HS Codes.

Figure 92: Top-Exported Building Materials Used in Construction from Greece to World (2012 - 2014)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Contrary to expectations some categories present an increase in exported value possibly indicating the first signs of recovery for the construction industry on a global level and therefore increased demand. Exports of aluminium under HS Code 76 from Greece to the R.O.W have increased during the three-year period indicated above. Its value increased from $50M in 2012 to approximately $70M in 2014, which are primarily exported to Italy, Germany and Turkey. Stone, plaster, cement and asbestos under HS Code 68 have also increased in exported value indicating the recovery of the industry, with the United States and the United Arab Emirates being the largest importers.

The categories Iron and steel (HS Code 72), as well as glass and glassware are significantly small in terms of exported value, the former of which has also declined in value. The main exporting countries for this HS Code are Algeria, Bulgaria and Rumania according to data presented by the ITC. On the contrary, the articles of iron & steel under a different HS Code (73) present a comparatively large export value. In 2012 this category of products was valued at $150M, a value which drastically decreased in the two following years and reached $50M in 2014. This category is primarily exported to the United States, France and Germany. Overall, construction materials do not have a strong position in the international competitive landscape; however there are signs which indicate the potential for developing a stronger and more competitive market.

APPLIANCES

REFRIGERATORS & FREEZERS

The figure below indicates that even the domestic sales of freezers and refrigerators under HS Code 8418 have started to pick-up in 2014, despite the economic climate. According to the Euromonitor, refrigeration appliances in terms of volume increases further in 2015 particularly the fridge-freezers units.

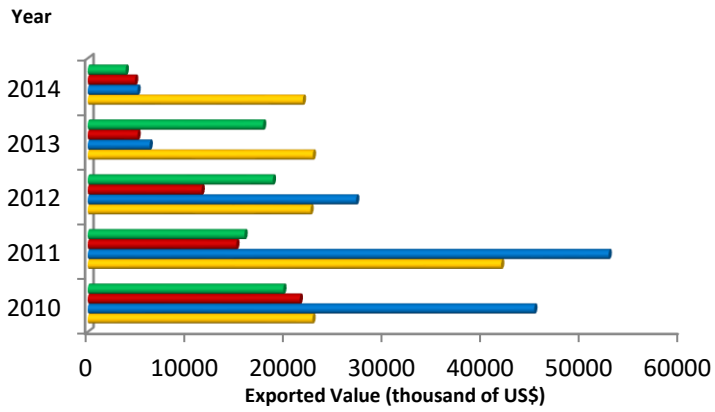
Figure 93: Sales of Refrigeration Appliance in Domestic Market (2010 - 2015)

'000 units	2010	2011	2012	2013	2014	2015
Built-in Refrigeration Appliances	6.3	5.6	4.9	3.6	3.6	3.5
Freestanding Refrigeration Appliances	381.2	307.2	240.8	220.6	230.7	247.5
Electric Wine Coolers/Chillers	3.7	3.1	2.4	2.1	2.0	1.7
- Built-in Electric Wine Coolers/Chillers	1.0	0.8	0.6	0.5	0.5	0.4
- Freestanding Electric Wine Coolers/Chillers	2.7	2.2	1.8	1.6	1.5	1.3
Freezers	40.0	38.9	39.3	36.1	36.2	36.8
- Built-in Freezers	1.5	1.2	0.8	0.6	0.5	0.5
- Freestanding Freezers	38.5	37.7	38.5	35.5	35.7	36.3
Fridge Freezers	313.9	245.5	183.0	168.0	175.6	191.2
- Built-in Fridge Freezers	3.4	3.4	3.3	2.3	2.4	2.4
- Freestanding Fridge Freezers	310.5	242.2	179.7	165.7	173.2	188.7
Fridges	29.8	25.3	21.0	18.0	20.6	21.3
- Built-in Fridges	0.3	0.3	0.2	0.2	0.2	0.2
- Freestanding Fridges	29.5	25.1	20.8	17.8	20.4	21.1
Refrigeration Appliances	387.5	312.8	245.7	224.2	234.3	250.9

Source: Euromonitor, 2016

Figure 94 below presents the exported value for the related HS Codes from 2010 – 2014 from Greece to the ROW. Overall the market seems to have shrunk, however the largest proportion of exported value is not the final manufactured product but rather parts, such as separate external doors, counters and cabinets.

