

## National footwear industry of Mexico Characteristics of the enterprises located in Leon city

Yashiro Danahi Cisneros Reyes  
University of Guanajuato, Mexico

---

### Key words

Mexican footwear industry (Leon), international competitiveness

### Abstract

*The footwear industry is vital to the economy of some countries, both in terms of the number of people it employs and the revenues it generates. The footwear industry is of enormous importance to the Mexican economy, accounting for 0.22% of Gross Domestic Product (GDP) in 2008 and 1% of manufacturing GDP. Of the 250 million pairs of shoes the country manufactures, 20 million are exported, while imports stand at 60 million. The main international market for Mexican-made shoes is the USA, followed by Canada and Japan.*

*However, since 2000, the industry has faced growing competition from countries like China, a situation that was compounded when the latter joined the World Trade Organization (WTO). On the upside, fiercer competition has forced the sector to take stock and shore up its activities. (Tradegood, 2013).*

*The purpose of this research is to identify the main characteristics of the mexican footwear industry located in Leon City (Guanajuato State) due to its importance and contribution to the national production. In 2012, national producers turned out 244 million pairs of footwear, of which 171 million pairs (70%) were made in Guanajuato. Considering the definition given by OECD of competitiveness: "a measure of a country's advantage or disadvantage in selling its products in international markets" this research analyzes the evolution of the footwear industry's competitiveness of Mexico during the previous years, particularly focusing on the relationship of the size of companies located in Leon and their export and import activity.*

---

### 1. Introduction

The textile and footwear industry is vital to the economy of some countries, both in terms of the number of people it employs and the revenues it generates. In the last half century, the apparel industry – which was concentrated in industrialized nations in the mid-twentieth century – has gradually spread to developing countries. The global “redistribution” of the textile industry began in the late 1960s, with the expansion of new manufacturing centers in Asia. In some cases, particularly in South Asia, imported fabrics were progressively substituted with national ones as a domestic textile industry began to take shape.

Many developing countries applied this strategy and, over the last 20 years, textile production has grown at an average global rate of 1.2%, with variations depending on the level of development of the country in question. In more industrialized economies, for example, growth has averaged 2.7%, compared to 3.6% in Asia.

Nonetheless, many developed countries still have viable textile industries that operate mainly at the top end of the market. And thanks to restructuring and modernization measures, several still feature on the list of the world's top ten textile exporters in terms of the value of their products.

Nowadays, global shoe production stands at 24 billion pairs a year, 60% of which are exported. Global trade in non-sporting footwear is valued at approximately US\$15 billion a year. Footwear with leather uppers accounts for a massive 85% of this total.

China alone produces approximately 9.5 billion pairs a year, 7 billion of which are exported. The most spectacular growth has probably been posted by China and India –which manufactures 700 million pairs of shoes a year– ousting countries like Italy that were once major producers, but whose annual output has now fallen to 400 million pairs.

Brazil is an interesting, but equally successful case that falls somewhere between the Chinese and Italian models. In the last 25 years, the country has tripled its output and positioned itself among the large global exporters, due largely to its strategy of supplying the USA with ladies' shoes in the medium-to-low price range. Annual shoe exports are valued at US\$1.6 billion, 70% of which –mainly ladies' shoes– are destined for the USA, where Brazil is the leading supplier of women's footwear with a 42% market share, followed by China with 38% and Italy with 10%.

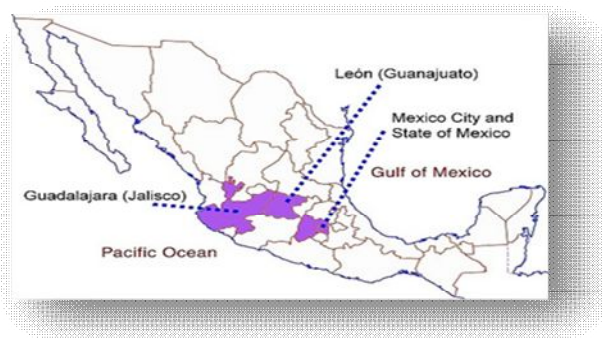
Mexico's textile industry plays an important role on both the USA and the domestic market, where its contribution to the economy of certain states is not to be underestimated. In the 1990s, the industry benefited from the dismantling of trade barriers, particularly the lifting of duties provided for in the North American Free Trade Agreement (NAFTA).

