PART 2

06

Impacts of COVID-19 Pandemic on Turkish Construction Sector

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Crisis and Fragility:
Economic Impact of COVID-19
and Policy Responses

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1. Introduction

Since the outbreak of the COVID-19 pandemic, the global economy faced an unexpected and unprecedented crisis as production halted or severely decreased in several locations, international trade of goods services in many sectors were seriously affected, and mobility of people within and across countries almost stopped. No country around the globe has been able to escape from the negative consequences of the pandemic; albeit in varying levels, depending on the readiness of their health services, structure of their financial systems, social and economic policies followed during the pandemic, etc. At the sectoral level, while a few industries such as online trade, information technologies and so on, benefited from these developments, most of the sectors have been severely hit by the crisis, most notably tourism, wholesale and retail commerce, manufacturing, social and personal community activities, construction and real estate activities.

The Turkish economy has also been experiencing serious impacts of the pandemic, reflected by the slowdown of GDP growth, serious depreciation in Turkish lira which does not adequately channel into rise in exports, and sharp declines in tourism revenues. Recent reports on Turkey's 2020 GDP growth foresee the Turkish economy to contract by around 5 percent (see, for example, IMF, 2020; Moody's, 2020). This study focuses on the

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impacts of the COVID-19 pandemic on the construction sector in Turkey, by summarizing the effects of the pandemic on Turkish economy, the role of the construction sector and interpretation of the latest developments in the sector with the recent data.

2. Impact of the pandemic on Turkish economy: Early studies

In the course of the COVID-19 pandemic, several studies have been carried out in order to analyze and estimate the impacts of the pandemic on different sectors of Turkish economy. Due to the limitations of data in such a short period of time, these studies developed a set of assumptions based on observations and inferences. The first detailed study to examine the effects of the pandemic on production and employment in different sectors of Turkish economy was conducted by Taymaz (2020). By using the Input-Output and Supply Use Tables, Taymaz (2020) found that the Turkish economy may experience a shrinkage between 3.2 percent and 12 percent annually according to different scenarios. Özatay (2020), on the other hand, has found that the economy can be exposed to a shock wave that will create a contraction of up to 32 percent.

In their macroeconomic outlook for the Turkish economy, Fitsch (2020) took the global demand collapse in the production process, into consideration and expected a contraction in national income in 2020 by 3.4 percent. Fitsch forecasts that the demand for Turkey's exports will decline by 40 percent, while the balance of payments will deteriorate moderately. In parallel with this, the IMF's World Economic Outlook report (2020) expects that the contraction in the world economy would be 3.7 percent, while contraction in the Turkish economy is expected to be around 5 percent.

The study by Bayar et al. (2020) followed a different path and focused on households and used the micro data of the Income Living Conditions Survey of TURKSTAT. This study determined how each sector could be affected by assigning an "impact value" to each sector based on various observations and estimations, in a range of 1 to 5, where 1 is "Very Bad" and 5 is "Very Good". For different scenarios, Bayar et al. (2020) estimated that employment level would fall from 45.6 percent to a range of 43.4 percent to 37.8 percent, the share of the poorest 20 percent of the society in total income would fall from 6.5 to 5.6 percent and income distribution would deteriorate significantly.

The general equilibrium analysis of the COVID-19 pandemic on Turkish economy by Voyvoda and Yeldan (2020) shows that the first (upon-impact) economic effects of the restrictions due to the COVID-19 outbreak will be an contraction of 26.7 percent per annum in national income, a decrease in total employment by 22.8 percent, from 28.2 million to 21.8 million, where the unemployment rate would increase from the 2019 average of 14.2 percent to 33.7 percent. There will be a significant fall in household private disposable income, leading to a decrease in total private consumption expenditure demand. Besides, investment expenditures are estimated to contract by 66.7 percent. Due to unfavorable conditions in the global markets, the expected loss in total export revenues is 27.8 percent, and the decrease in import demand is 29.5 percent. A study conducted by Voyvoda and Yeldan (2020) expects a depreciation in the Turkish lira at a level over 30 percent.

