

How will the Current European Conditions Influence the Deployment of Taiwanese Fastener Industry

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In the 20th century, some European countries established the European Union (EU) due to economic considerations, issued the union-wide circulated currency called “euros” in 2002, and made Lisbon Treaty effective in 2009, justifying the existence of European Parliament. After Croatia officially joined the Union in 2013, the EU has now a total of 28 member countries. 19 countries of them adopt euros as the official currency. The EU after integration becomes the world’s largest economic entity with a total of over 500 million people and the GDP (2014) per capita at USD 36 thousand; therefore, it has strong economic strength.

The Lisbon Treaty solidified the euro zone, but since the Greek debt crisis in 2010, the Greek government has not been able to pay back the debt totaling EUR 300 billion. Other countries began to worry that the Greek crisis would impact the euro zone, and eventually the financial crisis burst out in the euro zone in 2011, which began to shatter the trust among the EU member countries. The trust within the Union is founded upon the mutual benefits among member countries. If national interests within the Union are challenged, the trust within the Union will start to collapse.

The problems pertaining to Syrian refugees seem to be the last straw. In September 2015, the European Commission (EC) called for the “Bold Plans” and asked member countries to work together to receive incoming refugees. The refugee problem would have had a solution with German Chancellor Merkel’s hospitable policy, the expectation that the refugees could become a workforce, and the quota set by the EU of how many refugees each of the member country should receive. Unfortunately, in the beginning of 2015, a few refugees in Cologne (Germany) committed sexual harassments and rapes that caused the German ruling party failed in a local election. The terrorist attack in Paris on November 13 of 2015 resulted in 129 casualties. All of these incidents were highly relevant to the refugee policies. Refugees have become a hot potato to every European government. Worrying about losing their own benefits, some member countries started to talk about exiting the EU. For example, UK voted to leave the EU after a referendum on June 23, 2016. The EU seems to be at the brink of collapse.

Europe has strong economic power. Among the G8 countries, Germany, France, UK, and Italy are the EU members. The export statistics of Taiwanese fasteners to these 4 countries above are shown in **Table 1 to 3**.

Table 1. Taiwanese Fastener Export to 4 Major EU Countries in 2013

		Germany	France	UK	Italy
Steel Screws & Nuts	Value	USD 337,657,846	USD 63,099,953	USD 143,726,891	USD 76,797,422
	Quantity	128,611,411 KGM	23,165,620 KGM	54,516,214 KGM	33,389,729 KGM
	Unit Price	USD 2.625 /KGM	USD 2.724 /KGM	USD 2.36 /KGM	USD 2.300 /KGM
Automotive Screws	Value	USD 389,640	USD 129,063	USD 238,787	USD 40,210
	Quantity	102,080 KGM	34,078 KGM	32,284 KGM	10,959 KGM
	Unit Price	3.817/KGM	3.787/KGM	7.396/KGM	3.669/KGM

Table 2. Taiwanese Fastener Export to 4 Major EU Countries in 2014

		Germany	France	UK	Italy
Steel Screws & Nuts	Value	USD 375,886,200	USD 81,606,571	USD 180,719,632	USD 92,178,290
	Quantity	142,884,207 KGM	29,488,861 KGM	67,758,478 KGM	38,482,125 KGM
	Unit Price	USD 2.631/KGM	USD 2.767/KGM	USD 2.667/KGM	USD 2.395/KGM
Automotive Screws	Value	USD 274,902	USD 169,819	USD 277,325	USD 218,517
	Quantity	77,263 KGM	47,137 KGM	39,057 KGM	63,505 KGM
	Unit Price	USD 3.558 /KGM	USD 3.603/KGM	USD 7.101/KGM	USD 3.441/KGM

Table 3. Taiwanese Fastener Export to 4 Major EU Countries in 2015

		Germany	France	UK	Italy
Steel Screws & Nuts	Value	USD 336,411,067	USD 71,791,099	USD 178,366,592	USD 81,575,153
	Quantity	136,122,818 KGM	27,390,219 KGM	69,562,893 KGM	35,188,254 KGM
	Unit Price	USD 2.471/KGM	USD 2.621 /KGM	USD 2.564/KGM	USD 2.318-/KGM
Automotive Screws	Value	USD 41,333	USD 17,584	USD 210,784	USD 67,375-
	Quantity	12,020 KGM	4,850 KGM	41,613 KGM	17,733 KGM
	Unit Price	USD 3.439/KGM	USD 3.626/KGM	USD 5.065/KGM	USD 3.799 /KGM