The footwear industry is of enormous importance to the Mexican economy, accounting for 0.22% of Gross Domestic Product (GDP) in 2008 and 1% of manufacturing GDP. Mexicans buy around 300 million pairs of shoes a year, which translates into about 2.5 pairs per capita. Of the 250 million pairs of shoes the country manufactures, 20 million are exported, while imports stand at 60 million. The main international market for Mexican-made shoes is the USA, followed by Canada and Japan.

However, since 2000, the industry has faced growing competition from countries like China, a situation that was compounded when the latter joined the World Trade Organization (WTO). On the upside, fiercer competition has forced the sector to take stock and shore up its activities. (Tradegood, 2013).

## 2. National Footwear Industry of Mexico

Mexican footwear industry is heavily concentrated in three main locations. Manufacturing is focused on the city of Leon in the state of Guanajuato. Factories and workshops in Leon account for about 68% of all shoes made in Mexico. The two other important manufacturing areas for footwear are Guadalajara (Jalisco) where about 18% of the national production originates, and Mexico City (together with surrounding parts of the State of Mexico), responsible for 12%.



*Figure 1. Concentration of shoe industry in Mexico*

According to the 2009 Economic Census, there were close to 7500 "productive units" related to shoe manufacturing in Mexico, with about half of them located in the state of

Guanajuato. In 2012, national producers turned out 244 million pairs of footwear, of which 171 million pairs (70%) were made in Guanajuato.

Shoes are also an important international trade item. In 2013, shoe exports reached 26 million pairs, worth almost \$600 million (an increase of 14% compared to 2012). The main export markets were the USA, Canada, Colombia, Guatemala, Panama and Japan. (Geo-Mexico, 2014)

### The basic statistics (2009-2010)

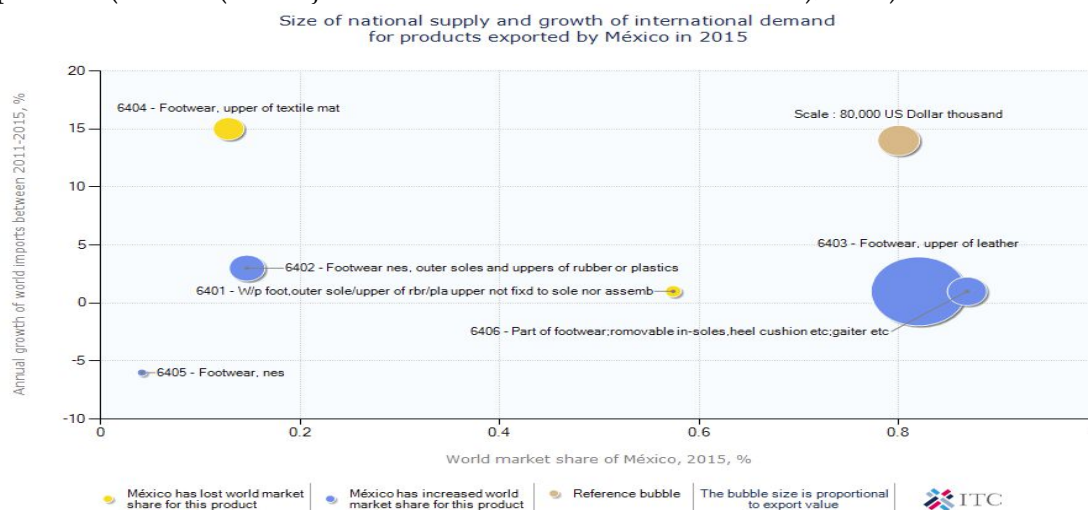
- Number of footwear-related firms: about 8000, half of them in Guanajuato.
- Size of firms: 56% micro (fewer than 10 employees), 33% small (10-50 employees).
- Employment: the footwear sector provides 140,000 direct jobs, and twice as many indirect jobs, for a total of 420,000.
- Mexico's largest shoe maker: Emyco, whose 4,500 workers make 6 million pairs of shoes, boots and sandals (various brands) every year. This firm alone introduces 100 new models every three months.
- Production volume: 250 million pairs/yr, about 1.6% of world total.
- Domestic market: 285 million pairs/yr (average of 2.5 pairs/person/yr)(Geo-Mexico, 2011)