3. Construction Sector in Turkey

The construction sector has been playing an important role in growth and has been seen as one of the driving forces of the Turkish economy in the last two decades. With the implementation of the IMF stabilization program between the end of 2001 and 2008, an emphasis has been put on construction of infrastructure, which was followed by a general growth in the construction sector as a whole. The present government that came into power in 2002 also gave significant importance and provided important privileges to the construction sector. Hence, the sector has indeed been one of the important determinants of economic growth, especially in the period from 2002 to the 2008 global crisis. According to TURKSTAT (2020) data, the construction sector grew by 17.3 percent in real terms in the 2002-2007 period, increasing its share in GDP from 4.5 percent to 6.8 percent. The sector, which contracted in 2008 and 2009, later experienced a rapid recovery and recorded a higher growth than GDP with an average real growth of 11.1 percent between 2010 and 2017. In 2017, the share of construction activity in GDP reached 8.6 percent. However, the sector experienced a significant contraction in real terms in 2018 and 2019 due to factors such as the increase in the exchange rate, global economic uncertainties, increasing foreign trade protectionism, and savings policies in public expenditures. The total production level of the construction sector in 2019, at current prices, is approximately 232 billion TL, and its share in GDP is 5.4 percent. However, considering the contribution of other sectors that provide input to the sector and continue their activities depending on the developments in this sector, the share of the construction sector in GDP is around 30 percent (INTES, 2020).

In addition to having a strong presence in the domestic economy, the Turkish construction sector has been in the process of becoming an important actor in international markets. To meet the requirements of the IMF and keep up with globalization, Turkey has liberalized its economy in many aspects and introduced several policies that promote greater trade openness. These developments were projected in the growth of the construction sector both through expanding the market for it, thanks to trade liberalization, and by increasing its competitiveness, thanks to macroeconomic stability. On top of all that, the government granted an immense amount of subsidies to support the sector's chances of reaching international standards. As a result, the Turkish construction sector secured a strong presence in the Middle East, Africa, Russia, and other CIS countries, especially in the last decade. As of now, Turkish construction firms offer various types of construction services through increased skills and cooperation with leading international firms (Düzgün-Öncel, 2019: 163-4).

The construction sector, along with being a significant component of Turkey's GDP, creates large levels of value-added and, as a result of being a labor-intensive sector, contributes to the economy by bringing about major employment opportunities. As of now, there are 1.3 million employees in the construction industry in Turkey, which makes up to 5.2 percent of total employment (TURKSTAT, 2020). Along with these, it is a sector in which intersectoral relations are quite intense and, therefore, it is a sector which contributes to economic growth both through its direct effects and through interactions with other sectors. It is worth noting that the finished products of the construction sector are considered to be investment goods, thus, these goods are not only used for their functions but for the creation of other goods and services. Each activity carried out in the construction sector can affect other related sectors due to its relationship with the inputs used in the production process. The sector, due to its input-output relations with more than two hundred other sub-sectors in Turkey has wide effects on value added and employment in the Turkish economy. The construction sector is largely based on national capital and labor, as well as playing contributing to Turkey's international trade and also playing a notable role in the global value chains (Küçük and Tekçe, 2020). However, this closely tied relationship between the construction sector and economic growth, increases the sector's susceptibility to volatile macroeconomic conditions. This is why the crushing economic effects of the COVID-19 pandemic have been more apparent in the construction sector than in many others.

4. Impact of COVID-19 on the Construction Sector in Turkey

Because of the COVID-19 pandemic, the construction sector has been getting serious hits all around the world through closing of construction sites, cancellations of projects, supply chain disruptions, and cash stagnations. As the construction sector is linked to over two hundred sub-sectors, any disturbance in one of them is expected to create a ripple effect in the construction sector. In Turkey, not so different than in many other developing countries, construction takes up an especially important part of the economy. Therefore, aforementioned disruptions in the sector have caused a greater negative overall impact than they would have in a less dependent, more developed economy.

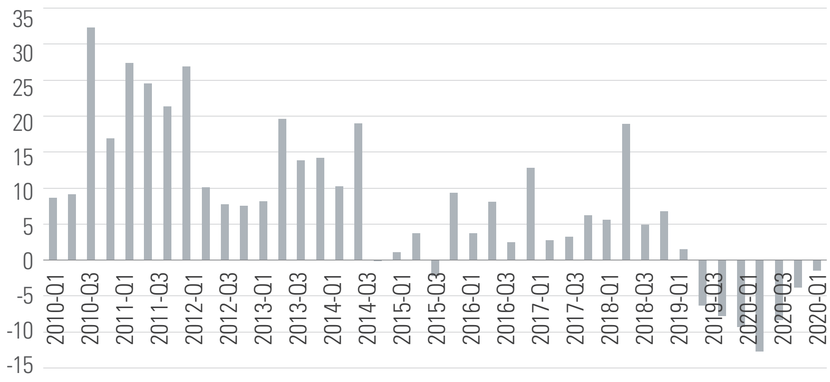
When we evaluate the above-mentioned studies about the impacts of the pandemic on Turkish economy with a focus on the construction sector, we see that all studies report and expect serious losses in the sector. For example, Bayar et al. (2020), in their "impact value" of the pandemic to each sector, in a range of 1 to 5, label the impact of the COVID-19 pandemic on Turkish construction sector as 1 - "very bad". The study expects very serious production and employment losses in the construction sector in the course of the pandemic.

