## **World Construction Market**

Ben-Zion Iliev

Master's student, International Finance Faculty, Financial University, Moscow, Russia magistrafu@qmail.com

## **Abstract**

Construction sector involves a lot of counterparties and influence of the whole national economies. In one construction project (for example, business centre) involves a huge number of different companies — from extraction (elements for cement) to project management and design. And, as a consequence, the importance of the construction sector is not only related to its size but also its role in economic growth. There is evidence of the existence of a very strong relationship between construction activity and economic growth. Leaders of the global construction market — USA, China and the European Union. Partially, it depends on the national economy, but there is a list of additional points — management efficiency, construction technology, skills availability, and so on.

Keywords: construction, innovation, project management, global market.

onstruction is an important part of the development and modernisation process. ✓ Increased spending in the construction sector does stimulate economic growth, like in any other sector. The construction sector deals mainly with the provision of capital infrastructure, which has an impact on economic growth. The delivery of such infrastructure creates significant employment opportunities for the population, which generates further investment in other sectors of the economy through the multiplier effect. [1] So, it means that construction has an indirect link with economic growth, but the construction sector (through government purchases) might be a solution for the financial crisis — a shining example of what — the Great Depression and large government purchases (investments in infrastructure).

Nowadays, this market is also supported by low interest rates. [2] Low rates stimulate construction spending across all segments with cheap mortgage rates supporting private new housing activity and governments' continued willingness to stimulate their economies through increased infrastructure spending (see Fig. 1).

The European economy has continued to move forward with what has become a more

broad-based and stronger economic expansion. Real GDP increased by 2.8 per cent in 2017 while investment in construction rose by 3.8 per cent in the EU-27 area. Investment in the euro area grew at its highest pace since 2007 and is showing signs of a broad-based pick-up across countries. The Investment Plan for Europe ("the Juncker Plan") is also expected to continue supporting investment while rising incomes bode well for construction investment. The purpose of "the Juncker Plan" — maintain and increase the level of investments in the EU. The Investment Plan for Europe has three objectives: to remove obstacles to investment, to provide visibility and technical assistance to investment projects and to make smarter use of financial resources. This program has a lot of advantage for different counterparties. Fraport project in Greece, which has the aim to upgrade 14 regional airports. First of all, Greece will get a new infrastructure. It helps increase the tourism sector and infrastructure convenience for citizens. Secondly, national companies earn some profits from this project and, through the effect of multiples, it will motivate other sectors of the economy. [3]

The US construction industry is among the world largest, with annual expenditures of over

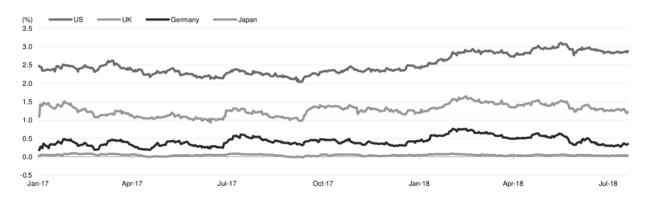


Fig. 1. Interest rates of 10-year government bonds.

Source: Bloomberg, 2019.

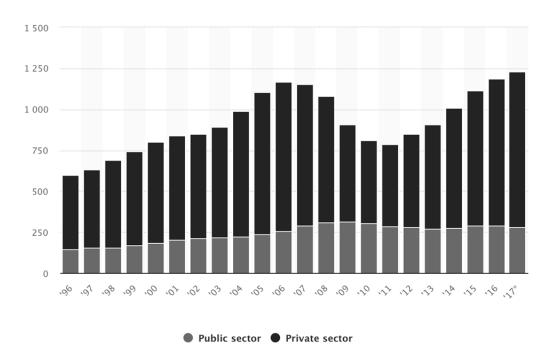


Fig. 2. Construction spending in the USA (in bln. dollar).

Source: Census Bureau, 2017.

\$ 1,231 bln. in 2017. These expenditures are distributed between the public and private sectors. Private sector — \$ 951 bln. and public — \$ 280 bln. Construction projects are taking place all over the country, making the industry's outlook a positive one (see Fig. 2).