Figure 94: Exported Value of HS Code 8418 from Greece to ROW



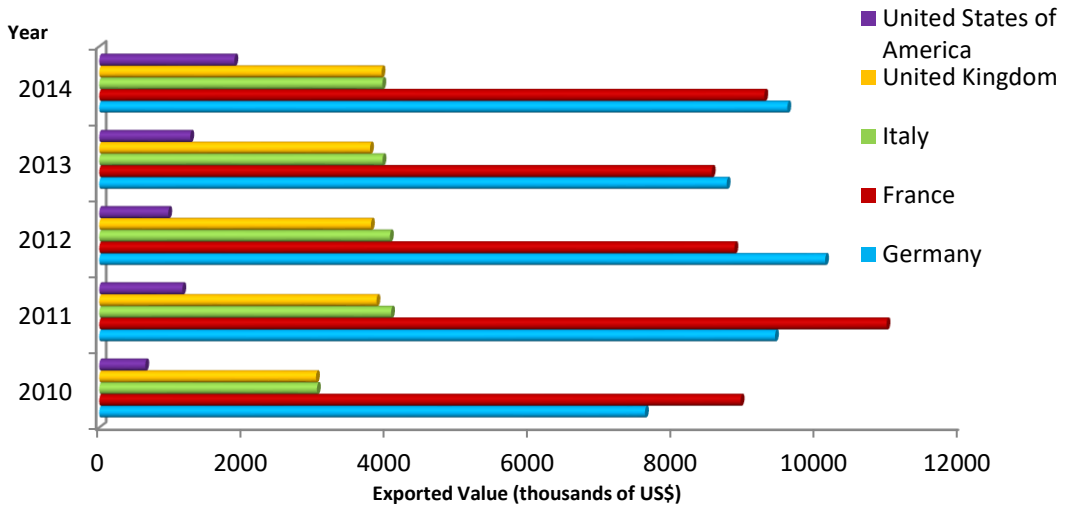
HS Code	Product Label
841850	Refrigerating or freezing display counters, cabinets, show-cases, etc.
841810	Combined refrigerator-freezers, fitted with separate external doors
841899	Parts of refrigerating or freezing equipment, nes
841821	Refrigerators, household type, compression-type
Source: International Trade Center (ITC)	

Source: International Trade Center (ITC)

SINK & WASH BASINS OF STAINLESS STEEL

Sinks and wash basins are another HS Code which is an important indicator of the appliances market. The United States is the 5th in terms of value importing country from Greece, after four strong European countries: Germany, France, UK, Italy and the UK. Despite the recession, overall exports have either increased or remained stable for the given period strongly indicating the come—back of the construction sector.

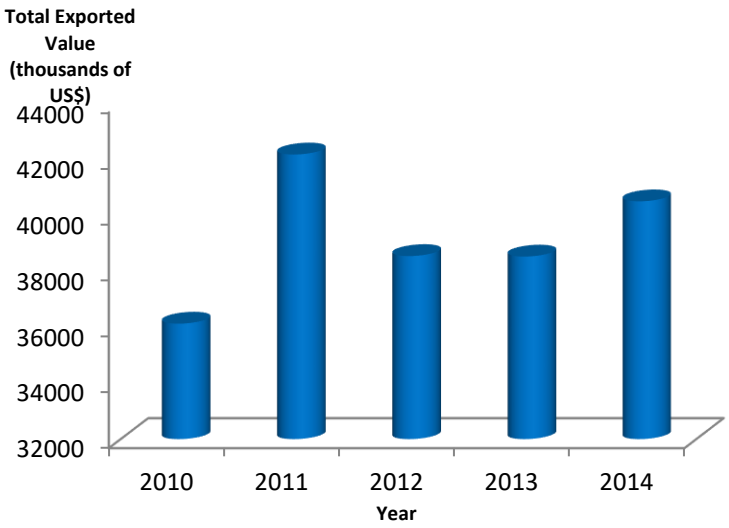
Figure 95: Exported Value of HS Code 732410 by Country (2010 - 2014)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

The total exported value from Greece to the ROW is unstable and although there was a significant contraction in 2012, in 2014 the market grew and reached a total value of more than $40M indicating recovery.

Figure 96: Total Greek Exported Value for HS Code 732410 (2010 – 2014)



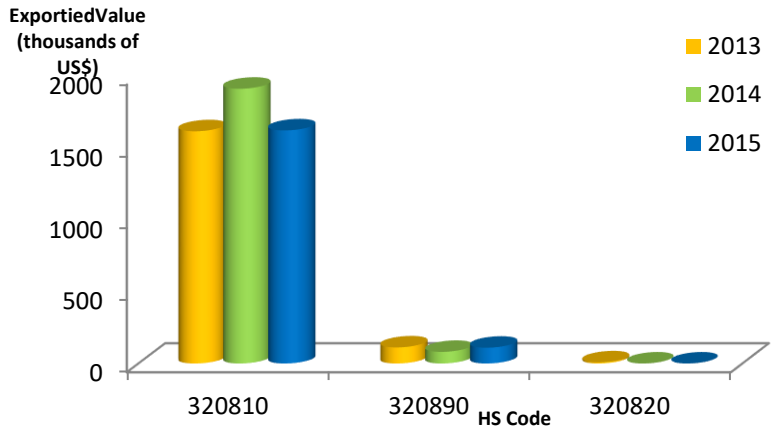
HS Code	Product Label
732410	Sinks & wash basins, of stainless steel
Source: International Trade Center (ITC)	

Source : Trade USA- US CENSUS BUREAU – UN COMTRADE

3.3. GREEK EXPORTING MARKET TO THE USA

The Greek exporting market to the US is particularly limited in monetary and quantitative terms. Some of the existing bilateral trade patterns from 2013 - 2015 for construction materials and appliances of interest to this report are presented below.

