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REFLEXES OF TURKISH CONSTRUCTION INDUSTRY AGAINST FINANCIAL CRISES AND MORTGAGE

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ABSTRACT

The developing and growing construction sector has provided the development and development process of the necessary investment programs in our country, with rapid population growth and urbanization, and especially with the increase in public investment expenditures. Adopted neoliberal policies have brought with them a capital-centered transformation in cities, and have been the locomotive source of economic growth in Turkey since the 1980s. The economic crisis that started in the United States of America in 2008 affected all other sectors, directly or indirectly, the real estate and banking sector, all over the world. In the markets, large-scale capital movements were transferred to developing countries. From the financial sector to the real sector, the impact of the global crisis was felt. There have been financial and bank institution bankruptcies. There have been serious decreases in the housing price index and global growth rates in the world. As of 2005, the data of the real estate sector, which draws a constantly rising curve in Turkey, entered a period of stagnation and then recession with the global crisis. The sector has an accelerating effect on the growth and contraction of economies. For this reason, it was desired to take advantage of the accelerating effect of economic growth by being active in the sector with the power of the state. The construction-real estate sector in Turkey is predominantly residential. The housing constructions produced have created a new climate for the sector, especially for middle income groups, especially TOKI, due to reasons such as high quality,

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cheap and low bank loan interest rates such as TOKI etc. Therefore, its activities have increased after the 2000s. The steps taken and the instruments used must be effective towards ensuring financial stability. Basically, the Central Bank of the Republic of Turkey divides it into functional tools and monitoring tools. In general, identification and monitoring tools are used to monitor and prioritize systematic risks. They try to support their decisions by revealing the risks to the policy makers in time and cross-section. They use market conditions indicators, risk indicators in the system, fundamental imbalance indicators and macro stress tests. In general, the purpose of functional tools is to prevent systemic risk. As a result of this situation, the effect of housing demand and construction investments according to expectations has become very important to the country's economy and operating banks.

Keywords: Construction & Management, Construction Risk-Crisis, Economy-Finance, Sustainable Strategies, Construction R&D & Innovation

INTRODUCTION

“The word crisis, whose etymological origins are based on Latin and Greek, is used synonymously with concepts such as depression and depression in the field of sciences, and in the face of an unexpected social, economic or psychological development, normal relations are severely shaken, in solving the problem encountered, the situations that arise as a result of the inadequacy of the existing solutions. used to express” (Işık, 2011). Various developments in the current globalizing world can affect companies in the short, medium and long term. These developments can occur suddenly as well as during the process. The process of turning into a crisis: if there is a reactionary situation that threatens its assumptions, if the existing values, mechanisms, goals become insufficient, if the adaptation and prevention mechanisms of the company become insufficient, which are unanticipated, unexpected, need to be responded quickly and effectively, the emergency sirens sound. “Financial crisis is a term commonly used when financial institutions or investment vehicles suddenly lose most of their value. Many financial crises and recessions in the nineteenth and twentieth centuries arose due to panic in the banking sector. Other situations called financial crisis are the bursting of financial and real estate bubbles, collapse in stock markets, currency crises and other crises” (Dzikevicius A., Zamzickas M., 2009). “Systemic financial crises can be defined as a shock that emerges in the financial system and disrupts important functions of the system such as asset valuation, loan allocation and payments, while

at the same time having broad effects on the real economy. Such crises occur as a result of foreign exchange and interest shocks and general economic stagnation, there are also liquidity problems on the basis of it, there is definitely a diffusion process and require state intervention. (Duygu A., 2003). (Figure 2).

Global Neoliberalism

The basic products of the construction industry are generally infrastructure, buildings, mixed structures, etc. are immovable items. Therefore, in the past, the construction industry was considered a local industry. The construction industry has also taken its share in the rapidly internationalizing world with the benefits of popular globalization. The most critical pillar of creating a capital pool on city lands is the orientation of the spatial policies of neoliberal change, transformation and development.

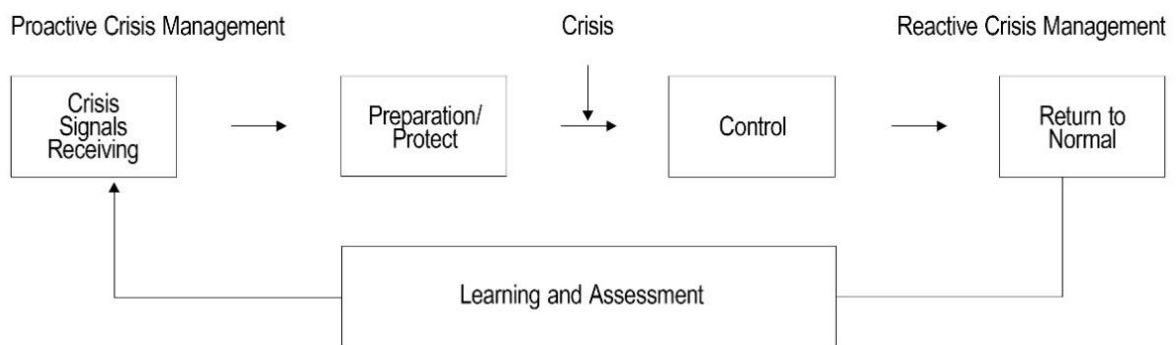


Figure 1: Crisis Management Process (Mitroff, Pearson, 1993)

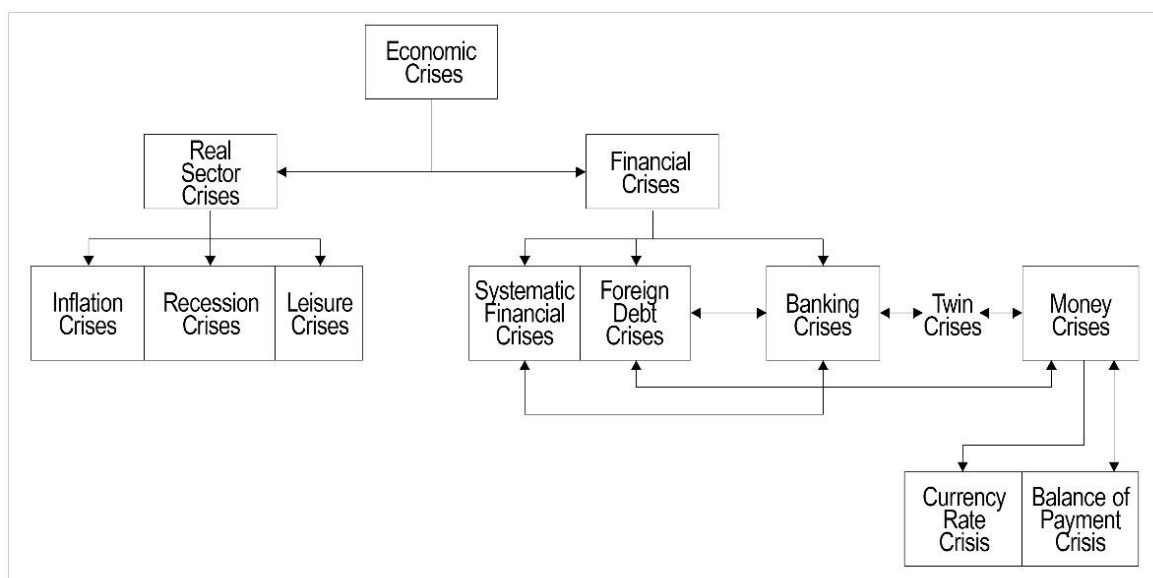


Figure 2: Classification of Economic Crises (Yücel, Kalyoncu, 2010)

Especially II. After the World War II, sharing between countries increased due to the increase in the need for labor, skill exchange and technology. Depending on the technological developments, the pieces of the puzzle come together internationally, nationally, regionally and locally to form the whole. With the support of international institutions, organizations and agreements such as GATT, WTO, GATS, EU, the international share of the construction industry has increased strongly. The Great Depression of 1929 emerged as a result of the economic system after the rapid economic growth at the beginning of the twentieth century and entered a deep crisis. The free market system began to manifest its influence after the World War II period, together with neoliberalism. Neoliberal circles, by taking the developed western countries and international support behind them, caused the balances to change on the basis of global development.