According to Voyvoda and Yeldan (2020), construction is among the top five sectors that will experience the highest real production contraction relative to 2019 by sectors along with accommodation and food services, tourism, air transport and iron and steel, with an expected fall in real production of 48.75 percent. They estimate that private consumption expenditures fall by 22.26 percent and exports fall by 47.77 percent. Voyvoda and Yeldan (2020) stress that, if a labor-income support policy is implemented, the decline in production in the construction sector will be limited to 21.53 percent.

As a matter of fact, the construction sector in Turkey has already been experiencing hardships in the last few years, resulting in its negative growth rates, and 2020 has been no exception. Figure 1 shows that the sector contracted by 1.5 percent in the first quarter of 2020. The interesting part of this is that the overall economy and many sectors grew in the first quarter of the new year. The only sub-sector to shrink was the construction sector. Thus, the construction sector shrank seven quarters in a row. As the problems arising from its own dynamics that lead to shrinkage in the construction sector continue, let alone the external shocks due to the COVID-19 pandemic, the sector is expected to shrink in the rest of the year.

Another point worth noting is that in the recent years, the relationship between the construction sector and economic growth started to fade away. The positive relationship between the construction sector and the overall growth of the economy first weakened and then a significant break occurred. Table 1 shows that in 2018, while the economy grew by 2.8 percent, the construction sector contracted by 2.1 percent. In 2019, while the economy grew by 0.9 percent, the construction sector contracted by 8.6 percent. In the first quarter of 2020, the economy grew by 4.5 percent, but the construction sector shrank by 1.5 percent. The divergence between the sector and economic growth is getting stronger.

Figure 1.
Growth rate of construction sector (%)



Source: TURKSTAT (2020)

Table 1.
Growth rates of construction, real estate and GDP (%)

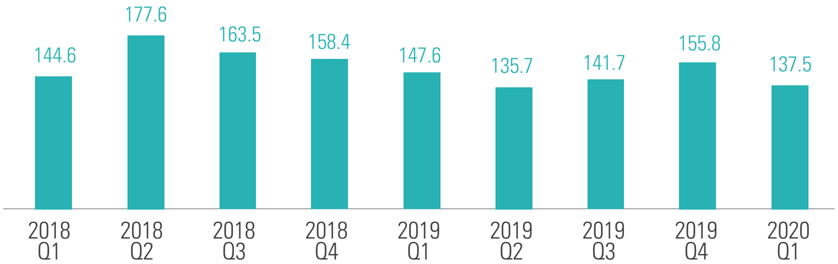
Period	Construction	Real Estate	GDP
2016	5.4	3.6	3.2
2017	9.0	2.3	7.5
2018 Q1	6.8	3.8	7.4
2018 Q2	1.5	0.8	5.6
2018 Q3	-6.3	2.3	2.3
2018 Q4	-7.8	4.8	-2.8
2018	-2.1	2.9	2.8
2019 Q1	-9.3	1.6	-2.3
2019 Q2	-12.7	2.7	-1.6
2019 Q3	-8.3	2.4	1.0
2019 Q4	-3.8	3.1	6.0
2019	-8.6	2.5	0.9
2020 Q1	-1.5	2.4	4.5

Source: TURKSTAT (2020)

Despite how valuable the construction sector is to the public and to the government, construction expenditures shrunk substantially this year. Figure 2 depicts that in the first quarter of 2020, construction expenditures decreased by 6.8 percent at current prices compared to the same quarter of the previous year and were realized as 137.5 billion TL. Considering the annual increase in construction costs, construction expenditures contracted by 19 percent in real terms. In April, construction jobs experienced a very sharp contraction with the effect of the COVID-19 outbreak. The level of construction works dropped by 36.4 points in April compared to the previous month, the result of the cessation of many economic activities. In May, a gradual return to economic activities began. Accordingly, employment levels in the construction sector increased by 5.0 points in May, followed by an increase of 19.1 points in new business orders received by the sector in June and 21.5 points increase in July (TURKSTAT, 2020).