### Exports

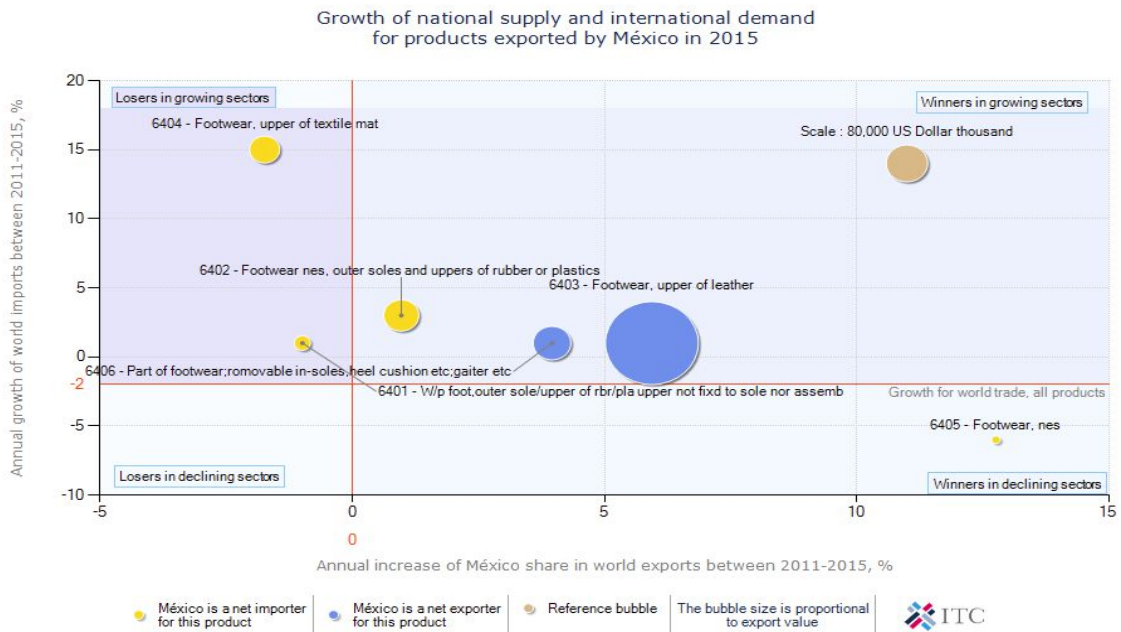
- Export volume: 15 million pairs/yr
- Value of exports: \$250 million (dollars). Exports have risen steadily since 2006, despite the global economic difficulties.
- Export destinations, by volume: USA 82%, Brazil 5%, Guatemala 2%, Japan 2% and Canada 2%.
- Export destinations, by value: USA 84%, Japan 4%, Canada 2%, France 1% and Brazil 1%.