Figure 97: Bilateral Trade between USA and Greece for Paints and Varnishes (HS Code 320890)

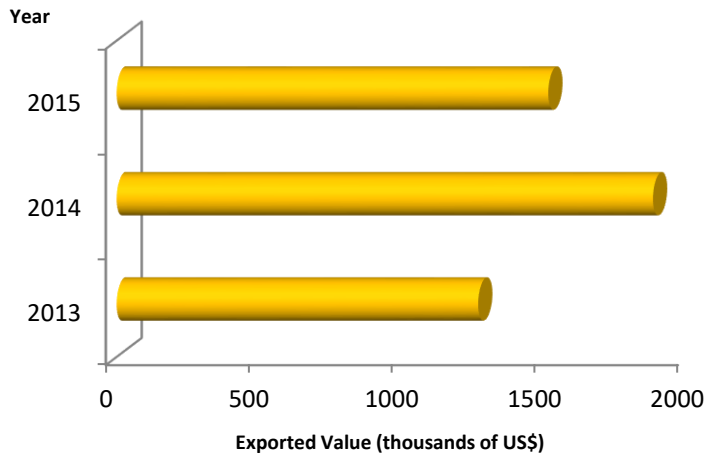


HS Code	Product Label
320890	Paints & varnishes based on polymers dissolved in a non-aqueous solution nes
320820	Paint & varnishes based on acrylic/vinyl poly, dispersed in a non-aqueous medium
320810	Paints & varnishes based on polyesters, dispersed in a non-aqueous medium

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 98: Bilateral Trade between US A and Greece Sinks & Wash Basins (HS Code 732410)

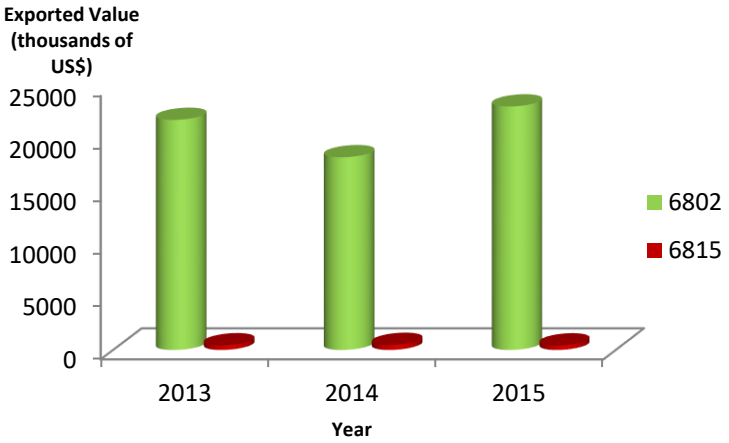


HS Code	Product Label
732410	Sinks & wash basins, stainless steel

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 99: Bilateral Trade between USA and Greece for HS Code 68

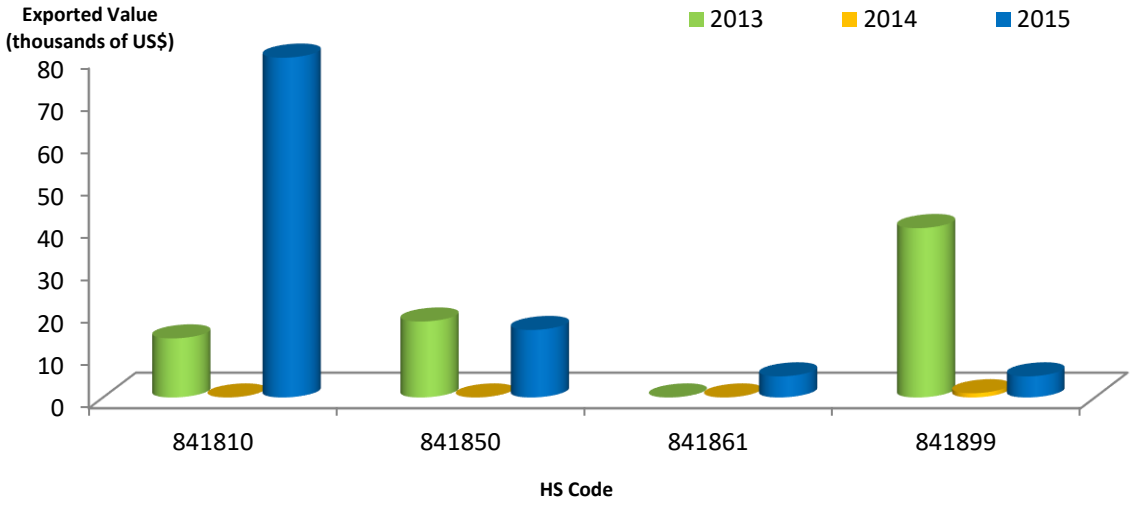


HS Code	Product Label
6802	Worked monumental/building stone &art; mosaic cube, granules
6815	Articles of stone or of other mineral substances, nes

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 100: Bilateral Trade between USA and Greece for Fridges and Refrigerators (HS Code 6418)