Figure 2.

Construction expenditures



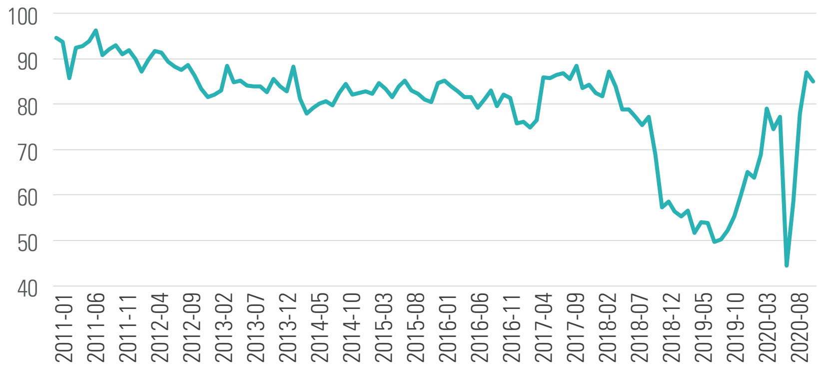
Source: TURKSTAT (2020)

When we observe the levels of international trade for inputs of production of the construction sector, the story remains more or less the same. Exports of construction materials declined significantly in May. In May 2020, exports of construction materials decreased by 42.3 percent compared to May of the previous year and decreased to 1.27 billion dollars. The sharp monthly export drop in May was due to the effects of the COVID-19 outbreak. The isolation measures, which were put into force as a result of the COVID-19 outbreak, negatively affected exports. In May, with the negative effects of the COVID-19 pandemic, imports fell by 28.1 percent compared to the same month of the previous year and decreased to 465 million dollars. Despite the increase in imports of construction materials in the first quarter of the year, the effects of the COVID-19 pandemic in the April-May period led to a sharp contraction in those imports. The upward trend in imports of construction materials will depend on domestic construction activities and is not expected to be realized soon.

Starting from May 2020, two factors helped the construction sector to make a rapid recovery: (i) relative easing of the quarantine measures and controlled return to economic activities thanks to lower numbers of COVID-positive cases, and (ii) historically low interest rate policy of Turkish government and the Central Bank that makes it more advantageous to access housing loans. These two factors combined, construction sector confidence index significantly improved from May to August 2020, but declined again in August mainly due to sharp currency depreciation in that month and increasing concerns about a second wave of COVID-19 quarantine measures (Figure 3).

Figure 3.

Construction sector confidence index (seasonally adjusted)

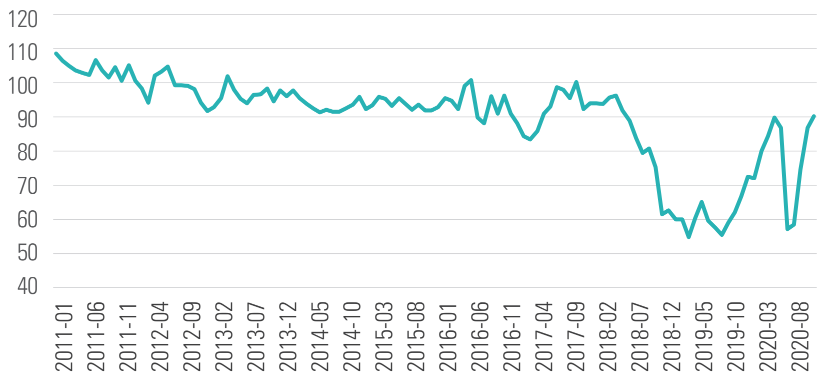


Source: TURKSTAT (2020)

Figure 4 below shows the building activity over the past three months, which is an index based on individual questions concerning the construction sector tendency, and tells a very similar story. The sector entered a crisis period in mid-2018 as the building activity declined sharply. Its recovery after June 2019 faced a sudden stop and fall when the COVID-19 pandemic hit the economy. With normalization of the economic and social life after May 2020, the construction sector has largely returned to its activity that reached and exceeded the pre-COVID-19 period.

Figure 4.

