

## ***Influence of Globalization on Number of Certificates ISO 9001 for Chosen Countries***

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**Abstract:** *If we will look back into the history of human evolution, it will be observed that the quality has always been integrated into the development of human society. Quality management is one of the most important challenges for many companies. However, the methods of quality management are changing during the years and it is true that this changes lead to higher standards and then higher quality of production processes in most of the companies. Globalization process developed all countries by involving active trading between each other. The main aim for all countries is to be competitive on the market which firstly demands to have high quality of the products and services. The aim of this article is to analyse the influence of globalization on the number of certificates ISO 9001 for the chosen countries through comparison and monitoring of statistical data of selected countries: Kazakhstan, Croatia and Germany in the last years.*

**Keywords:** *globalisation, certification, standardisation, certificate, certificate ISO 9001*

### **Introduction**

Globalization is something that we need to define. As W. Edwards Deming said in his book, written in the last century, people can no longer live in isolation. Year by year information flows across many countries in the world and connects millions of people on the planet. In general, globalisation term can be described as a rapid process of intercontinental economic, sociable and political integration. [1, 3] If we will consider only economical part, which is one of the most important aspects of development in every country, globalisation means integrating one country's economy with the rest of the world. [49, 8]

Going to the next point it is suitable to mention that for producers who are going on worldwide market it is necessary to be competitive on the market and to be able to satisfy consumers. That means the basic aspect is high quality of goods which may be proven by special documents called certificates. High standards and increasing level of quality are important factors in modern market economy, because the world is developing at rapid pace and customer expectations are becoming more demanding.

It is necessary to define the meaning of certification and standardisation processes. To make it easier, certification is the process of getting certificate and standardisation is the process of defining standards and characteristics for some goods, services and processes.

There are different types of certificates. In this paper ISO 9001:2015 certificate will be considered. ISO 9001:2015 is the only standard in the family that can be used by any organization, large or small, regardless of its field of activity. In fact, there are over one million companies and organizations in over 170 countries certified according to ISO 9001. This standard is based on a number of quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement. [1, 3]

### **1. Globalisation as an Important Aspect of Country's Economy**

Globalisation in economics deals with the free flow of goods, services, production inputs such as labour and capital, technology, knowledge and other key variables that are the subject of international trade. [1, 3] Globalisation shows intercontinental economic, sociable and political integration. [1, 3] One of the ways to measure how globalized national economy is can be found in measuring its ability of export. [169- 183, 12] Additionally, because of the developing of international trade, customer expectations are becoming more demanding, so trying to find the connection between globalisation and certification shows the influence of globalisation on standardisation and certification processes. The goal of this paper is to analyse the influence of

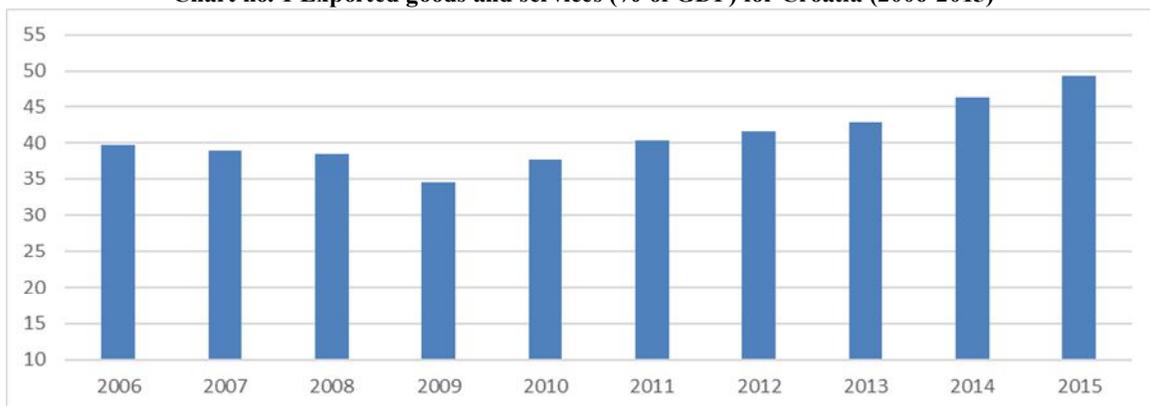
globalization on number of certificates ISO 9001 for chosen countries: Kazakhstan, Croatia and Germany in the last years.