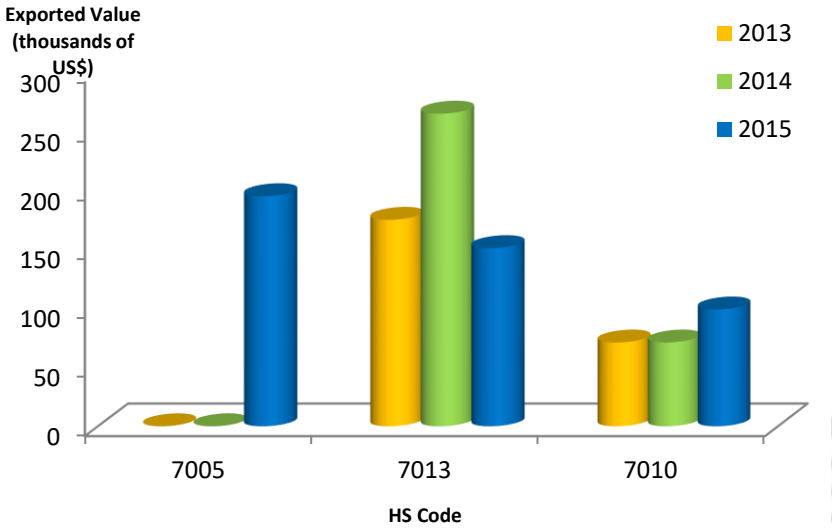


Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

HS Code	Product Label
841850	Refrigerating or freezing display counters, cabinets, show-cases, etc.
841810	Combined refrigerator-freezers, fitted with separate external doors
841899	Parts of refrigerating or freezing equipment, nes
841861	Compression type refrigerating/freezing equip whose condensers are heat exch

Source: International Trade Center (ITC)

Figure 101: Bilateral Trade between USA and Greece for Glass (HS Code 70)

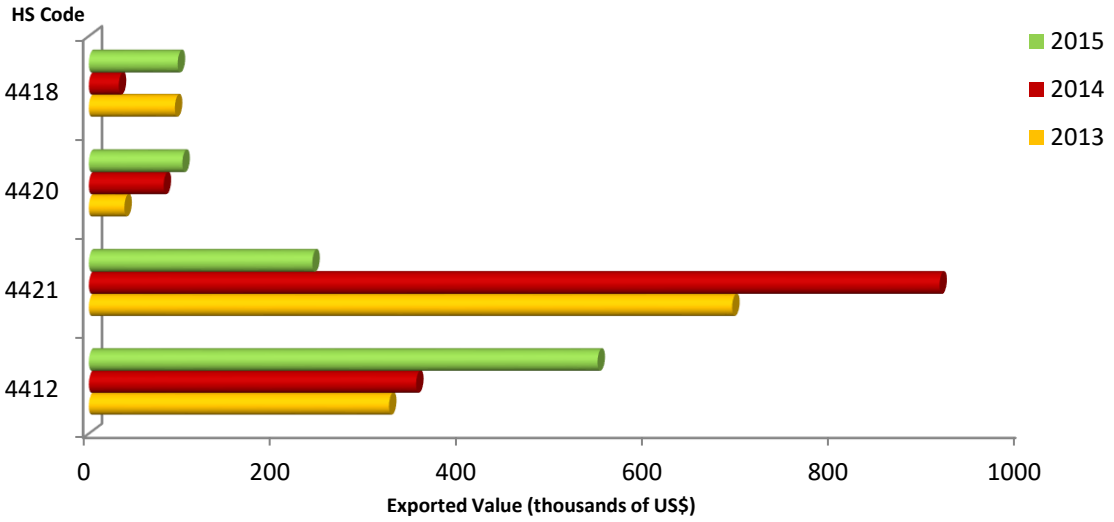


HS Code	Product Label
7005	Float glass & surf grounded/polished glass in sheet
7013	Glassware used for table, kitchen, toilet office, etc
7010	Carboy, bottle & other container of glass

Source: International Trade Center (ITC)

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

Figure 102: Bilateral Trade between USA and Greece for Wood (HS Code 44)

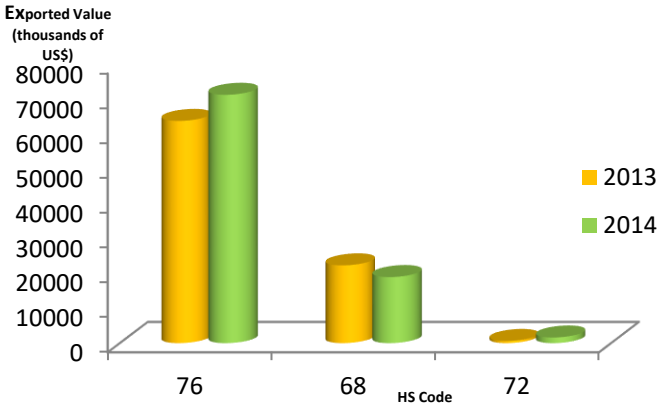


Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

HS Code	Product Label
4412	Plywood, veneered panels and similar laminated wood
4421	Articles of wood, nes
4420	Wood marquetry & inlaid wood; caskets & cases or cutlery of wood
4418	Builders' joinery & carpentry of wood