Building activity over past three months (seasonally adjusted)

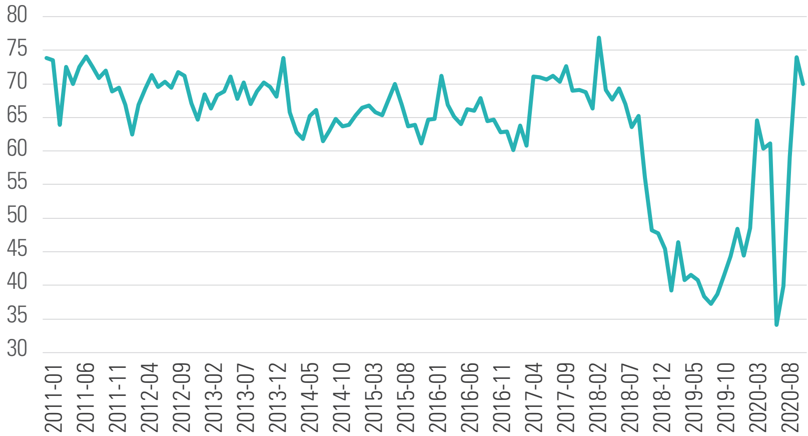


Source: TURKSTAT (2020)

New job orders received in the construction sector (Figure 5) also fell sharply during the first months of the COVID-19 outbreak, rapidly recovered when the two factors mentioned above, normalization and favorable interest rates, fueled the sector, but the latest data reveals a downward trend, similar to Figure 3. Although it is positive that in addition to the return to existing jobs, new job orders increased in the sector, it is early to claim that the construction sector fully recovered from its crisis as it is very likely that the expected second wave of the pandemic may create a downward trend in the sector.

Figure 5.

Current level of orders in construction sector (seasonally adjusted)

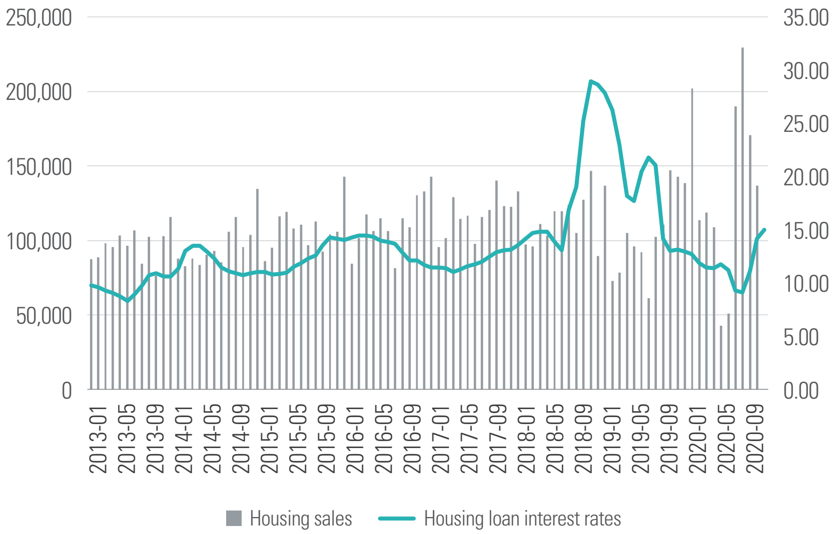


Source: TURKSTAT (2020)

Figure 6 shows the housing sales (left axis) and housing loan interest rates (right axis). When we examine housing sales, we see a rather interesting figure – a decline in housing sales since January 2020, reaching extremely low levels in April and May 2020 with the impact of the COVID-19 outbreak and the restriction measures. This was followed by a historical jump to unprecedented levels until July 2020. Similar to the previous figures, both the return to economic and social life started and very low interest rate housing loan campaigns fueled these housing sales. The Association of Turkish Construction Material Producers expects that housing sales will normalize in the coming months (IMSAD, 2020: 7).

Figure 6.