### Imports

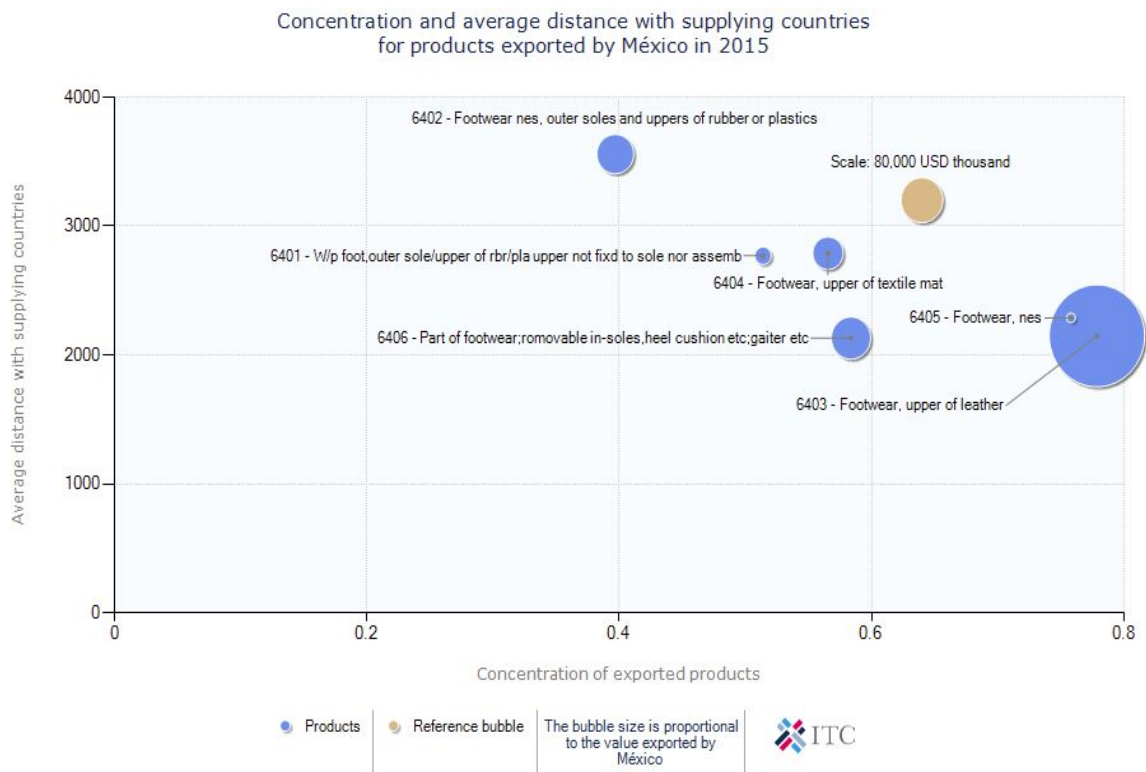
- Import volume: 45 million pairs/yr
- Value of imports: \$450 million; this figure is rising at 15-20%/yr
- Sources of imports, by volume: Vietnam 39%, Indonesia 21%, China 11%, Brazil 7%, Malaysia 5% and Thailand 5%.
- Sources of imports, by value: Vietnam 43%, Indonesia 16%, China 14%, Italy 7% and Spain 6%.(CICEG (Guanajuato Shoe Manufacturers Association), 2011)



Graphic 1. Size of national supply and growth of international demand for products exported by Mexico in 2015. Source: Compiled by author based on (ITC International Trade Center, 2015)