Source: International Trade Center (ITC)

Figure 103: Bilateral Trade between USA and Greece - Other Construction Materials



HS Code	Product Label
76	Aluminium and articles thereof
68	Stone, plaster, cement, asbestos, mica, etc. articles
72	Iron and steel
Source: International Trade Center (ITC)	

Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

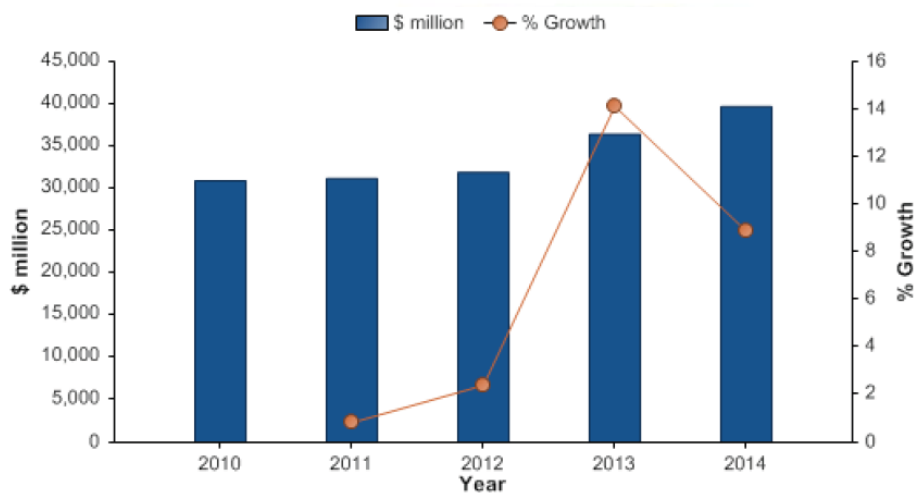
Chapter 4 | USA Market Analysis

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

4.1. CONSTRUCTION MATERIALS MARKET

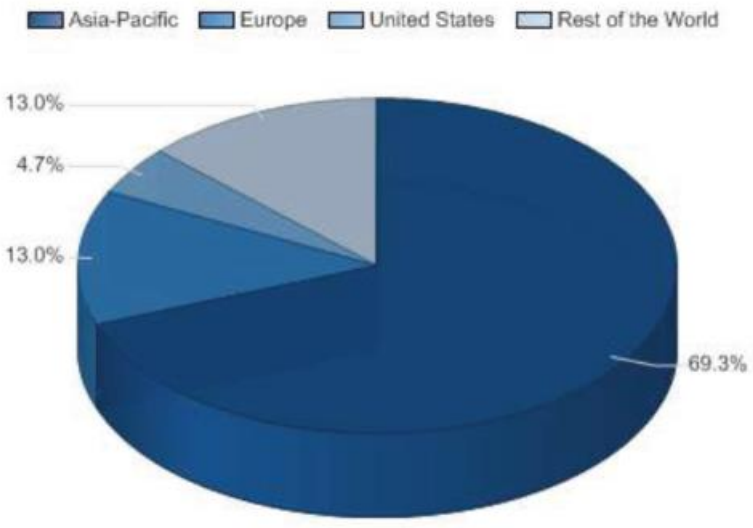
In 2014 the US market for construction materials was valued at $39,663,2 million, capturing only 4.7% of the global market in terms of market value (MARKETLINE, 2014).The annual growth rate between 2010 and 2014 averages at 6.4%, indicating a slower growth rate compared to the respective European and Asian-Pacific markets which have grown at 8.7% and 9.4% rates respectively. The geographical segmentation of the global market is illustrated in figure 105.

Figure 104: Market Value for Construction Materials 2010 - 2014 (Millions of US$)



Source: Marketline, 2014

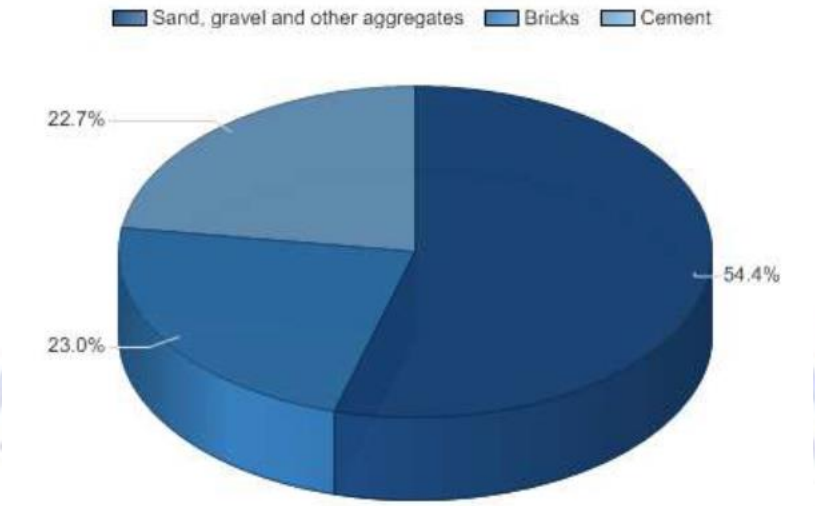
Figure 105: US Construction Materials – Geographical Segmentation



Source: Marketline, 2014

Looking at the market in terms of material categories, sand, gravel and other related aggregates capture the majority of the market (54.4%) and a revenue of $21.562.7 million, followed by bricks (23.0%) and cement (22.7%).