Housing loan interest rates (%) housing sales (billion TL)

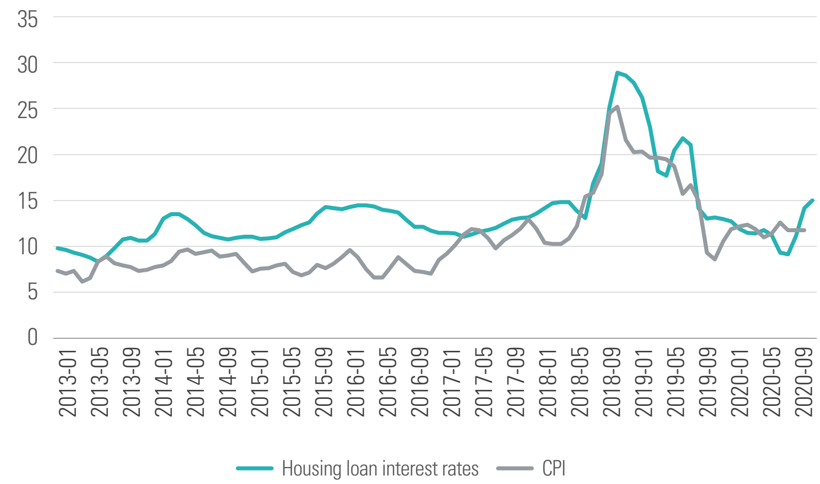


Source: Central Bank of Turkey (2020)

Construction of houses is a very important driving force of the Turkish construction sector. There exists a significant new housing stock, and as they are sold, new housing constructions gain momentum. In order to understand the boom in sales after May 2020 depicted in Figure 6, we need to talk about the interest rate policy of the Central Bank of Turkey and the resulting credit boom. With the COVID-19 outbreak, housing sales, which were already stagnant for some time, sharply declined. As a policy response to that, the government started campaigns to make mortgage loans more attractive and followed a negative real interest rate policy, and this revitalized housing sales. Figure 7 below illustrates housing loan interest rates and consumer price index (CPI) in Turkey in the last five years. As seen in the figure, before May 2020, there were very few periods where housing loan interest rates are lower than the CPI (in other words a negative interest rate) and in those periods the difference between interest rates and CPI was very small. However, between May and July 2020, the housing loan interest rates have been cut as low as around 9 percent while CPI has been around 12 percent. This unprecedented favorable interest rate led to the steep increases in housing loans which naturally reflected to the aforementioned rise in housing sales in those months (Figure 6). However, the increase in loan interest rates above the CPI level after August 2020 led to an immediate sharp fall in housing sales. This is a clear indicator showing that the upward trend in housing sales, and thus in the construction sector, was mostly a result of very low rates of interest, and with non-negative real rates, the negative impacts of both COVID-19 pandemic and other adverse economic conditions become more visible.

Figure 7.

Housing loan interest rates and consumer price index (%)



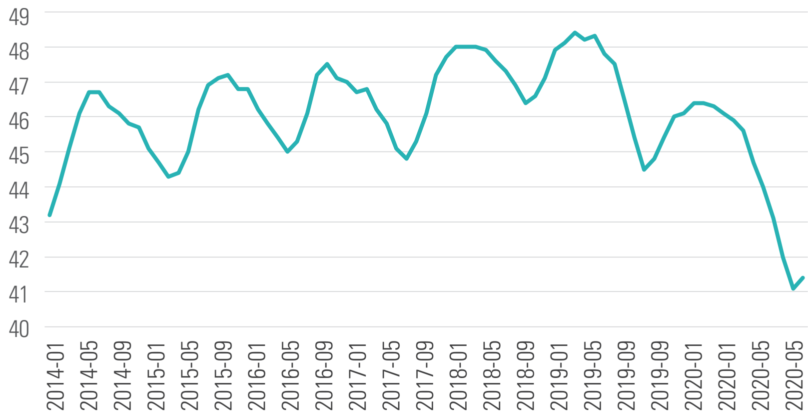
Source: Central Bank of Turkey (2020)

Fast policy response to the construction sector that was shaken by the COVID-19 pandemic led to a quick recovery and created optimism in the sector reports (see, for example, the July report of the Association of Turkish Construction Material Producers, IMSAD, 2020). But, as the same report stresses, it is more important to have a healthy and stable recovery in the sector. With the gradual decrease in this policy support in the coming months, the construction sector will continue its activities with its own dynamics and this will bring a normalization after a rapid recovery in the construction sector activities (IMSAD, 2020: 3).