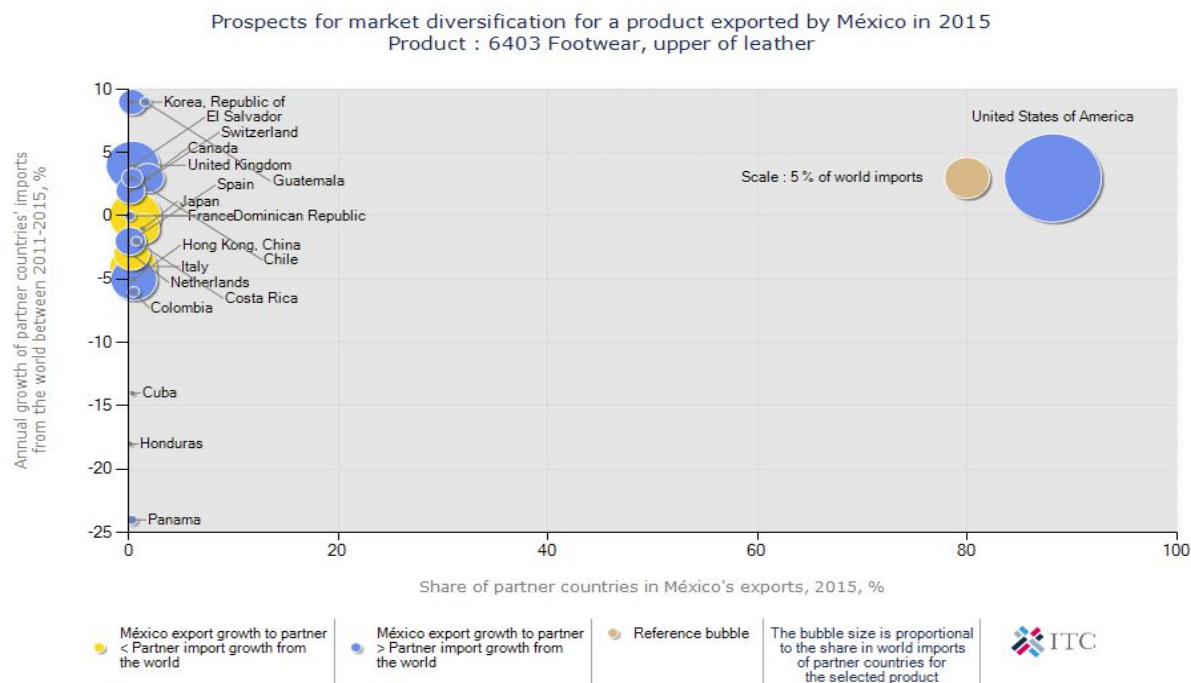


Graphic 2. Growth of national supply and international demand for products exported by Mexico in 2015. Source: Compiled by author based on (ITC International Trade Center, 2015)



Graphic 3. Concentration and average distance with supplying countries for products exported by Mexico in 2015. Source: Compiled by author based on (ITC International Trade Center, 2015)





Graphic 4. Prospects for market diversification for a product exported by Mexico in 2015. Source: Compiled by author based on (ITC International Trade Center, 2015)

It can be concluded from the previous graphics that Mexico is more competitive exporting footwear upper of leather. During the last 5 years from 2011 to 2015, this sector has grown more than any other sector of the industry both in terms of size and growth of national supply of international demand for products exported by Mexico. It is necessary to be noted that the enterprises located in Leon are dedicated mostly to produce this kind of footwear, thus this statistics are particularly important to the studied subject. Also can be inferred for the graphics that Mexico's exportations of footwear industry are directed to near countries, USA market is the most important.

Finally, even it is not possible to qualify the exportations of footwear industry like a highly diversified market; the increasing number of destination countries for Mexican products is a sign of the change that is taking place at that industry.

## 2.1 Footwear Industry of Leon

Leon, in Guanajuato, is the center of one of the world's most complete leather and footwear clusters. The area is a leading supplier and exporter of footwear, saddles and hats.

Footwear has been made in Guanajuato since 1645. The earliest shoe makers' association dates back to 1808. Nowadays, firms with majority Mexican capital dominate the sector. Several of the foreign firms which manufactured shoes here prior to the second world war, changed the focus of their production lines in the early 1940s to specialize in supplying military footwear, leaving the making of consumer footwear to firms with national capital.

OECD defines competitiveness as follows: "a measure of a country's advantage or disadvantage in selling its products in international markets" (OECD Organization for Economic Cooperation and Development, 2014). The purpose of this research is to measure how competitive is Leon in selling its footwear production (upper of leather) abroad.