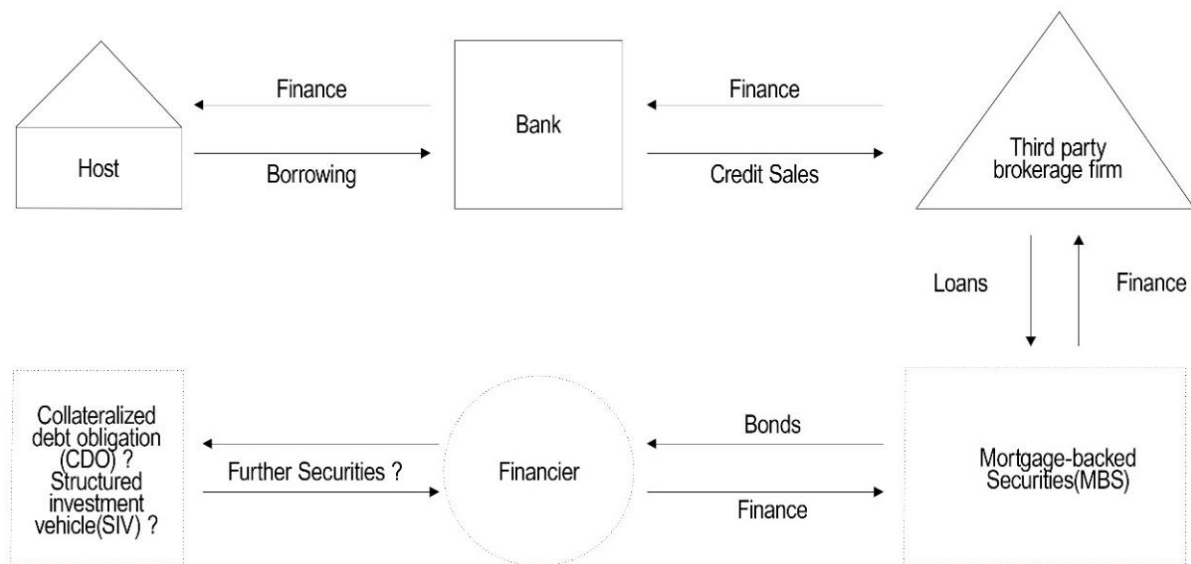


Figure 3: Mortgage Funding Process (Rosen, 2007)

The world economy has witnessed many crises on a global scale in the last two centuries. The Mortgage Housing Finance crisis originating from the USA is one of the most profound economic crises. While the effects of this global financial crisis have been felt in the USA since the end of 2007, it has started to be felt in our country since the end of the 2nd quarter of 2008, and has had shocking effects and traumas, as in other developing countries (Figure 3). The construction industry, which is predicted to have a global market of around 7.5 trillion dollars in total, has deeply affected Turkey as well as the rest of the world, along with these

developments in the economy (Figure 4). “With 7.5 trillion dollars, the construction sector today constitutes 13.4% of the world production (Figure 5-6-7) and it is estimated that in 2023 it will reach 12 trillion dollars with a growth of 35% and constitute 14.6% of the world production” (Global Construction, 2020). The construction sector, which is the 3rd largest area after agriculture and industry, indirectly affects 400 sub-sectors and constitutes one of the largest sectors in Turkey. Construction, which is also defined as the "Sponge Sector", creates a large employment resource. It is observed that the employment potential capability of the output created in the sector, the labor force density, is at a serious level when compared to other sectors. “Turkey's share in the world construction industry is around 3%. Considering that 48% of the investments made in the first half of 2009 consisted of construction investments, it can be better understood why the construction industry is an important sector for Turkey” (Özdemir ,Kılıç 2011)

2007 developments	2008 developments	2009 developments
<p>July - December</p> <ul style="list-style-type: none"> -Problems continued to be experienced in sub-prime loan payments in the markets and the first credit problems began to show results. -Financial products based on sub-prime loans started to be reevaluated and repricing on credit risks. -Risk appetite dwindles as investors avoid risk. -Deposit rates rose as loan rates rose and banks have resorted to short-term borrowing. 	<p>January - August</p> <ul style="list-style-type: none"> -Local banks and mortgage companies are in trouble, some of them went bankrupt in the USA. <p>September</p> <ul style="list-style-type: none"> -Lehman brothers went bankrupt. -Famous mortgage companies such as fannie mae and freddie mac came under the control of the american government. <p>October</p> <ul style="list-style-type: none"> -Citibank and AIG survived bankruptcy with the financial support of the american government 	<p>February</p> <ul style="list-style-type: none"> -USA president unveils 75 billion dollars plan to bail out 9 million mortgage holders. -Unemployment continued to rise -Local banks continued to fail in the USA <p>May - August</p> <ul style="list-style-type: none"> -Turkish Central Bank begins to cut interest rates. -With the interest rate cut, the demand to buy in the market revived (especially in house) <p>September - December</p> <ul style="list-style-type: none"> -Turkish Banks started to give real sector loans again.

Figure 4: Chronology of the 2008 Global Crisis (Gürçay, 2015)

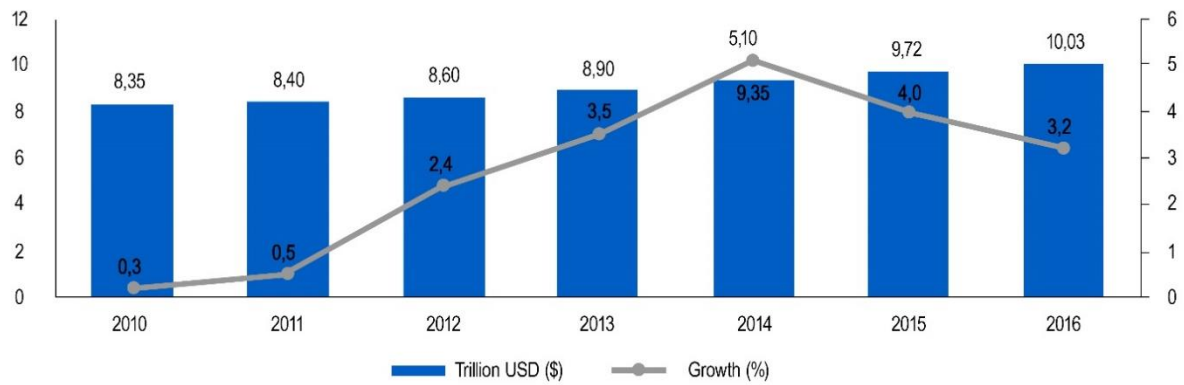


Figure 5: World Construction Expenditures (Global Construction Handbook, 2016)