2017 saw construction spending hit an all-time high in the United States and the consensus from several industry experts and consultants is that the momentum will carry through in 2018. However, ever since the construction industry began recovering from the Great Recession, it has wrestled with issues around labour shortages. Given the recent reduction in the corporate tax rate, a key development that remains to be seen is if construction firms will invest savings

into creating additional training programs to facilitate more workers entering the industry or by increasing wages to attract further workers.

The tariffs of 25 per cent on steel imports and 10 per cent on aluminium imports will take effect on the whole USA economy. The Trump administration will place quotas or volume limits on other countries such as South Korea, Argentina, Australia and Brazil instead of tariffs, he said. The price of steel and aluminium products will go up, so profit margins of construction companies will be squeezed. Also, project costs will rise as rebar, and steel beams for bridges or multistory structures become more expensive. And steel and aluminium components used by heavy equipment manufacturers will see prices

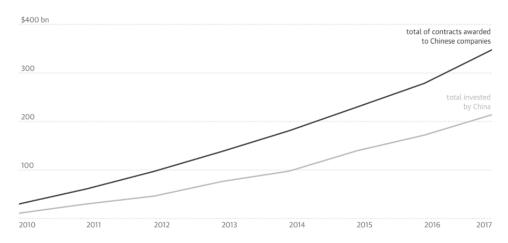


Fig. 3. Chinese investments in "one belt, one road" project.

Source: National Bureau of Statistics of China, 2018.

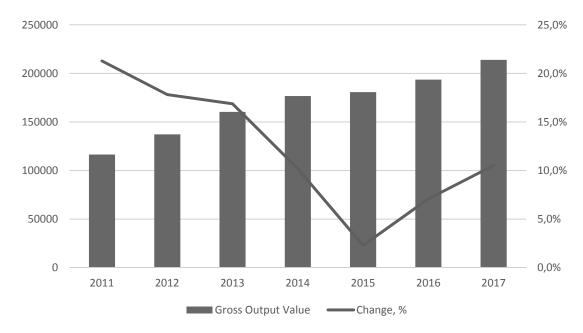


Fig. 4. The gross output value of construction in China (in 100 mln. yuan).

Source: National Bureau of Statistics of China, 2018.

increases, so machines an aggregate will cost more to produce, a cost these manufacturers may pass along to customers.

Chinese region is also interesting to global construction market observation. China is pushing ahead with major infrastructure investments along the route of the old Silk Road. It is driving construction as well as providing a stimulus to some of China's sluggish stateowned enterprises, setting China on a growth path that is stronger for longer. This new mega project called "one belt, one road" stretches from China to Europe. It is a heavy construction and engineering feat with highways, high-speed rail, logistics and technology. Its impact on construction is equivalent to another Chi-

nese economy at the start of its rapid expansion. [4]

Over the five years since President Xi Jinping announced his grand plan to connect Asia, Africa and Europe, the initiative has morphed into a broad catchphrase to describe almost all aspects of Chinese engagement abroad. Belt and road is a "21st-century silk road" confusingly made up of a "belt" of overland corridors and a maritime "road" of shipping lanes. From South-east Asia to Eastern Europe and Africa, belt and road include 71 countries that account for half the world's population and a quarter of global GDP.

The belt and road initiative is expected to cost more than \$ 1 tr, although there are different es-

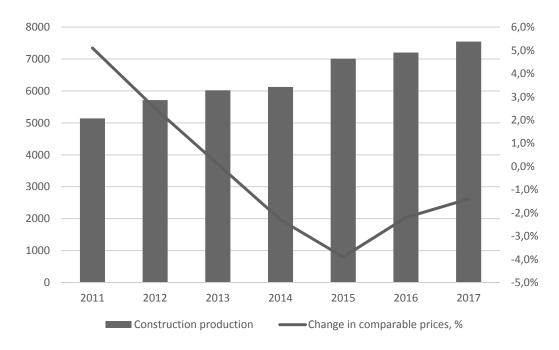


Fig. 5. Construction production in Russia (in bln. rub.).

Source: Rosstat, 2018.

timates as to how much money has been spent to date. According to one analysis, China has invested more than \$ 210 bln., the majority in Asia. But China's efforts abroad don't stop there. Belt and Road also mean that Chinese firms are engaging in construction work across the globe on an unparalleled scale. Chinese companies have secured more than \$ 340 bln. in construction contracts along the belt and road (see Fig. 3).