## 2.2 Data and Methodology

According to the most recent Economic Census by (INEGI (National Institute of Statistics, Geography and Informatics), 2016) there are 2,370 ( $N$ ) enterprises specifically dedicated to the fabric of footwear upper of leather in Leon. The size of sample is 527 ( $n$ ), to get a confidence level of 99% and a confidence interval / margin of error ( $E$ ) of 5%. (Creative Research Systems, 1982)

Data collected (Secretary of Economy, 2016) by survey focused on the size of the enterprises ( $X$ ), considering the number of employees the classification is:

$M_y$  micro (0 - 10 employees),  
 $S$  small (11 - 50 employees),  
 $M$  medium (51-250 employees) and  
 $L$  large (251 and more employees)

The international trade activities considered was exports ( $Y_e$ ) and imports ( $Y_i$ ).

$$H_0 Y_e, Y_i = \begin{cases} 1 & \text{asb} < 0.05 \\ 0 & \text{otherwise} \end{cases}$$

N	Valid	527
	Invalid	0

Table 1. Statistical ( $Y_e$ )

		Frequency	Percentage	Valid percentage	Accumulated percentage
Valid	No	333	63.2	63.2	63.2
	Yes	194	36.8	36.8	100.0
	Total	527	100.0	100.0	

Table 2. Descriptive analysis ( $Y_e$ ) Exports

N	Valid	527
	Invalid	0

Table 3. Statistical ( $Y_i$ )

		Frequency	Percentage	Valid percentage	Accumulated percentage
Valid	No	495	93.9	93.9	93.9
	Yes	32	6.1	6.1	100.0
	Total	527	100.0	100.0	

Table 4. Descriptive analysis ( $Y_i$ ) Imports

	Valid		Cases Invalid		Total	
	N	Percentage	N	Percentage	N	Percentage
Does the company export? * Number of employees	527	100.0%	0	0.0%	527	100.0%

Table 5. Case Processing Summary Exports

		Number of employees					Total
		Micro	Small	Medium	Large		
Does the company export?	No	Count	150	116	57	10	333
		% in Does the company export?	45.0%	34.8%	17.1%	3.0%	100.0%
	Yes	Count	32	63	68	31	194
		% in Does the company export?	16.5%	32.5%	35.1%	16.0%	100.0%
Total	Count	182	179	125	41	527	
	% in Does the company export?	34.5%	34.0%	23.7%	7.8%	100.0%	

Table 6. Crosstab Does the company export? \* Number of employees

	Value	df	Asymptotic significance (bilateral)
Chi-cuadrado de Pearson	72.289 <sup>a</sup>	3	.000
Likelihood ratio	74.129	3	.000
Linear association linear	72.015	1	.000
N of valid cases	527		

a. 0 squares (0.0 %) have expected count less than 5. The minimum expected count is 15.09.

Table 7. Chi-squared test

0.000 < 0.05 Ho is accepted

	Valid		Invalid		Total	
	N	Percentage	N	Percentage	N	Percentage
Does the company import? * Number of employees	527	100.0%	0	0.0%	527	100.0%

Table 8. Case Processing Summary Imports

		Number of employees					Total
		Micro	Small	Medium	Large		
Does the company import?	No	Count	179	174	106	36	495
		% in Does the company import?	36.2%	35.2%	21.4%	7.3%	100.0%
	Yes	Count	3	5	19	5	32
		% in Does the company import?	9.4%	15.6%	59.4%	15.6%	100.0%
Total	Count	182	179	125	41	527	
	% in Does the company import?	34.5%	34.0%	23.7%	7.8%	100.0%	

Table 9. Crosstab Does the company import? \* Number of employees

	Value	df	Asymptotic significance (bilateral)

Chi-cuadrado de Pearson	30.575 <sup>a</sup>	3	.000
Likelihood ratio	28.143	3	.000
Linear association linear	22.326	1	.000
N of valid cases	527		

a. 1 cell (12.5 %) has expected count less than 5. The minimum expected count is 2.49.