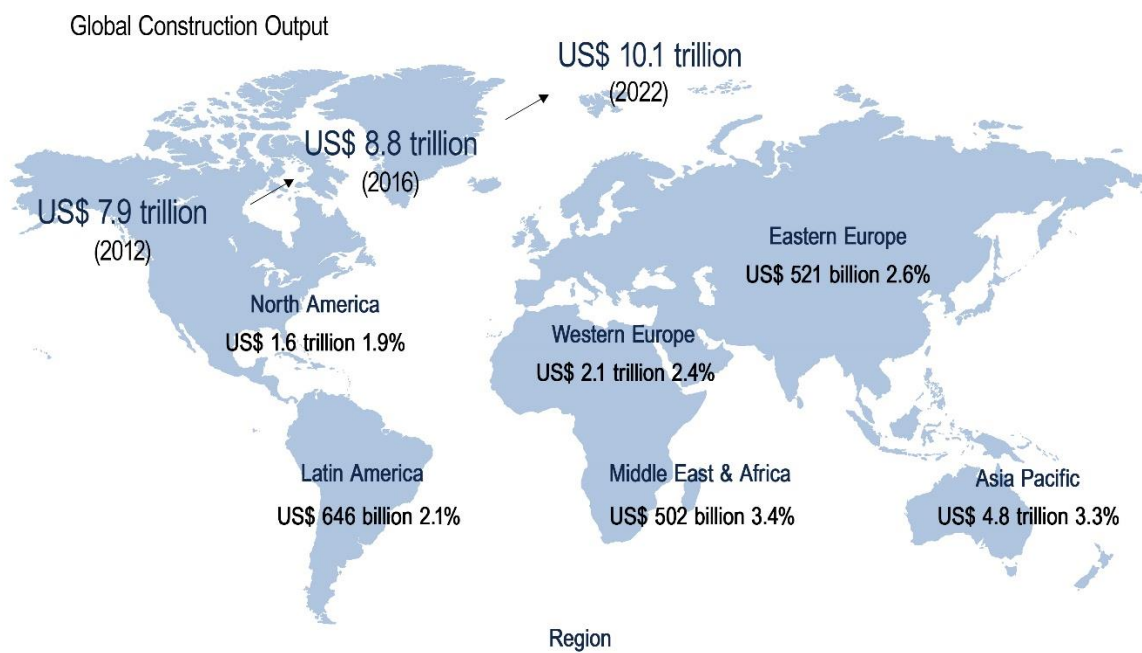


Figure 6: Projected increase of global construction output according to the regions between the years 2017 and 2021 (CIC, 2017)

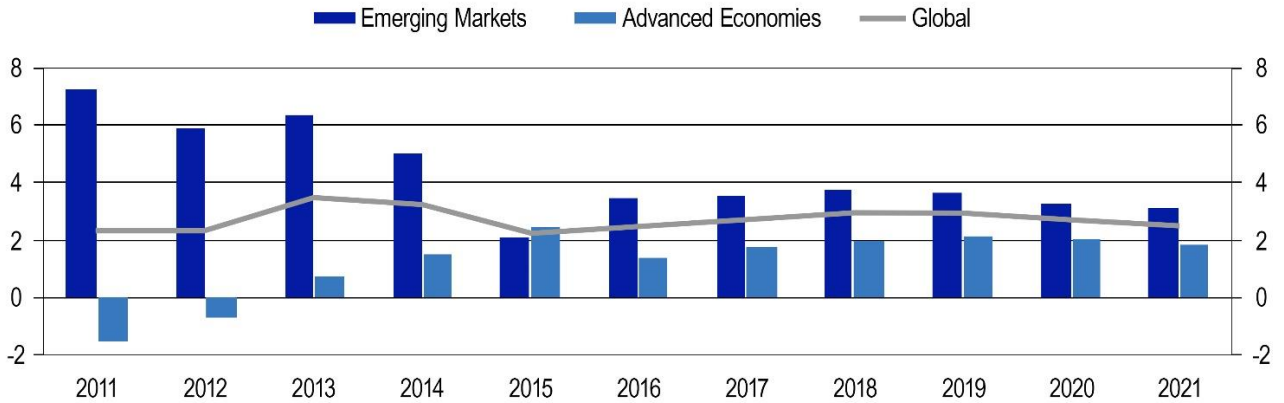


Figure 7: Contribution of emerging markets and advanced economies in the global construction output growth (CIC, 2017)

According to the news content of TUIK dated 25 November 2009; When the statistics of the houses sold are examined, the effects of the global economic crisis on the construction sector in Turkey, the change of ownership as a result of the sale of 111,910 houses in the third quarter of 2009, and a decrease of 42.5% in Turkey compared to the previous period are examined. The increase in the demand for housing after the crisis developed until 2018 with the support of the strategic precautionary package of the Republic of Turkey. There was an increase in the zoning and property permits of the construction sector, followed by an increase in the use permits over the years after the crisis. Housing loans exceeded 100 billion TL for the first time in 2013, and an accelerated increase was experienced in prices (Figure 8). The expectation of rising housing prices and the low course of interest rates, the demand for housing from individuals and companies increased, and the volume of housing loans in banks increased from year to year (Figure 9). As a result, real estate, housing and construction investments increased (Figure 10). The increase in housing prices and demand over time has increased the expectations even more. The demand boom continued until 2017, and housing sales decreased in 2018 due to the difficulties experienced in the economy. The excess demand of the firms emerged with the decline in the sales in which they invested. During this period, it has been observed that companies have encountered various problems in the repayment of loans due to their loan obligations to banks. “The Turkish economy has seen the benefits of globalization between 2002 and 2007. The country has benefited from the abundance of liquidity provided by the increase in the global risk-taking appetite and low interest rates. While inflation fell to single digits, high growth was achieved. In addition, there has been a

positive conjuncture in the financial markets for nearly 5 years and foreign investors in particular have achieved high returns. It is not possible for the global crisis, which has started to affect many countries, not to adversely affect the Turkish economy, which has a high current account deficit and debts and therefore needs global funds. (Cansızlar, 2008).