## 2. Export, Globalization and Number of Certificates ISO 9001 for Chosen Countries

Going to the next point defining main variables to find the influence of globalization on certification process for chosen countries, number of exports in last decade will be considered. The main reason why this kind of variables were chosen is the existence of export sector in economy of the country which means that aforementioned is involved in international trading and cooperation process with foreign countries. The next important variable analysed in this paper helps to reach the main aim of this article is defining the number of certificates ISO 9001 in Kazakhstan, Croatia and Germany in last decade. Therefore, through defining the connection between two variables, the paper will try to prove that the number of certificates influences the amount of exported goods and services (% of GDP).

To begin with, the first country that will be considered is the country in central Europe, Croatia, is mostly an exporter of transport equipment, machinery, textiles, chemicals, foodstuffs and fuels. On the other hand, Croatia is importer of machinery, transport and electrical equipment, fuels and food. This country mostly exports to Italy, Bosnia and Herzegovina, Germany, Slovenia, Austria and Serbia. As shown on the diagram according to analysed data from World Bank monitoring was made for the last decade: 2006 until 2015. According to given statistics, exported goods and services, written in the % of GDP, have positive trend. The trend is growing up slowly during the 2006- 2015. For an example, in 2006 it was 39.7 %, and in 2015 it became 49.4 %.

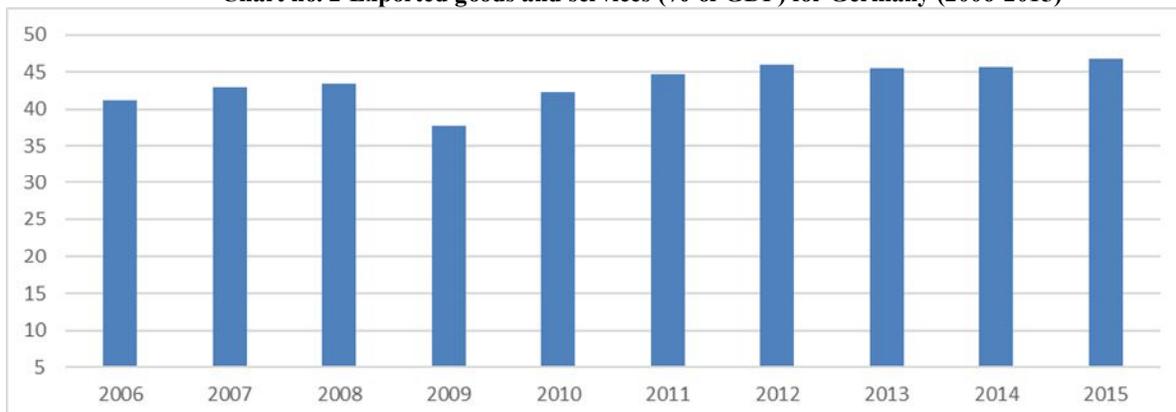
**Chart no. 1 Exported goods and services (% of GDP) for Croatia (2006-2015)**



Source: [11]

Furthermore, the next country considered in this paper is Western Europe country Germany. Germany is the third largest exporter in the world, with exports accounting for almost half of its economic output. Germany main exports are vehicles, machinery and electrical equipment, pharmaceutical products, optics, photographs, plastics and aircraft. Main export partners are United States of America, France, United Kingdom, Netherlands, China, Italy, and Austria. Also, Russia and Asian Countries. As it is visible on the chart, variable of exported goods and services (% of GDP) for Germany is mostly on a constant level. For example, from 2006 until 2015 it changes only for 5.6 p.p. and it is 48.6 % in the last year.