Table 10. Chi-squared test

0.000 < 0.05 Ho is accepted

### 3. Discussions and conclusions

The 2 hypotheses were accepted and conclusion is that the size of the companies has a correlation with the realization of imports and exports. The bigger the company, the bigger the chance to export its products. Also, the bigger the firm, the bigger the chance to import products of the footwear upper made of leather - industry.

Analyzing the result showed in Table 6 is clear that small and medium companies contribute more, in terms of percentage, to the footwear upper of leather exports. However it is important to notice that in real terms, of value and volume this cannot be equally representative; the logic explanation is that large firms, even represent only a small percentage, do export in total, as a single category, a larger amount in terms of value and quantity.

Analyzing the Table 7 is remarkable the fact that medium enterprises concentrate the imports of upper made of leather products. Large companies even not have a considerable percentage can represent a bigger amount in terms of value and quantity.

Mexico's ranking 2015 of footwear upper of leather countries was 20<sup>th</sup>, that represents 0.8% of share in world exports (ITC International Trade Center, 2015); considering that annual growth in quantity between 2011-2015 was only 1%, but annual growth in value between 2014-2015 was in fact -2%, that large firms in 2009 represented only a 1% of the number total of companies with a total gross production of 39.9% (INEGI (National Institute of Statistics, Geography and Informatics), 2016), remaining 60.1% of the production for micro, small and medium enterprises and finally taking in account the results of this research placed in the very representative footwear industry of Leon where companies face an intense international competitiveness with limited resources it is clear that micro, small and medium enterprises need support to be able to compete better in the globalized world.

### 4. Research limitations and direction for further research

For further research, quantities of imports and exports should be considered to create a more complete map of the competitiveness of footwear upper made of leather industry. Also an analysis of the nature of actual Mexican governmental programs that tend to impulse exports of footwear industry and the implications of the international trade agreements that Mexico has signed.

### 5. References

- CICEG (Guanajuato Shoe Manufacturers Association), 2011. *Situation of the Footwear Industry of Mexico*, Leon: s.n.Creative Research Systems, 1982. *Creative Research Systems*. [En línea] Available at: <http://www.surveysystem.com/sscalc.htm> [Último acceso: 20 Jan 2016].
- European Confederation of the Footwear Industry, 2014. *World Footwear Congress 2014*. [Online] Available at: [http://www.worldfootwearcongressleon2014.com/eng/?page\\_id=605](http://www.worldfootwearcongressleon2014.com/eng/?page_id=605) [Accessed 01 Feb 2016].



Geo-Mexico, 2011. *Geo-Mexico, the Geography and Dynamics of Modern Mexico*. [Online] Available at: <http://geo-mexico.com/?p=3265> [Accessed 10 Jan 2016].

INEGI (National Institute of Statistics, Geography and Informatics), 2016. *INEGI*. [En línea] Available at:

[www.inegi.gob.mx](http://www.inegi.gob.mx) [Último acceso: 30 apr 03].

ITC International Trade Center, 2015. *Trade Map*. [Online] Available at:

<http://www.trademap.org/Index.aspx> [Accessed 01 04 2016].

OECD Organization for Economic Cooperation and Development, 2014. *OECD.org*. [Online]

Available at:

<https://stats.oecd.org/glossary/detail.asp?ID=399> [Accessed 17 apr 2016].

Secretary of Economy, 2016. *Mexican System of Business Information*. [En línea] Available at:

[http://www.siem.gob.mx/siem/portal/estadisticas/Est\\_ExpImp\\_xMun.asp?qedo=11](http://www.siem.gob.mx/siem/portal/estadisticas/Est_ExpImp_xMun.asp?qedo=11) [Último acceso: 02 Feb 2016].

Tradegood, 2013. *Tradegood*. [Online] Available at:

<http://www.tradegood.com/es/viewpoints/the-textile-and-footwear-industries-in-mexico.html>

[Accessed 01 Feb 2016].

---