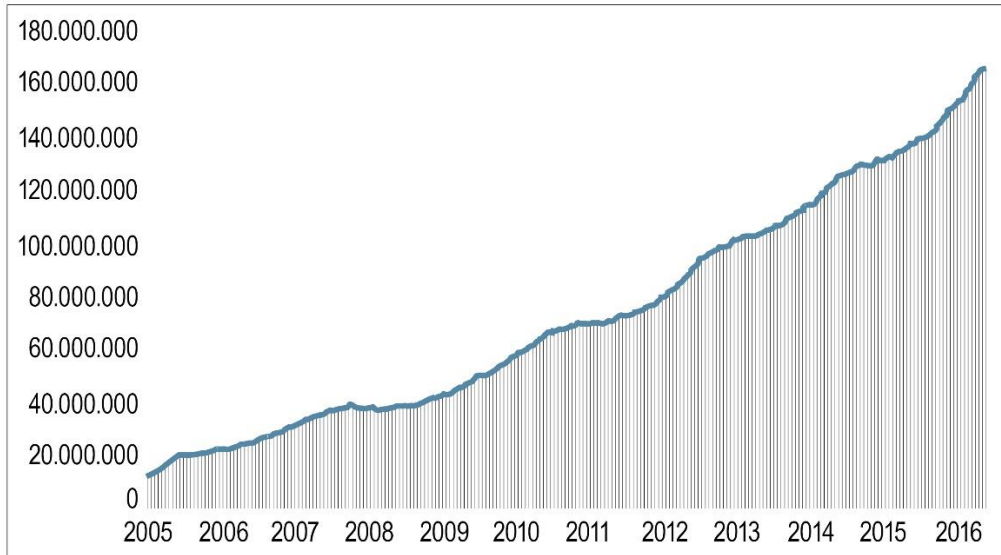


Figure 8: Amount of Housing Loans Used (TCMB, Url-9)

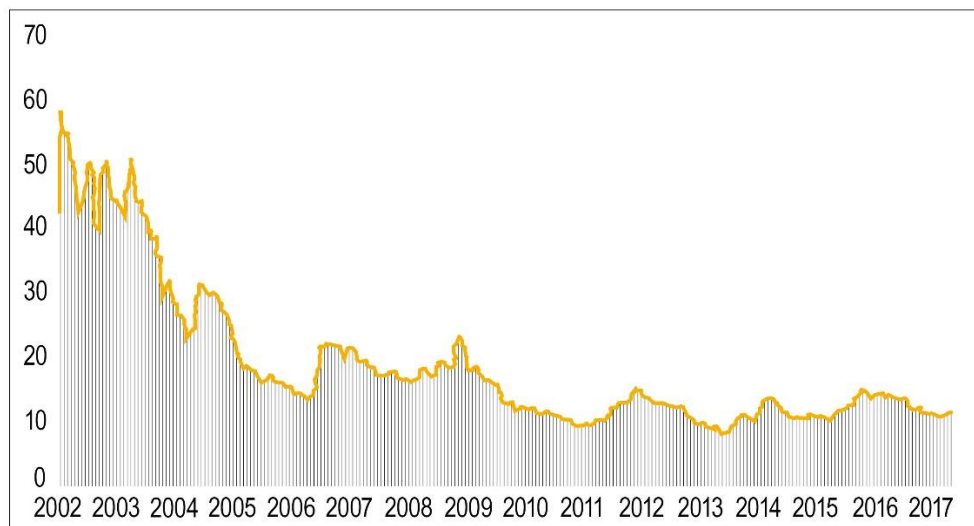


Figure 9: Percentage Change of Housing Loan Interest Rate in Turkey (TCMB, Url-9)

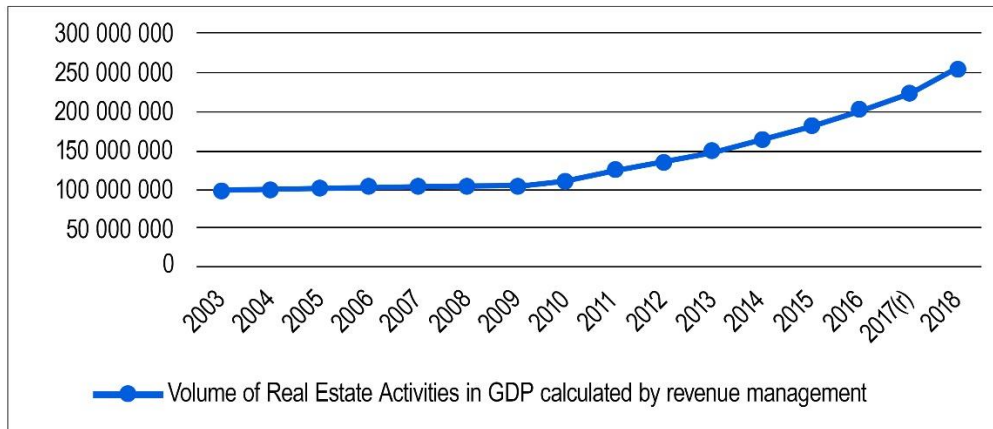


Figure 10: Volume of Real Estate Activities in GDP Calculated by Income Method (TÜİK, Url-10)

“While the project amount of the investments made in the PPP model between 1986-2002 was 12 billion dollars, there was a dramatic growth between 2003-2018 and this amount reached 53 billion dollars and the total value of the contracts reached 134 billion dollars. When we look at the distribution of the total contract value by sectors, airport investments with a share of 51% are followed by energy investments with 21%, road investments with 15%, and health facilities with 8%. 27% of the total project amount realized in the relevant period belongs to the 14.2 billion dollar Istanbul Airport (SBB , 2019). According to EPEC data, Turkey is in the first place in the European PPP market, ahead of the UK, which introduced the PPP model to the world. According to the World Bank (2019) dataset, which brings together information on PPP projects in developing countries, Turkey ranks 3rd with an investment of 116 billion dollars in the 10-year period between 2009-2018. These data show that PPP investments in Turkey have a significant volume on a global scale. (Yeşilbağ M., 2020).