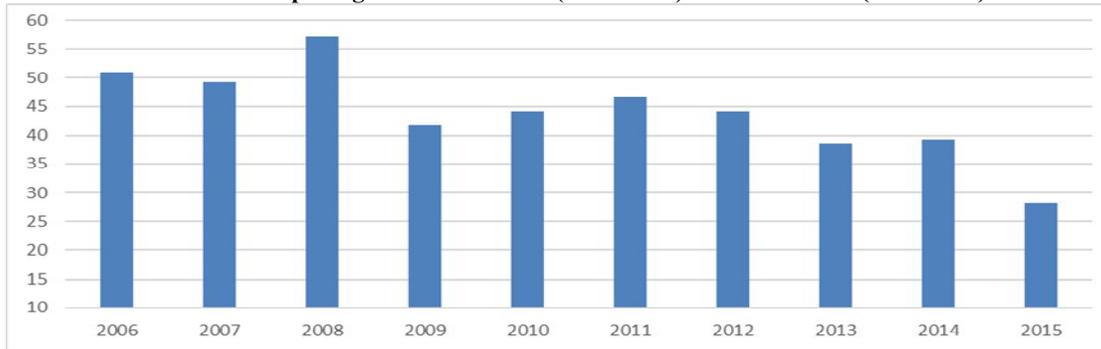
**Chart no. 2 Exported goods and services (% of GDP) for Germany (2006-2015)**



Source: [11]

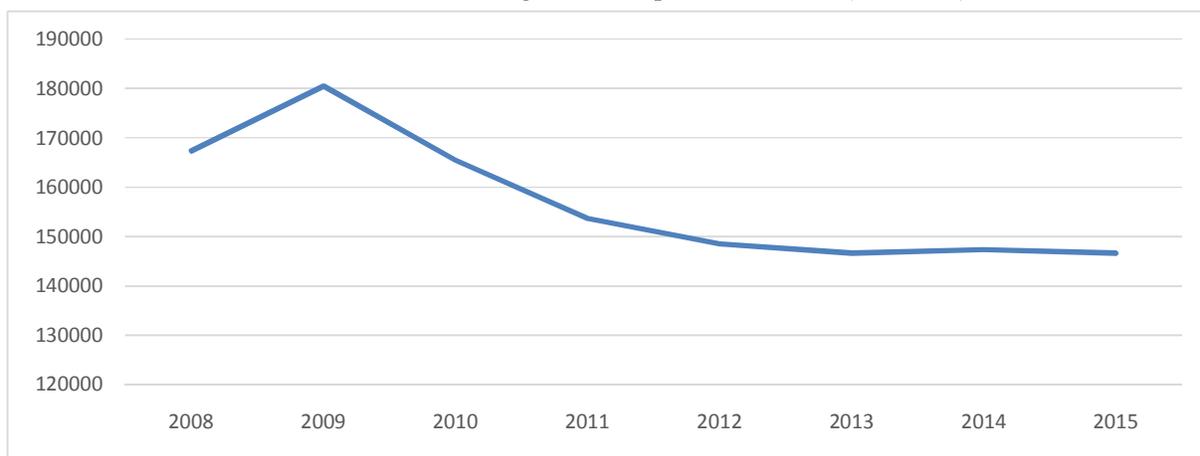
Finally, Central Asian country Kazakhstan has an export-orientated economy, highly dependent on shipments of oil and related products. Furthermore, there are other exports that include ferrous metals, copper, aluminium, zinc and uranium. The main export partners are Italy, China, Netherlands, Russia, France, Switzerland, Ukraine, and Canada. According to data given on the chart no. 3, situation did not change over the years, however graph slightly dips from 2012, from 38.6 % to 28.3 % 2015.