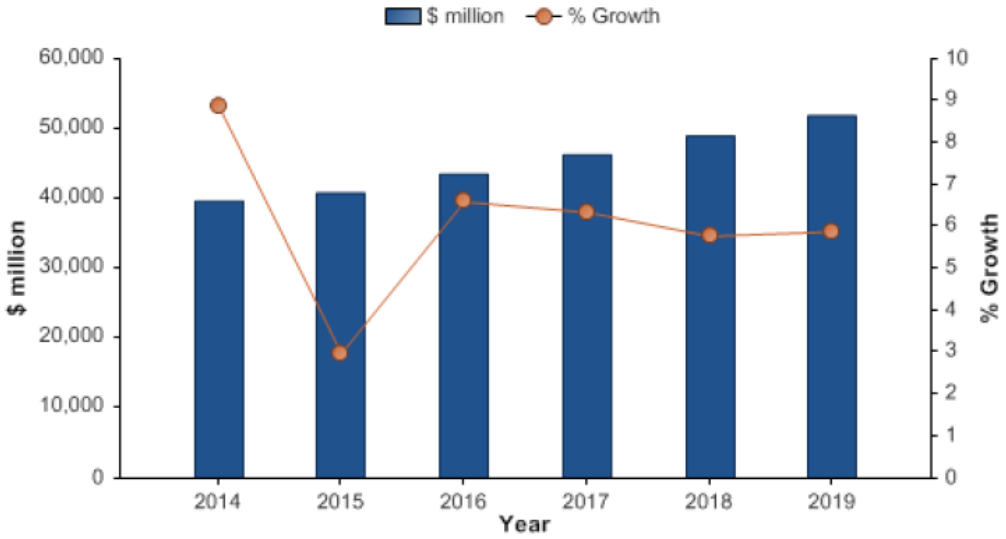
Figure 106: Market Segmentation of USA Construction Materials in 2014



Source: Marketline, 2014

The market is forecasted to grow in the coming years by 30.7% compared to its value in 2014, reaching a value of $51.851 million, as presented in the figure below. The respective European and Asia-pacific markets will grow at slightly faster rates and reach $161,499.4 million and $889,849.0 million, growing at faster rates at around 8% for the same period.

Figure 107: US Construction Materials Market Value Forecast (2014 - 2019)



Source: Marketline, 2014

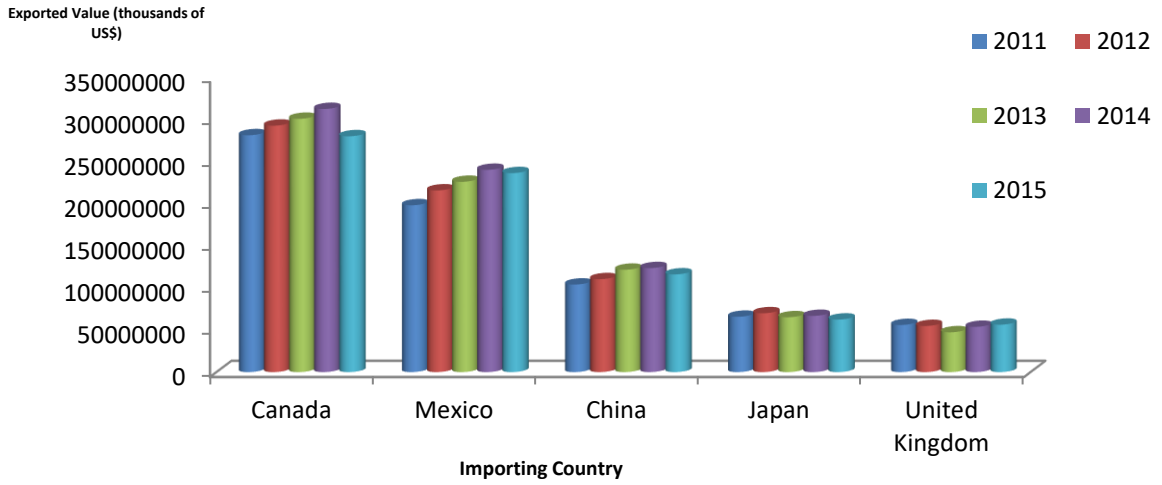
The main entry barriers to this market are the high capital outlays and fixed costs which are involved in the initial setup of production plants. These two factors make the industry uneconomical for new entrants who are unable to cover these costs at the start-up level. The process of planning involved in establishing quarries is substitution of some building materials with others steel, glass, stone, plastic, or fabricated building products

According to market research done by Freedonia Group by 2018 the demand for bricks, blocks and pavers is expected to rise by 8.8% yearly, as a result of the broad construction market recovery. In addition this study notes that bricks are mostly used in the construction of single-family residential construction. Furthermore the company suggests that the bricks which are made of clay are expected to have the most rapid growth in the new housing construction. Structural blocks last year made up the biggest segment of the market with a value of US$ 2.95 billion according to analysts, while others support that in fact structural blocks made up the biggest segment of the market out of the bricks, blocks and pavers market.