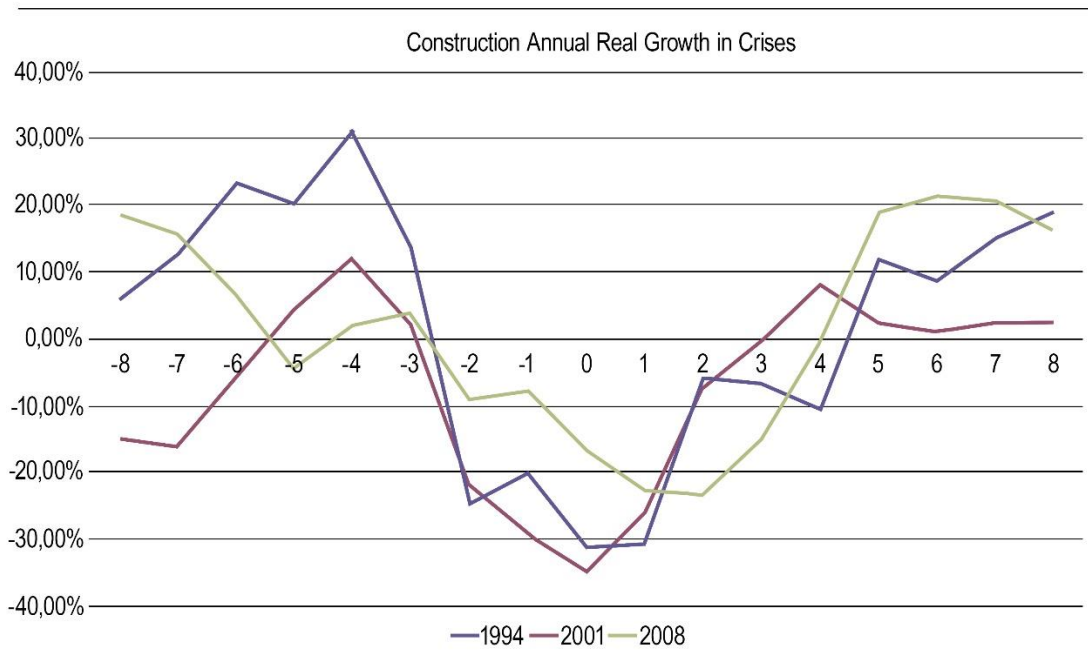


Figure 11: Construction Annual Real Growth in Crises

The reflexes given by the developing and developed states regarding the housing problem may differ. The housing problem is not considered qualitatively, especially in countries that do not have the institutionalization and technology to meet the demand for adequate housing, and in countries that have just experienced the concept of urbanization. The situation is different in countries such as Turkey, which have achieved a certain development momentum. Evaluating the housing problem only in terms of quality or quantity in countries at the scale of Turkey reveals incomplete or erroneous results (Figure 12). It is very important for states and governments to take an active role in solving problems in the areas of quantitative and qualitative housing deficit, to intervene and struggle, and to take initiative. The ideological background adopted by the states is directly related to their organic structures and their solutions and struggles to the housing problem. (Alkışer, Yürekli, 2014) They explain this situation as follows:

“In the socialist system, the housing property produced and owned by the states is much more than the capitalist system. In many countries, however, since housing is considered in the context of social rights and is considered an important phenomenological effect, although the intervention areas of the state are limited according to the liberal society model, it is under the protection of the state in the capitalist economy. Although most liberal governments develop models and systems in which they do not exist, they cannot give up the housing production model

under their own management. With the acceptance of a versatile and comprehensive state intervention in housing provision in the 1940s, the efforts to produce commercial housing especially for the low and middle-income classes in many democratic societies developed since the end of the 19th century are the products of the mentality that emerged with the emergence of the idea that the state should undertake the task of providing various social rights. ”

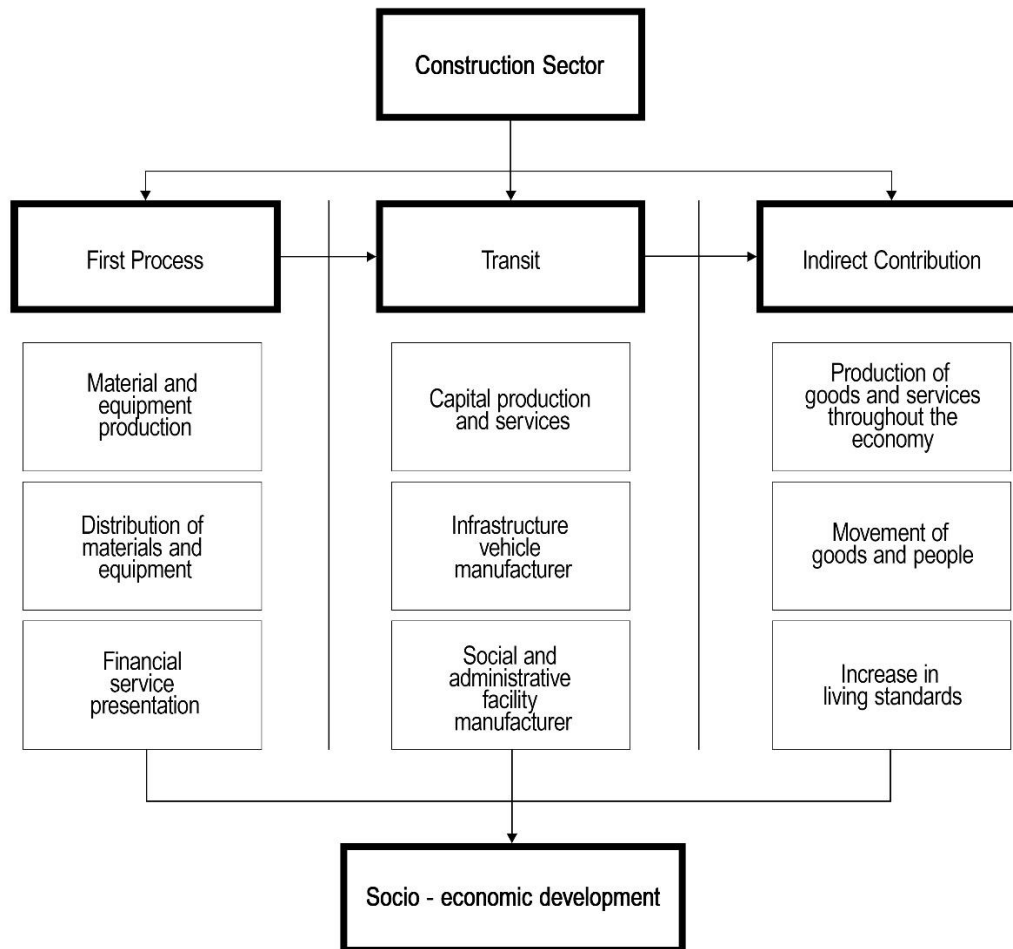


Figure 12: Socio-economic Dimension of the Construction Sector (Ofori, 1985)

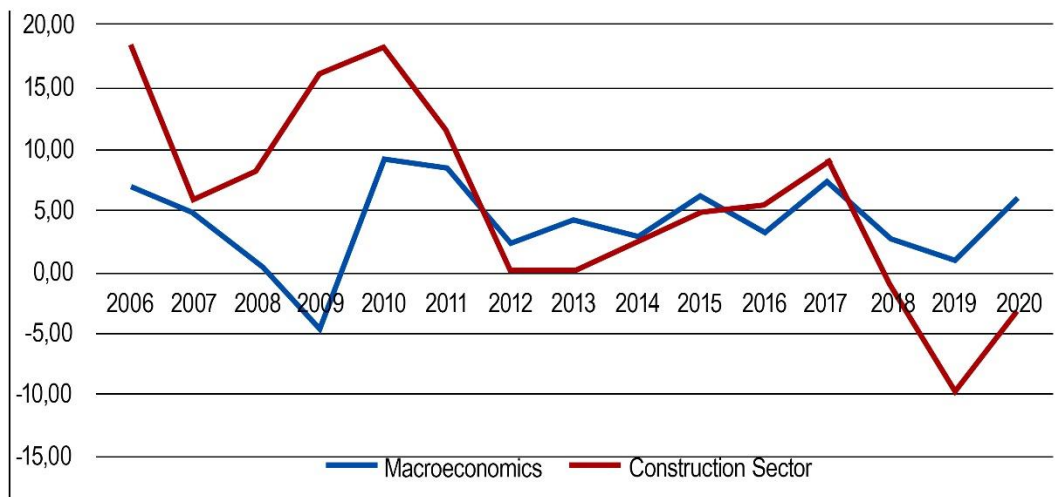


Figure 13: Comparison of Construction Sector and GDP (2020)

