Chapter 15
Global Trends in the Construction Industry: Challenges of Employment

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ABSTRACT

Construction industry is a labor-intensive industry contributing to the employment rate of the countries. The state of the country’s economy and its construction industry are interdependent. An increase in the unemployment rate in the construction industry can have adverse impacts on the country’s economy. Local markets are not local anymore. Even in the domestic markets, there is international competition due to the globalization. For this reason, global changes and new trends as challenges of employment in the construction industry need to be carefully analyzed due to their potential impacts on the employment rate and on the labor profile. This chapter covers construction industry’s contribution to the employment rate of the countries; global trends as challenges of employment in the construction industry and as factors influencing professionals’ skills needed in the construction industry; ways of adapting the construction workforce and professionals to the global trends in the construction industry.

INTRODUCTION

Construction industry plays an important role in the global economy as it has 15% share in the world’s GDP (Gross Domestic Product) (Mazhar & Arain, 2015, p. 434). The global construction market is expected to grow further to USD$15,030 billion in 2025 (Department for Business Innovation and Skills [DEFRA], 2013, p. 5). Construction is a labour-intensive activity, and able to provide employment with low investment (International Labour Organization [ILO], 2001, p. 58). Construction industry depends more on labor compared to other industries (Kim, Kim, Shin, & Kim, 2015, p. 1534). Construction industry contributes to the employment rate of the countries (The World Bank, 2016) as well as to their economy. For this reason, construction industry can contribute to the global unemployment problem as global unemployment increased by 5 million people in 2013 and as it is expected to rise by a further 13
million people by 2018 (International Labour Organization [ILO], 2014, p. 3). Ernst and Sarabia (2015, p. 24)’s research on structural economic trends in 45 high-income countries, middle-income countries and low-income countries between 1995 and 2009 revealed that the construction sector is crucial for economic growth and employment creation. Similarly, Chiang, Tao and Wong (2015, p. 1)’s study on Hong Kong revealed bidirectional causality links between GDP and construction activities as well as correlations of employment with GDP and construction. Further examples include but are not limited to the construction industries in the UK, Canada, Australia, Portugal, Bulgaria, Spain, Taiwan, United States, and Korea. In the UK, the construction industry contributed to £103 billion in economic output in 2014, and to the 6.2% of total employment in 2015 (Rhodes, 2015, p. 3). Construction industry plays an important role in the economy of Canada (Mazhar & Arain, 2015, p. 434). In Australia, the construction industry employs approximately 9% of the total workforce (Australian Industry Group [AIGROUP], 2015). In Portugal, the construction industry contributes to the 10.7% of total employment and to the 6.4% of GDP (Horta, Camanho, & Costa, 2012, p. 84). Ernst and Sarabia (2015, p. 9)’s research based on the WIOD (World Input-Output Database) (Trimmer, 2012) revealed that the construction industry presented “between 4.5% (Bulgaria) and 10.4% (Spain) of the overall gross output in 1995 and between 4.2% (Taiwan) and 14.6% (Spain) in 2009” and that regarding “total value added, it represented between 4.2% (United States) and 10.1% (Korea) in 1995 and between 2.2% (Taiwan) and 10.8% (Spain) in 2009”. The construction industry further contributes to the economy due to “its ‘pull’ and ‘push’ multiplier effects on other economic sectors.” (Chiang, Tao, & Wong, 2015, p. 1). The construction industry has higher multiplier effects compared to other industries (Ernst & Sarabia, 2015, p. 10). Ernst and Sarabia (2015, p. 24)’s research on 45 countries, based on data obtained through from WIOD and EORA, revealed that construction industry has acted as an employment driver especially in Australia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Italy, Japan, Korea, Malta, Netherlands, Portugal, Russia, Spain, Sweden, Taiwan, United Kingdom, the United States in the 1995-2009 period.

Construction employment trends in countries in the last decade (2005-2015) have been extracted, calculated and adapted from Organisation for Economic Co-operation and Development (OECD, 2016a, 2016b) and Labour Market Statistics (2005-2015a, 2005-2015b) as summarized in Table 1. Accordingly, throughout the world, in 2005, the highest share of the construction employment within the overall employment has been observed in Ireland (12.56%), Spain (12.27%), and Portugal (10.98%) whereas the lowest share has been observed in Israel (5.09%), Netherlands (5.89%), and Sweden (5.91%) (OECD, 2016a, 2016b; Labour Market Statistics, 2005-2015a, 2005-2015b). Furthermore, in 2015 throughout the world, in 2005, the highest share of the construction employment within the overall employment has been observed in Denmark (9.65%), G7 (6.97%), New Zealand (9.45%), Slovak Republic (8.81%) whereas the lowest share has been observed in Netherlands (4.83%), Slovenia (5.77%), and Switzerland (5.84%) (OECD, 2016a, 2016b; Labour Market Statistics, 2005-2016a, 2005-2016b) (Table 1). In the last decade (2005-2015) the highest percentage increase in the construction employment occurred in Estonia (1.74%), Poland (1.53%), Canada (1.3%), Belgium (0.56%), Finland (0.32%), Chile (0.29%), Australia (0.23%), Austria (OECD, 2016a, 2016b; Labour Market Statistics. 2005-2015a, 2005-2015b) (Table 1).

Developing countries’ share in the global construction output tends to increase. In 1965 developing countries’ share in the global construction output was 10% whereas their share increased to 23% in 1998 (Building Economics Research Unit [BERU], 1972; ILO, 2001, p. 8). Emerging markets and Asia are important markets for the construction industry, and their global market share is expected to increase (DEFRA, 2013, p. 7).