5. Impact of COVID-19 on employment

COVID-19 pandemic has affected the Turkish economy in numerous ways, one of which through employment. In Turkey, according to the official records, unemployment has increased by 0.1 percent in May 2020 compared to May 2019. This figure may look reasonable, but severely, total employment has decreased by more than 2.4 million people which reduced employment rate to 41 percent from its 2019 level of 45.5 percent. Figure 9 shows the development of employment rate in Turkey since 2014. We see that in the last year, the number of employed people decreased by 308 thousand in the agricultural sector, 274 thousand in the manufacturing sector, 206 thousand in the construction sector, and 1.6 million in the services sector. With the negative developments caused by the pandemic, it is no surprise that labor force participation in Turkey, which was already lower than the OECD average, fell from 52.9 percent in May 2019 to 47.6 percent in May 2020 (TURKSTAT, 2020). In other words, the official unemployment rate of 12.9 percent (in May 2020) does not reflect the labor market situation in Turkey precisely as labor force participation and employment rates are at record-low levels due to very high levels of discouraged workers, who are not counted as unemployed.

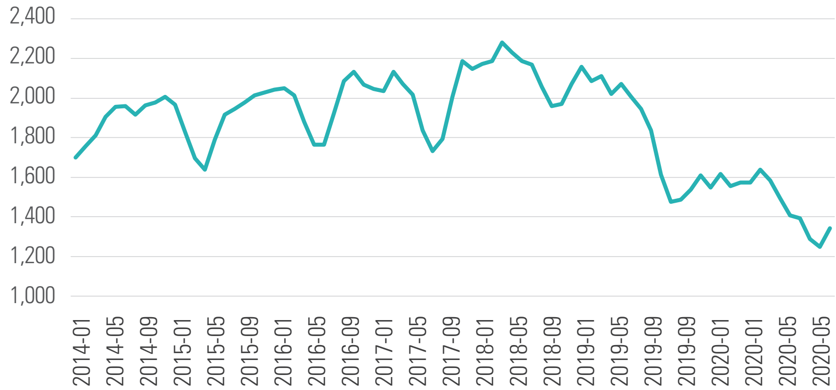
Figure 8.
Employment rate in Turkey (%)



Source: TURKSTAT (2020)

Employment in the construction sector has been hit by the pandemic, but as explained above in this paper, the sector was already facing hard times since mid-2018. Employment in the sector fell from April 2018 to January 2019 by around 670 thousand. After a period of constant level of employment, the sector experienced another steep decline after October 2019, where employment fell from 1.64 million to 1.25 million only in six months (Figure 9). Some of this decline is caused by the pandemic, as reflected in the figures about the sector above.

Figure 8.
Employment in the construction sector (thousand)



Source: TURKSTAT (2020)

6. Conclusion

COVID-19 pandemic has been shaking the global economy since March 2020, and although a recovery has been experienced during the summer months, it is expected that in the coming months the pandemic will hit a second wave and global production and supply chains will be harmed again. The countries who took early, appropriate and strong policy measures will be less affected than the others. Turkey is no exception; although Turkey has not been one of the very badly affected countries like USA, Brazil or Italy, its economy has significantly contracted during the pandemic. The construction sector has been one of the worst affected sectors of

Turkish economy. The recent data about the sector makes it clear that the construction sector was already in the course of a decline, but the negative conditions of the pandemic both in domestic and international markets made this decline steeper.

The policy response of Turkish policymakers to the crisis in the construction sector was lowering interest rates, reaching negative real rates for housing loans. This policy, combined with relative normalization of social and economic life during the summer led to a rapid upturn in the sector and increased optimism about the near future. However, limiting the policy response only to monetary measures would be ineffective and even harmful. In fact, this measure could be used for a very short period and when the loan rates came back to the CPI levels, housing sales experienced a sharp decline. Historically low interest rates made Turkey very vulnerable to exchange rate shocks; between June and the end of August, Turkish lira depreciated more than 10 percent against US dollar, making imported raw materials and intermediate goods that the construction sector depends on more expensive. In this respect, current policy measures in the construction sector may only be effective in the short term.

The sector needs sustainable policy measures, as soon as possible, in order to cope with the economic shocks of the COVID-19 pandemic, limiting the economic policies to the sector with lowering interest rates would be very short-sighted, further stimulus packages are urgently needed. As the employment statistics analyzed in this paper reveal, the construction sector lost around one million workers in the last two years and it would be reasonable to expect further losses as the situation worsens because of the pandemic. As the sector requires policies that give rapid results against the pandemic shocks, policies like debt restructuring and rescheduling to construction firms and income transfer policies to construction workers could create a better protection shield to the sector against the economic implications of the COVID-19 pandemic.

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