According to Peck and Tickle, neoliberalism represents an ongoing construction process. The fact that the sector functions as a locomotive sector among other sectors, and the mechanism that works continuously and triggers other sectors, provides the business volume in the construction sector (Figure 13). At the same time; It contributes to the creation of the environment that will enable the state to transfer capital by using intervention tools such as regulations, taxes and various subsidies. State intervention policies, according to Peck; liberalization, marketization, privatization, budget restriction and structural adjustment policies. State intervention tools are; subsidies and tax regulations (Figure 14). “The construction industry can be an area where capital shifts its investments during periods of intense recession. Capital, which wants to reproduce itself, shifts its investments to different areas and regions during recession periods” (Harvey, 2012). According to Harvey, it is defined as the main task of a neoliberal state to develop the conditions in which a profitable capital accumulation can be achieved for domestic and foreign capital. Especially II. In the post-World War II period, states fulfilling their main duty by intervening in the housing sector from time to time to overcome the problems experienced in the sector, and meeting the housing needs of their citizens has become a very common situation with the increase in the population (Figure 15). A serious change has been observed in the forms and tools of such interventions since the last quarter of the twentieth century. Many states have taken the steps to regulate and develop the market in the housing sector for this purpose. According to academic research, it has been determined that the construction sector is among the leading sectors of the economy and its positive

contribution is predominantly opinion. For this reason, it has been focused on facilitating and increasing activities as a political choice.

Housing Interventions Tools				
INTERVENTION TOOLS		INTERVENTION PURPOSES		
	Intervention Type	Impact on quality housing supply	Effect on pricess	Effect on income distribution
CHARGES	Property tax	Not available	Adverse	Adverse
	Tax privileges	Affirmative	Affirmative	Not available
	Interest (tax) discounts	Affirmative	Affirmative	Affirmative
SUBSIDIES	Interest subsidies	Affirmative	Affirmative	Not available
	Housing benefits	Not available	Affirmative	Affirmative
	Investment subsidies	Affirmative	Affirmative	Not available
	Credit quarantees	Affirmative	Affirmative	Not available
REGULATION	Rent controls	Adverse	Affirmative	Affirmative
	Construction regulations	Adverse	Not available	Not available

Figure 14: Housing Response Tools (Pınar C, 2019)

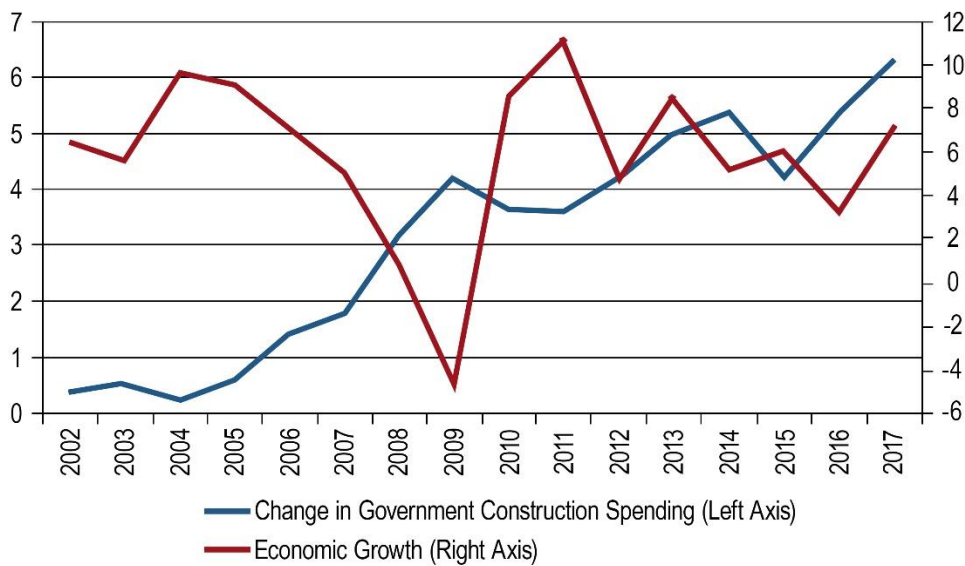


Figure 15: Relationships Between Changes in Real Public Construction Expenditures and Economic Growth in Turkey (TCMB³-EVDS⁴-TÜİK⁵-TÜFE⁶-İTO⁷-TEFE⁸),(Orman Y., 2018)

“Once countries reach a certain level of economic development, output in construction will slow relative to national output in country development” (Lopes, Oliveira, Abreu, 2011). The main objective of the housing policies carried out by the state is to support the segments with low economic welfare, to provide housing opportunities that are economically accessible to large masses of people. In this respect, it is assumed that housing policies mainly aim at revising the distribution of real income and aiming at social welfare. States have begun to take a more active role in intervention in the housing sector, especially by considering the problems of citizens who cannot own a house due to financial conditions as a social welfare problem. The issue that should be emphasized here is that although concepts such as income level and social welfare come to the fore in such interventions, it is often seen that there are many reasons behind the scenes. Considerations for the development of the construction sector, which is accepted as the main sector in many countries, are becoming a priority. From this point of view, it is seen that housing policies are an important policy area for economic stability and macroeconomic purposes. For this reason, it is seen that government interventions in the housing sector depend on various factors, apart from social purposes such as rent sharing, macroeconomic purposes, redistribution of surplus value and efficiency in resource use. Harvey, emphasizing that classical historical materialism, which basically puts industrial production and the primary cycle of capital in the center with Marx's formulation in *Capital*, trivializes the problematic of the "reproduction of space" and thus attributes a secondary place to urban economy at best, will be incomplete. proposes to make it a sine qua non of a historical analysis of capitalism. In this sense, following the theoretical line opened by Lefebvre, Harvey argues that urban economy, as a field that includes categories such as housing problem, infrastructure investments, urban rent, construction and real estate sectors, is essential for understanding the development patterns and crisis dynamics of capitalism” (Yeşilbağ, 2016). As mentioned above, housing has a

³ TCMB: Türkiye Cumhuriyeti Merkez Bankası (Central Bank of the Turkish Republic)

⁴ EVDS: Elektronik Veri Dağıtım Sistemi (Electronic Data Distribution System)

⁵ TÜİK: Türkiye İstatistik Kurumu (Turkish Statistical Institute)

⁶ TÜFE: Tüketici Fiyat Endeksi (Consumer Price Index)

⁷ İTO: İstanbul Ticaret Odası (Istanbul Chamber of Commerce)

⁸ TEFE: Toptan Eşya Fiyat Endeksi (Wholesale Price Index)

very important place in many aspects of human life. Because housing is a financial competence and a financial property tool that individuals invest the most in. It is also important because it is a property that can rarely be sold for cash and can be bought rarely due to its price.