4.2. US EXPORTS OF CONSTRUCTION MATERIALS

The United States mostly exports highly industrialized products such as machinery, nuclear reactors, electrical equipment, aircrafts and vehicles, to the ROW, maintaining a relative stable position in terms of exported value. The top exporting partners of the US are illustrated below in terms of the total exported value for the given period 2011 - 2015.

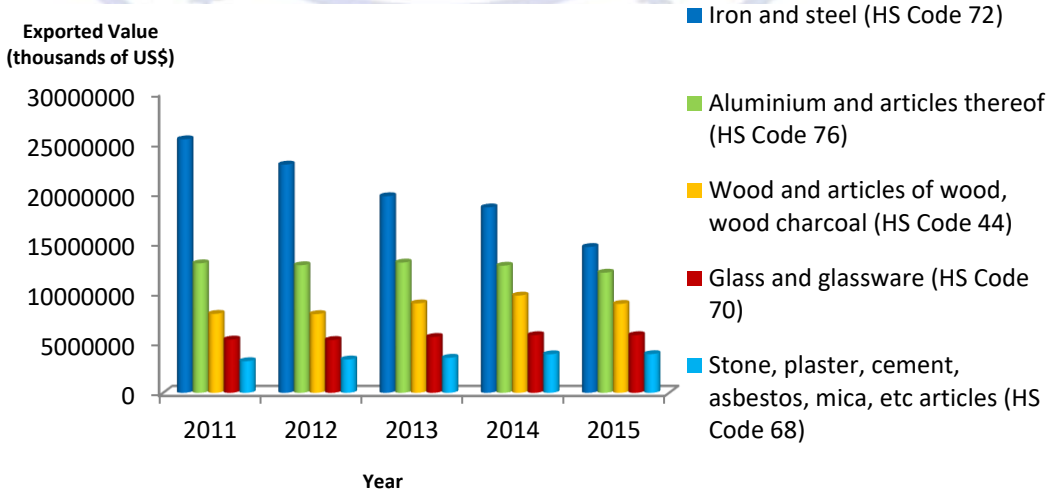
Figure 108: Main Exporting Partners of the US in terms of Monetary Value



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

The top-exported materials used within the construction industry are presented below for the same given period. Overall the market follows a decreasing trend suggesting that most of the material in the industry is imported and less is being produced and exported to the world from the US. The most highly exported material from the US to the ROW is iron and steel with a monetary value which reaches $25B in 2015.

Figure 109: Top-Exported HS Codes from the US to the ROW

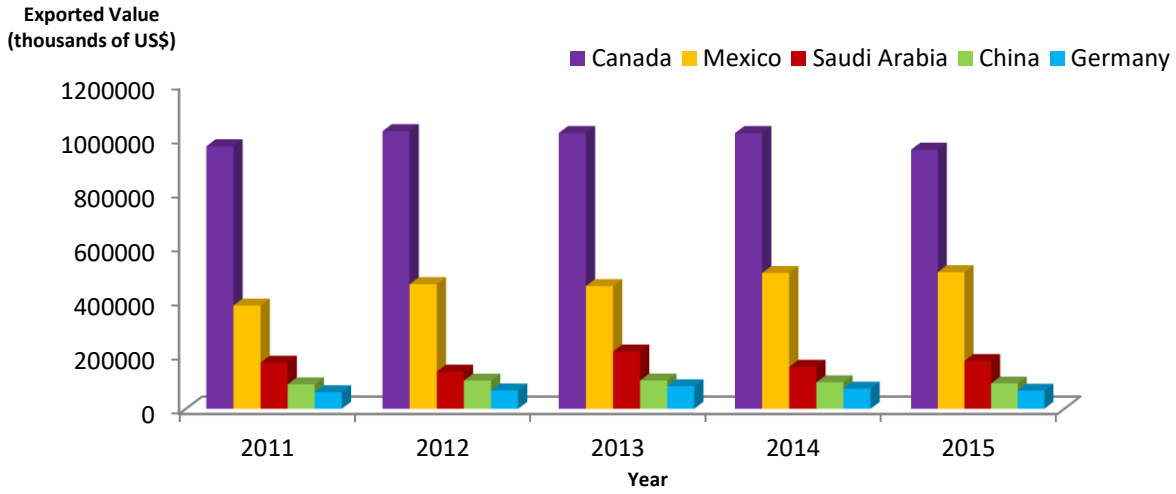


Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

REFRIGERATORS & FREEZERS

The exporting pattern for HS Code 8418 from the US to the ROW is presented by importing county. Canada and Mexico are the dominant trading partners which together capture 50% of the total exported value for refrigerators and freezers. Saudi Arabia, China, and Germany are less significant trading partners for the particular HS Code, the latter two are major producers in the industry.