**Chart no. 3 Exports goods and services (% of GDP) for Kazakhstan (2006-2015)**



Source: [11]

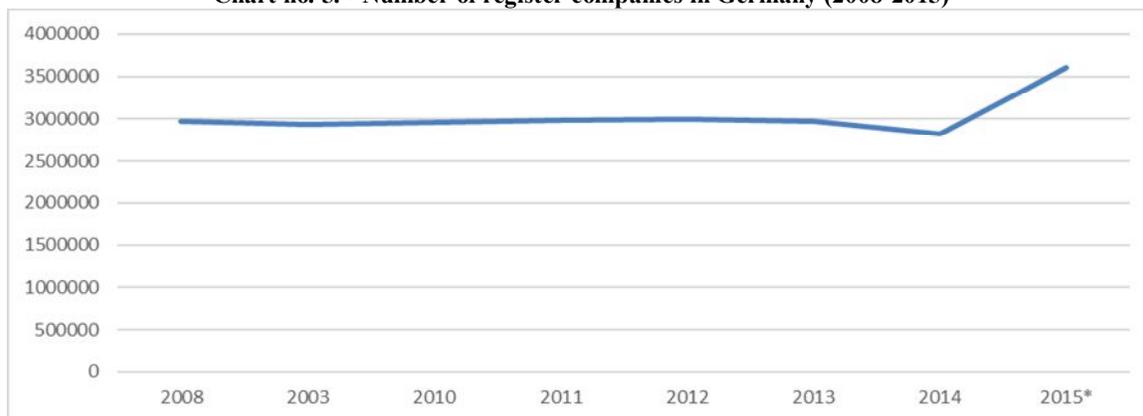
**Chart no. 4 Number of registered companies in Croatia (2008-2015)**



Source: [1]

By considering statistical data given by European Commission on the Eurostat website, number of registered companies in Germany is larger than 28 000 000 in 2008. Going to the next years this number was increasing until 2013, where it reached 2972456 companies. But in 2014, it went down, as visible on the diagram but only for 153 620 companies. In general, this indicator has positive trend during years.

**Chart no. 5. - Number of register companies in Germany (2008-2015)**

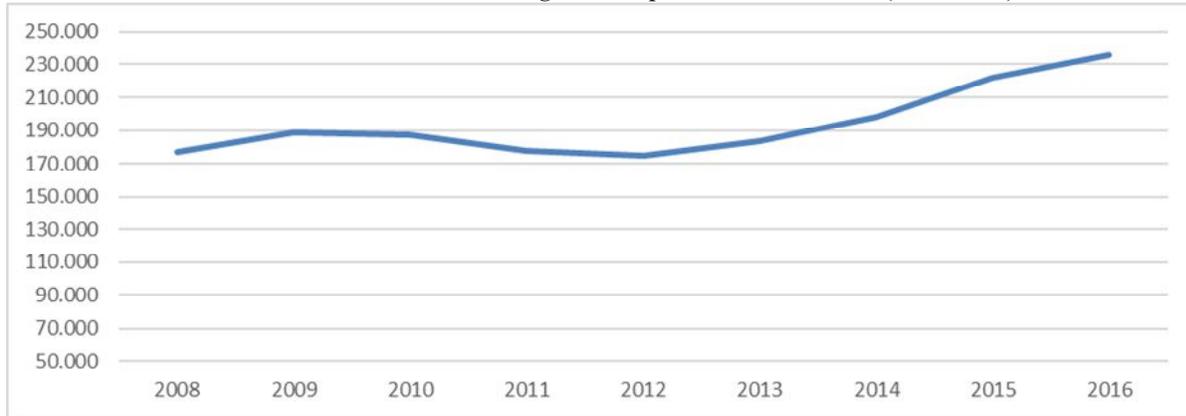


Source: [2]

\*Germany Trend and Invest, 2015. [6]

According to data given by Technical Regulation and Metrology Committee of the Republic of Kazakhstan, the total number of registered companies in considering years from the 2006 until 2016 is growing constantly. In 2006, there are 174 794 companies and in 2016, the number grows to 236 103 companies.