These 4 major European industrial countries account for nearly 50% of Taiwanese fastener sales to Europe. In 2013, the total sales value to these countries was USD 620 million with the average price per kg at USD 2.502; in 2014, the total sales value to these countries was USD 730 million with the average price per kg at USD 2.615; in 2015, the total sales value to these countries was USD 660 million with the average price per kg at USD 2.48. In 2015, both the unit price and total sales value declined, and the total sales value in particular dropped by nearly 10%. In 2016, the EU repealed the anti-dumping tax on carbon steel screws from China, causing pressure on Taiwanese fastener industry also selling fasteners to Europe. How should Taiwan tackle it has become a very serious issue. In Taiwan, automotive fasteners sold to these 4 major European countries account for around 10% of all the steel fasteners made in Taiwan. It is predictable that Chinese-made fasteners with their low-price advantage will take over the low-price fastener market in Europe. Let's take a closer look at the characteristics of these 4 industrial countries.

Germany

The full name of Germany is “Bundesrepublik Deutschland.” It has a population of 80 million and 357 thousand square kilometers of territory. Its population is the highest among all European countries and its GDP is as high as USD 41,000, making it the third largest economic entity in the world. After the WW2, Germany was divided into two countries until the Berlin Wall was down in 1989 and the reunion in 1990. The reunited Germany plays an important role in the EU. In 2005, the commonly called “Iron Lady” Angela Merkel was elected as German Chancellor, and the Christian Democratic Union led by Merkel brought Germany to go safely through the global economic crisis caused by the U.S. in 2009 and the European financial crisis caused by Greece in 2012. During her 10 years of tenure, the support rate for Merkel remains high. In 2015 she opened arms to receive refugees suffering and fleeing the war. Roughly over 1 million refugees entered Germany in 2016, making it the country with the most refugees in the EU. Excluding the concerns over terrorist attacks, the young labor force sufficiently complemented by the refugees is very favorable to the demand for labor force in Germany. Especially when a new type of protectionism emerges in the 21st century and when countries are more willing to

use domestically made products, these 1 million refugees and their second generation will definitely bring an abundance of work force demanded by Germany for the next one to two decades.

Germany has a massive scale of automotive industry. Although Volkswagen's exhaust scandal in 2015 put a heavy blow to German automotive industry, in my opinion the effect should be temporary. As far as Germany's car manufacturing and its technical level is concerned, the situation should turn normal soon. Germany has world-leading precision technology and extremely high requirements for fastener quality. In the past it was hard for Taiwanese fastener industry to enter the German market because the quality of heat treating technology was not up to par, but in recent years Taiwan has progressed a lot in material quality and heat treating technology, and thus Taiwanese fastener companies should work hard to enter the supply chain of German high-end cars.

France

The full name of France is “French Republic”. It has a population of 66 million, 643 thousand square kilometers of territory, and the GDP per capita at around USD 37,000. France was once occupied by Germany in the WW2. After the war, the French economy took off and now it is the

6th largest economic entity in the world with the dominance in critical technology such as high speed rail, electricity, aviation, and telecommunication. France is a presidential system country which the president is elected by its people. The incumbent president François Hollande has a 5-year tenure effective from 2012. France has been suffering deteriorating financial conditions and a large sum of foreign debts. Right after Hollande took the presidency, he reformed the finance system, raised the progressive tax rates for the rich, extended the retiring age of labor to 60, which eventually improved the financial conditions. In the EU, France has an important political and economic leading position.

France has the world-class ability in nuclear power generation, aviation, and oil extraction technology. The French PSA Peugeot Citroën Group is the second largest carmaker in Europe. The Airbus Group in Europe takes the lead and contends with U.S. Boeing. French high speed rail and MRT take the lead as well. High technological level gives France strong export strength. The fastener industry faces the aerospace, high speed rail, and automotive industry demanding high quality fasteners; therefore, Taiwanese fastener industry must improve its overall quality, especially when it faces the requirement for quality accreditation.