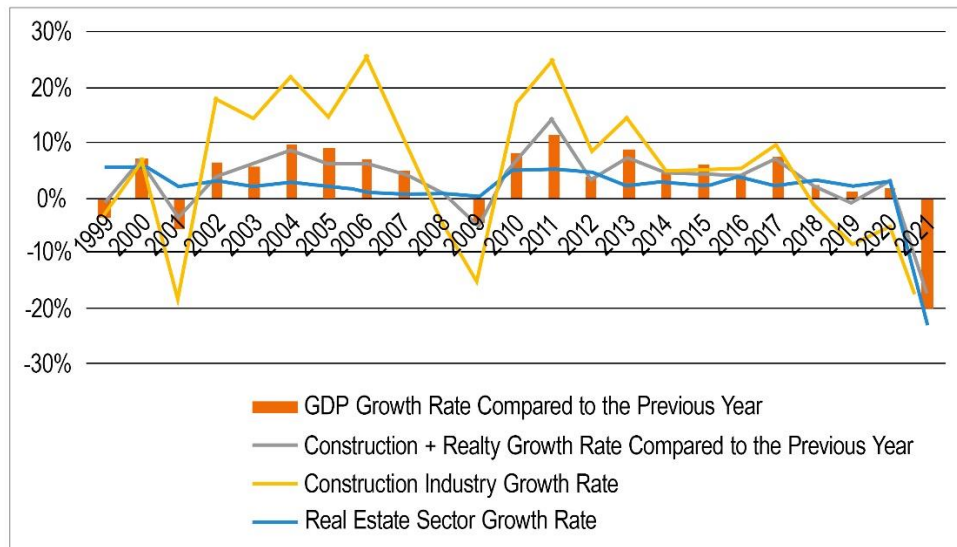


Figure 16: GDP, Construction, Real Estate and Construction + Real Estate Sectors Growth Rates Compared to the Previous Year (CBRT, Electronic Data Distribution System)

Housing investments have become an investment tool that provides higher returns from resources such as stock market, gold, dollars and deposit accounts in Turkey. In countries with inflationary economic conditions such as Turkey, housing also gains meaning in turbulent times as a means of security. In addition to the production and purchase of housing for investment purposes, it is another source of housing need in Turkey. Therefore, housing also turns into a reliable means of earning rent (Figure 16). In a similar situation where developing countries have housing problems in our country, it is seen that the state intervenes in this chronic problem from time to time (Chart 1). The results of the migration from the village to the city and the rapid population growth constitute the biggest of the problems in this regard and cause the number of housing in the city areas to be insufficient. It is observed that the undevelopment of an institutional structure in housing finance and the arguments of unplanned urbanization could not be moved to a better level due to the combination of this issue. While the direct share of the GNP in our country is 6%, fixed capital investments constitute 50% of the construction investments, and this ratio rises up to 30% with the stakeholder sectors with which

it interacts directly or indirectly. Financing is the most important element for companies to grow and survive despite micro and macro economic variables. The main financing problems faced by companies and firms are weak equity and working capital structures, problems stemming from investment expenditures, problems arising from economic policies and collateral, problems encountered in finding loans. The housing sector becomes open to speculation due to the high rate of increase. From the first quarter of 2010 to the last quarter of the second quarter of 2016, the housing sector has more than doubled, according to TKFE data, and companies such as contractors and subcontractors for housing construction have increased. The volume of housing loans and mortgages and the customer portfolio using these loans have gradually increased. Housing sector; The balance of payments is faced with potential problems such as exchange rate risk, risk of increasing interest rates, banks entering a crisis position, market risk, because housing prices increase above the national income and inflation. “The number of people with housing loans increased by 69 percent in the period of 2011-2016, from 1.3 million to 2.2 million. In the same period, the average loan amount increased from 57 thousand TL to 75 thousand TL. (TBB, 2017).

Chart 1. Development Rates (%) of Public and Private Sector Fixed Capital Investments in the Construction Sector and in Total (compiled from the data of the Ministry of Development Turkey).

Sectors	2008	2009	2010	2011	2012
Public fixed capital investments in the construction sector	- 1,2	13,3	10,9	13,0	- 12,9
Private fixed capital investments in the construction sector	- 24,3	- 29,3	76,6	18,7	- 7,8
Total public sector fixed capital investments	5,8	- 1,2	19,1	- 3,0	5,4
Total private sector fixed capital investments	- 7,3	- 24,3	34,5	22,6	- 1,7

With its most obvious and general features; The costs of foreign resources have increased excessively, the equity financing is insufficient, the net working capital, which has decreased quite significantly, is not sufficient, the short-term use of foreign resources has increased rapidly, the financing expenses have increased excessively, the fixed assets are generally tried to be financed with own resources, the fixed expenses have It is observed that especially in the crisis and post-crisis periods of the firms, that the profitability of the principal and principal installments decreased significantly (Chart 2). Due to the decrease in sales, the companies' tendency to sell on credit instead of cash causes the decrease in the speed of turnover and receivables due to the crisis in the sectors. The reason for the increase in the capital cost and the liquidity crunch is the long duration of the cash cycle and the increase in the turnover period. Since exports and sales decreased during the crisis, the main materials used in production of sectors (such as construction)

with excessive foreign exchange indexed debt became risky for imported ones. Profit margins also decreased due to the decrease in exports after the crisis, the increase in raw material and energy costs, and the contraction in foreign markets. Companies tried to survive with lower profitability and capital structure, higher financial borrowing, and continued to feel the effects of the crisis in the following years. It is a tactical option to use the existing capacity instead of making new investments, as cash sales will decrease in times of crisis. Export contracts should be bank-guaranteed and accredited, risk-bearing commitments should not be made, and companies with foreign currency inflows whose majority of trade is based on imports and exports should borrow in foreign currency. Company managers should minimize the cost differences that may arise from the fluctuation of the exchange rate with successful intelligence management, without entering into risky sales. Guarantees should be obtained for the realization of sales transactions made under legal contracts at the rate of cash as much as possible.

Chart 2. Average Growth Rates of Sectors in Recessions (TÜİK, 2009).

AVERAGE GROWTH RATES DURING RECESSIONS %						
SECTORS	1994	1998	2001	2008	TOTAL TIME	AVERAGE
GDP	- 6,4	- 3,0	- 7,6	- 8	- 25,0	- 6,24
COMMERCE	- 11,2	- 8,5	- 13,3	- 13,4	- 46,4	- 11,60
CONSTRUCTION	- 5,2	- 1,9	- 14,5	- 12,1	- 33,7	- 8,42
MANUFACTURING	- 9,1	- 5,5	- 8,3	- 10,2	- 33,1	- 8,28
HOTEL AND CAFE	X	- 12,9	- 2,5	X	- 15,4	- 7,70
MINING	- 5,8	- 6,7	- 6,2	- 10,5	- 29,2	- 7,30
FARMING	- 3,1	- 6,8	- 7,3	X	- 17,2	- 5,73
TRANSPORTATION	- 2,8	- 0,5	- 5,8	- 9,8	- 18,9	- 4,73
FINANCE	- 1,5	X	- 5,7	X	- 7,2	- 3,60
ENERGY	X	- 2,4	- 3,6	- 4,5	- 10,5	- 3,50