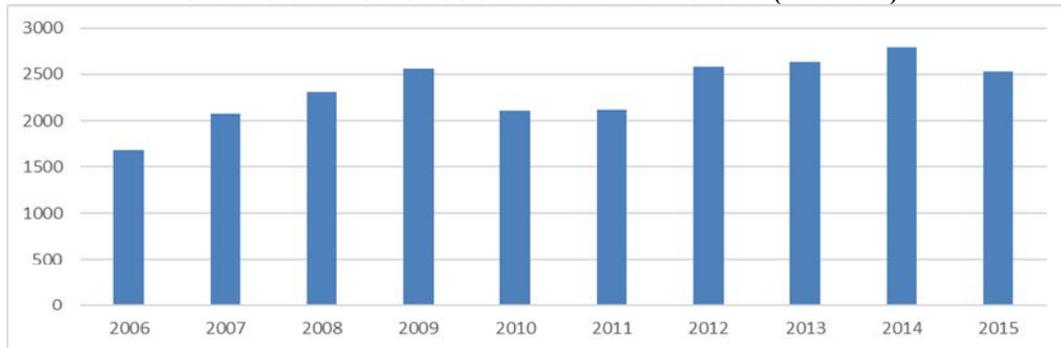
**Chart no. 6 Number of register companies in Kazakhstan (2008- 2016)**



Source: [10]

As visible on the next graph the number of ISO 9001 certificates in Croatia is fluctuating during period 2006-2015. For example, in 2006 this variable was 1676, 3 years after it was 2567 and then again went down to 2102 in 2010.

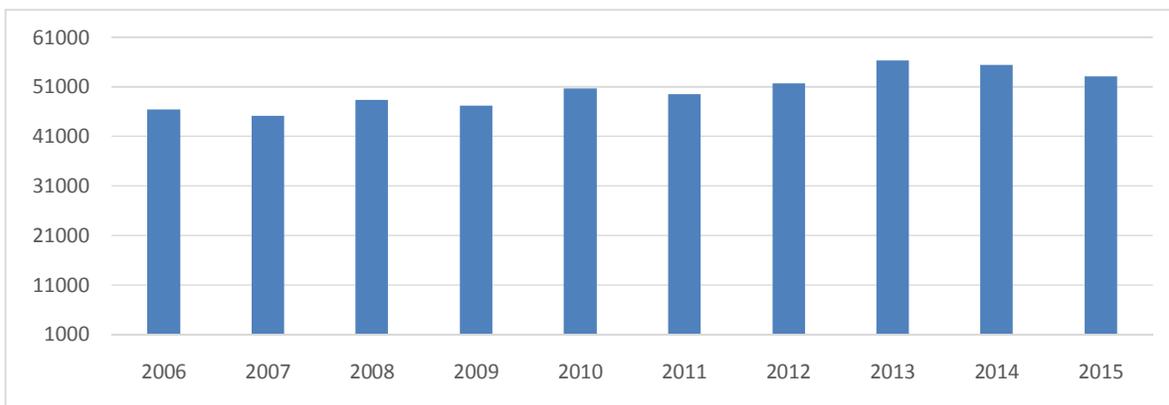
**Chart no. 8 Number of ISO 9001 certificates in Croatia (2006-2015)**



Source: [4]

Therefore, the next chart represents the number of ISO 9001 certificates in Germany during 2006- 2015 period. It is clear that this variable didn't fluctuate and that is more stable in comparison to the chart number 8 – Croatia. However, the numbers are much bigger than in the chart before. For example, number of certificates is going from the minimum in 2007, when it was 45 195 certificates, to its peak of 56303 certificates in 2015.