UK

The full name of UK is “the United Kingdom of Great Britain and Northern Ireland.” Unlike other European countries, the UK is an island country with the total territory of 242 thousand square kilometers, a population of around 64 million, and the GDP per capita at about USD 42 thousand. It is the first industrialized country in the world, and the suzerain of The British Commonwealth of Nations. It is a constitutional monarchy country headed by Elizabeth II. However, the parliament is the main authority of power. The UK joined the EU in 1973, but the domestic power of the country that tries to detach the country from the EU and keep British pounds as official currencies continues to exist. In 2015, the allocation of Syrian refugees made the British people upset and called for BREXIT. The incumbent prime minister is Theresa May, the leader of the Conservative Party who has taken over the position after BREXIT became affirmative.

BREXIT became affirmative after the referendum on June 23, 2016, when the stock and English pounds depreciated and the S&P as well as Fitch downgraded UK’s credit ranking. The UK focuses its manufacturing on national defense, automobiles, aviation and is the first industrialized country in the world with very well-developed finance, banking, and insurance industries, but ever since it left the EU its position as the heartland of finance will be definitely affected.

Italy

The full name of Italy is “Italian Republic,” with the total territory of around 300 thousand square kilometers, a population of around 60 million people, and the GDP per capita at around USD 30 thousand. It is the heartland of innovation in Europe. Like Germany, it was part of the Axis in WW2. After its defeat, it received assistance through the Marshall Plan from the U.S. and started to substantially improve its economy in the 1960s. In 1993 it became

a member of the EU. It has a bicameral parliament, within which the chambers and houses are equivalent in power and are both generated from general election. The Italian president is elected by the parliament and has 7 years of tenure with the right to appoint the prime minister. The incumbent president is Sergio Mattarella and the Prime Minister is Matteo Renzi. In 2011, a national debt crisis burst out in Italy, making it become one of the countries suffering the European financial crisis.

Italy has a very well-developed automotive industry. Like Taiwan, Italy has a high proportion of SMEs which create over 70% of its national production value. As Italy is the 2nd largest steel producer in Europe, it also has very well-developed engineered machinery, shipbuilding, and national defense industries, especially luxury cars (e.g. Ferrari and Maserati), fashion clothing (e.g. Valentino and Armani), yachts (e.g. Ferretti and Azimute). These are all important brands in Italian export.

The Strategic Deployment of Taiwan

After the EU imposed the antidumping taxes on certain iron and steel fasteners originating in China in 2009, the fastener export of China to Europe plunged, and many orders originally made to China were switched to Taiwan, which soon boosted the surge in Taiwanese fastener export to Europe. As a result, Taiwan could retain pretty good sales performance during the U.S. and European financial crises. In 2015, Taiwan sold around 520 thousand tons (or USD 1.3 billion) of fasteners to Europe, down 8% from 2014. Around 70% of fasteners sold to Europe were low carbon steel screws and the remaining 30% were automotive and special fasteners. However, since the EU has repealed the anti-dumping taxes imposed on certain Chinese fasteners, Taiwanese fastener industry is facing extreme pressure from material and labor costs. China, on the

contrary, has better leverage over Taiwan, and Taiwanese low-price fastener makers will face enormous impact.

With many years of effort, Taiwanese fastener industry has improved its product quality a lot, but it still suffers limited development in penetrating fastener-demanding European industries like automobile, aerospace, shipbuilding and national defense. In the aforesaid 4 industrial countries, Taiwan only takes up a very low proportion of sales value, which explains that Taiwan still has a long way to go in the development of high-price fasteners. The private sector cannot enter the high-price fastener market with its own force, so the governments must have comprehensive and effective plans to improve the overall development for Taiwanese fastener industry. The government and private sectors should dedicate themselves more to the R&D of critical technology such as materials, manufacturing processes, dies, and heat treatment. The national-level R&D organizations such as ITRI and Ministry of Science and Technology should invest a large sum of funds in supporting the upgrade of Taiwanese fastener industry because with only the force of the private sector it is very hard to compete with other countries in the field of high-price fasteners. We should consider ourselves a national team, focus on target clients in several important countries, and gather all the forces of industries, government and academia to make comprehensive plans for fields ranging from materials, manufacturing processes, heat treatment, quality system certification, to lab inspection, with the help of the country. Despite so many challenges ahead that may kick a business out of the market, it is never too late as long as we start to do something constructive. Hopefully, Taiwanese fastener industry will get out of the competition of low price and create the unique competitive edge with its own diversity. □