Figure 110: Exported Value with main US Importing Partners (HS Code 8418)



Source: Trade USA- US CENSUS BUREAU – UN COMTRADE

4.3. KEY COMPANIES FOR CONSTRUCTION MATERIALS IN THE US

The leaders in the market are of similar nature, a characteristic which encourages competition and creates cartel like behavior. The growth of the industry and of the individual companies includes a large number of factors, which amongst others are the growth of the construction industry (residential and commercial), the liquidity of the financial markets and the public spending for infrastructures. The leaders in the US market are the following:

- **HeidelbergCement AG**

  Head Office: Heidelberg, DEU

  Local office: Texas, USA

  Key Financial Figures

$ million	2009	2010	2011	2012	2013
Revenues	14,770.9	15,623.9	17,126.9	18,610.9	18,499.4
Net income (loss)	56.5	454.9	462.0	702.2	1,254.4
Total assets	33,860.9	36,341.4	38,522.8	37,179.4	35,663.5
Total liabilities	19,254.9	19,238.2	20,510.5	18,982.6	18,961.4
Employees	53,302	53,437	52,526	51,966	52,560

Source: Marketline, 2014

- **Lafarge S.A.**

  Head Office: Paris, France

  Local office: Chicago, Illinois, USA

  Key Financial Figures

$ million	2009	2010	2011	2012	2013
Revenues	21,085.3	21,463.7	20,288.9	20,995.1	21,130.5
Net income (loss)	1,388.5	1,478.8	977.0	735.4	1,038.1
Total assets	52,430.6	56,409.0	54,052.7	52,386.8	49,215.5
Total liabilities	30,129.3	32,217.4	32,808.1	28,824.4	27,304.5
Employees	78,000	76,000	68,000	58,031	63,687

Source: Marketline, 2014

- **Oldcastle, Inc.**

  Head Office: Atlanta, Georgia, USA

- **Vulcan Materials Company**

  Head Office: Birmingham, Alabama, USA

4.4. KEY PLAYERS CONSTRUCTION COMPANIES IN THE US

Some of the top construction companies in the US according to the Hotel Management Survey in 2014 are listed below specifying the regions in which they are active and the types of construction in which they are engaged.

Company Name	Type of Construction	Region
The Allied Group	All	Nationwide
Baystate Services	Public spaces, restaurants/ lounges/bars, guestrooms, spa, retail	East Coast, Midwest
BriMark Builders	All	Nationwide
CDA Hospitality Construction	Restaurants/ lounges/bars, retail	Nationwide, Caribbean
Cicero's Development Corp.	All	Nationwide
Concord Hospitality Enterprises Co.	All	Nationwide, Canada
Continental Contractors	All	Nationwide, Caribbean
CVC Hospitality	All	Nationwide, Caribbean
D.F. Chase	All	East Coast, Midwest
D&D Construction Services	All	East Coast, Midwest
DPR Construction	All	Nationwide, International
First Finish	Exteriors, public spaces, restaurants/ lounges/bars, guestrooms, spa	Nationwide, Caribbean
Furniture Fixture Services	All	West coast
Graycor Construction Co.	All	Nationwide
Hotel Makeover	All	Nationwide, Canada
Jade Group	All	Nationwide
PHR Construction & InterMountain Renovation Consultants	All	Nationwide
Zelham	All	Nationwide
Source: Hotel Management Survey (2014)		

AMERICAN - HELLENIC CHAMBER OF COMMERCE
1932

Chapter 5| Industry Trends

Overall, the increasing demand for construction materials and appliances in the US market is a consequence of the following behavioral and economic trends which directly influence the construction industry:

- **Population growth** in the US which was only marginally growing at **0.7%** on average for the period 2011 - 2015 according to the World Bank database and therefore an increasing demand for housing

- **Low unemployment rates** which in December 2015 were at 5% according to the US Bureau of Labor Statistics

- The marker for US Construction materials is growing at lower rates than the respective **Asian-Pacific and European average growth rates**

- **Come-back and growth of the US construction industry (at a 3% growth rate)** particularly for the residential sector, (multi-family and single-family houses) and less so office constructions and other related sectors, since the beginning of 2013

- Construction industry reached a value of **$961.1 billion** in **2013**

- The **permit-issuing authorization increased** by 19% in 2013

- **Non-residential construction** is expected to start receiving investment injections

- **Southern and western regions** of the US account for 50% and 24% respectively of the in 2013

- **Real estate** and **public administration** are responsible for the increase in non-residential construction

- Significant growth of the **building material industry**(by 8,9% in 2014, reaching a value of $39,663.2 million) and is expected to continue with an overall strong growth until 2019

- **Growing consumer confidence** along with increased economic and political stability also positively influences the market

- **Sand, gravel and other aggregates segments** is the market's most strongest revenue stream, contributing to 54,4% of the total US market value

- **Iron and aluminium** are the most highly **exported building materials** from the US industry to NAFTA countries and the global markets, followed by wood and glass.