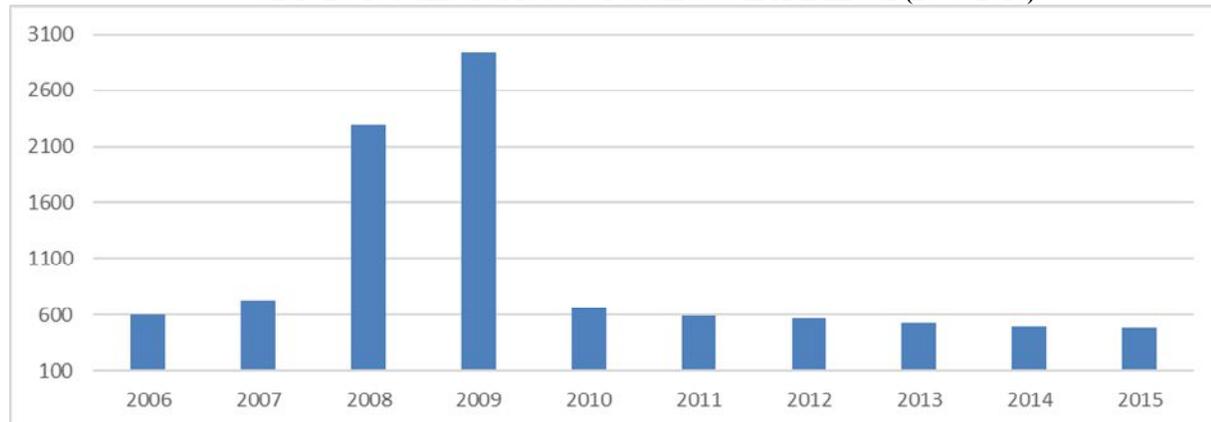
**Chart no. 9 Number of ISO 9001 certificates in Germany (2006/2015)**



Source: [4]

As follows, according to the statistics the number of certificates in Kazakhstan is not constant, therefore the variables during period of 2006 until 2015 in less than 700. However, in 2008-2009 that was rising until 2295 in 2008 and 2944 in 2009.

**Chart no. 10 Number of ISO 9001 certificates in Kazakhstan (2006- 2015)**



Source: [4]

Since the number of companies in all three countries differs a lot, we have calculated the percentage of companies with ISO 9001 certificates among all companies in chosen countries by connecting two variables described before, the number of companies and the number of the ISO 9001 certificates in period from 2008 until 2015. The results in percentages are displayed in Table 1.

**Table no. 1 The percentage of companies with ISO 9001 certificates among whole number of companies in Kazakhstan, Croatia and Germany (2008- 2015)**

% of companies with ISO 9001 certificates	Croatia	Germany	Kazakhstan
2008	1,376037	1,567662	1,298687
2009	1,422712	1,586558	1,559322
2010	1,269563	1,722149	0,355843
2011	1,377475	1,709624	0,335053
2012	1,739212	1,659232	0,322372
2013	1,797759	1,739336	0,287472
2014	1,904465	1,997385	0,251733
2015	1,724632	1,52044	0,220613

Authors calculation based on sources: [4], [1], [10], [2], [6]

So, as shown on the charts 8, 9 and 10, Croatia and Germany have similar trend, however Kazakhstan has smaller amount of companies certifying by ISO 9001 certificate. For instance, in 2010 year considered variable is 1,269563% for Croatia and 1,722149% for Germany, however for Kazakhstan it is 0,355843%. Similar situation is visible for the next years until 2015.

### Conclusion

If we limit our evaluation of globalization of national level just on the value of exported goods and services (% of GDP), from research presented in this paper we can conclude that most globalized country among three countries observed in this paper is Germany. Investigating the correlation between number of companies, which hold certificates ISO 9001, and level of globalization we have discovered that Germany as a country with highest percentage of certificates shows better results in exporting.

In order to have more clear results the future researches should be performed in specific sectorial analyses.

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