China's construction industry has seen rapid expansion since the country began to implement the reform and opening-up policy in 1978, data showed. The value-added output of the sector reached 5.57 tr yuan in 2017, compared with only about 13,9 bln. yuan in 1978. The average annual growth rate was 16.6 per cent. The value-added output of the industry accounted for 3.8 per cent of the country's GDP in 1978, while the proportion rose to 6.7 per cent in 2017. The companies contributed significantly to the country's infrastructure expansion. In 1978, China only had 52,000 km of railways in operation, while the length increased to 127,000 km by the end of 2017, including 25,000 kilometres of high-speed railways. As we said above, infrastructure projects, such as "One Belt, One Road" helps the Chinese construction sector maintain high and stable growth.

As for the Gross output value of construction production, there are also great results during

2011–2017. Value is increased by 183 per cent% in this period; it is about 10.7 per cent of annual average growth. Fig. 4 shows that changes in gross value year-to-year were almost double-digit each year. And gross output value in 2017 was higher than 20 tr yuan.

The future development of the construction sector might also be bright — the reason for that — plenty of infrastructure projects in Chine. For instance, the south-north water transfer project will try to solve the problem of water availability in the north of China. China has funded construction of three huge canals, each more than 600 miles long and carrying water to the north from China's three largest rivers. The project has a 48-year construction schedule. When completed, it will supply 44.8 billion cubic meters of water each year. Also, the Chinese government invested in infrastructure upgrades, such as Beijing airport expansion. The airport's first phase was completed in time for the 2008 Olympic Games. Further expansion is scheduled for completion by 2025.

The last, but not the least market for review is the Russian construction market. The construction industry in Russia is experiencing particular difficulties in the current economic situation. There are increased demand for resources, increased construction costs, as well as reduced demand. Even though the peak of the

crisis passed in 2016, its negative consequences have remained at the moment.

From 2014 to 2018, there was a trend towards a decline in the real incomes of the population. Under these conditions, developers are forced to focus their efforts on completing started projects.

According to Rosstat, construction production in actual prices increased by 47 per cent in 2011–2017, it is 6.6 per cent annual average growth. But after 2014, there is a decrease in production in comparable prices year-to-year (see Fig. 5). And 2017 also showed a decrease with the value of –1.4 per cent to the previous year. [5]

To sum up, the construction sector is a large item in the world economy and GDP. Above we reviewed main markets and each region has pe-

culiarities. Each region has specific trends and risks, but there are some common — shortage of skilled labour, for example. And in short-term companies have to unity. Only a world union can solve this problem. Of course, this problem can't be solved in one or two years, but gradual steps and planned investments might overcome the situation. Also, nowadays, there are sixth Kondratieff waves. We can't say exactly when it begins, but new waves can give new strong positive trend for the construction market. The wave might bring new technologies for intensive growth. The main aim of construction companies — feel the current market situation and investment in insight. Insight department can be a real force for future growth and competitive advantage.

## References

Lopes, J., Balsa, C. (2011). The long-run relationship between the construction sector and the national economy in Cape Verde. International Journal of Strategic Property Management, 15(1), 48–59.

International construction market survey 2018. London: Turner & Townsend. 2018. 105 p.

Li, F., Liu, S. (2016). The lack of construction labour in China and its impact. Construction Economics, 36(2), 18–21.

National Bureau of Statistics in China. Official site [Electronic source]. URL: http://www.stats.gov.cn/english/. Russian Federation Federal State Statistics Service. Official site [Electronic source]. URL: http://www.gks.ru.

## Мировой строительный рынок

Бен-Цион Илиев

студент магистратуры, Международный Финансовый Факультет, Финансовой университет, Москва, Россия

Аннотация. Цель статьи — оценить прочность и эффективность связи между динамикой строительной деятельности и экономическим ростом. Будучи основным инвестиционным сектором, строительство может потенциально положительно воздействовать на экономический рост даже в коротком промежутке времени. Автор показал, что успехи лидеров мирового строительного рынка — США, Китая и Евросоюза, несмотря на национальные особенности их экономик, обусловлены, прежде всего, высокой эффективностью управления, применяемыми современными технологиями строительства и инновационными строительными материалами.

Ключевые слова: строительство; инновация; управление проектом; мировой строительный рынок