As a result of rapid urbanization in cities, it is determined that problems such as deterioration of existing infrastructure, slums and environmental degradation are increasing. The legal infrastructure of urban transformation works in the regions included in the scope of urban transformation since 2000 has been established with many legal regulations, and studies have been started in our country in line with this legislation. In Turkey, it is obvious that meeting the housing need is not

possible without the role of the state as a distributor and cost contractor. Rapid economic growth and stagnation show an inversely proportional response to state effects. While the construction sector gives rapid results in developing environmental conditions, it is in a sectoral position that is primarily adversely affected in stagnant economic conditions. It is also noteworthy that some institutions of the state regarding the housing sector take important roles in their policies (Chart 3). In the housing sector, it is observed that two institutions play a leading role with the decisions taken and the legal regulations made in this context. TOKI and Emlak Konut Real Estate Investment Trust are organizations created out of need. Emlak Konut, established in 1953, has become an institution that realizes many real estate projects, and continued its activities in 2002 under the name Emlak Konut Real Estate Investment Trust. Emlak Konut Gyo A.Ş., which aims to develop real estate for the middle income group, has expanded its range of real estate development, sales and marketing. The institution also develops structures such as commercial real estate, social facilities and public buildings in addition to housing. “The revenue sharing method comes first among the methods used by Emlak Konut GYO A.Ş. Revenue Sharing method; It is defined as the transfer of the lands of individuals or institutions to the contractor companies in return for a certain percentage of the sales prices of the independent sections to be built on the land. In this way, it is aimed to share the revenue by selling the independent parts of the construction” (Pınar, 2019). With the aim of ensuring that the rapidly increasing housing demand in Turkey is met in a controlled manner by encouraging the housing production sector, the Housing Development Administration has been activated. ”While TOKI produced 43,145 houses between 1984-2003; Between 2003 and 2009, it produced 369,547 houses in 81 provinces and 603 districts” (Zariç, 2012).

Government Policies

Housing production in Turkey on a large scale became possible with low interest rates after 2002. In 2013-2014 and especially in 2017-2018 periods, due to the increase in crisis and recession parities and the pressure of interest rates, there were administrative differences between the Justice and Development Party and the Central Bank of the Republic of Turkey. Public banks are one of the most effective tools for reducing interest rates on housing loans. The lowering of interest rates in housing through public banks and the lowering of interest rates by private banks emerge as a result of competitive pressure.

Chart 3. Real Construction Expenditures in Turkey (TCMB-EVDS-TUİK-TUFE-ITO-TEFE, 2018)

	GOVERNMENT (Billion TL)	PRIVATE SECTOR (Billion TL)	TOTAL (Billion TL)	GOVERNMENT'S SHARE (%)	PRIVATE SECTOR'S SHARE (%)
2002	0.4	18.8	19.2	2.0	98.0
2003	0.5	17.5	18.1	3.0	97.0
2004	0.2	19.1	19.4	1.3	98.7
2005	0.6	30.8	31.4	1.9	98.1
2006	1.4	37.5	38.9	3.6	96.4
2007	1.8	41.5	43.3	4.1	95.9
2008	3.2	47.3	50.4	6.3	93.7
2009	4.2	55.9	60.1	7.0	93.0
2010	3.6	47.9	51.5	7.1	92.9
2011	3.6	66.9	70.4	5.1	94.9
2012	4.2	64.7	68.9	6.1	93.9
2013	5.0	83.4	88.4	5.6	94.4
2014	5.4	93.6	99.0	5.4	94.6
2015	4.2	87.6	91.8	4.6	95.4
2016	5.3	92.4	97.8	5.5	94.5
2017	6.3	106.4	112.7	5.6	94.4

While the interest rates of public banks in housing approached to 2% per month in 2019, as a result of the decrease of 0.99 percent on a monthly basis on August 1, private banks also reduced and lowered the rates of housing loan undertakings due to competitive pressure. According to the announced coronavirus precautionary package, as of March 2020, the minimum down payment amount for residences below 500 thousand TL has been reduced to 10%, and the loanable amount has been increased from 80% to 90%. As Erol and Ünal (2015) stated: A low-interest environmental demand encourages spending and helps the economy to grow, and accordingly the growing economy leads to construction growth. Similarly, high interest rates harm construction projects, given that almost all projects rely on financing costs (Erol I., Ünal U., 2015). Urban transformation projects function with the government's low housing loan interest policy despite high inflation, as a counter-tactic that delays the crisis. Especially since 2017, urban transformation projects have been brought to the fore as the basis of revitalizing the

economy and keeping the sector alive. According to the figures announced by TOKI as of September 2016, there are 19 million 210 thousand 938 existing superstructures within the borders of the Turkish Republic. It is estimated that approximately 6.6 million housing units across the country will be demolished and rebuilt within the scope of urban transformation in the next 20 years. The Ministry of Environment, Urbanization and Climate Change, which stated that 13 million building units were built with illegal methods in Turkey, stated that they would be subjected to urban transformation works within the scope of zoning peace in 2018. “The main development that gave TOKI its golden age was the urban transformation projects. With the Law No. 5162 dated May 5, 2004, TOKI has been authorized to make expropriation and zoning plans in slum transformation applications” (Eşkinat, 2012). “Within the scope of the local government reform in 2004-2005, the decision-making mechanisms and powers of local governments were increased with the arrangements made in the legislation of special provincial administrations, municipalities and metropolitan municipalities” (Akay, Akgün, 2014). In comparison, it is the transfer of treasury lands to Emlak Konut GYO and other large construction companies via TOKI with the revenue partnership model. Thus, in order to reduce the construction costs of the government, construction companies and contractors, it aims to maintain its capital accumulation by offering the land stock at the disposal of the sector at a lower cost when necessary. Various sectoral incentives are given to large-scale construction and urban transformation projects for the purpose of housing production, and it plays a major role in postponing a larger crisis to be experienced by the government with a low interest policy despite high inflation. Most of the residents of the buildings under the evaluation of urban transformation are encouraged to sell their real estate rights in the form of certificates or to obtain loans from banks. Thus, it is aimed to create resources for the companies in the housing market, and on the other hand, to create customers and resources for the financial markets. According to Keynes, the completion of macro policies and the active role of the state in this area constitute the backbone of liberal economic philosophy.

CONCLUSION

The most important feature of the crisis, which concerns all the countries of the world, is that it is global, it gained momentum at the end of 2007 and started to affect our country in the third quarter of 2008. The crisis originating from the USA is expressed in the literature as the biggest crisis in which financial collapse was

experienced after the Great Depression. The main factor in the emergence of the 2008 crisis; transparency, liquidity abundance, rating agencies and securitization. What makes the 2008 crisis a global concept and distinguishes it from all its counterparts is the released passive capital movements. In the 2008 global crisis, the power of the dollar, which is the reserve currency, made the developed and developing countries dependent on the US monetary policies. The main negative consequences of the global crisis are the declines in the housing market. In the financial crisis, decreases were observed in the growth rates of developed and developing countries due to its reflection on the real economy. In this crisis, the most important factor that negatively affected the developing countries such as Turkey; increase in unemployment rates and liquidity tightness. While liberal economic policies made it difficult to carry out audits and controls, they also brought opportunities such as sharing technology, globalization of financial markets, and increasing savings. As a result, it can cause financial crises and possible dangers of capital flows. The construction industry in Turkey should be prevented from having an impact on the country's economy, and we should accept the fact that it is one of the most important industries. Making arrangements, updates and innovations in the construction sector should bring the sector to a position where it can be minimally affected by past and future crises. The construction sector includes more than 400 sub-sectors, the importance and place of the sector should be updated. The Central Bank aims to return to normal conditions as soon as possible from the crisis with its instruments in terms of its monetary policy responsibility. Macroeconomic stability is crucial to the outcome of the crises. "The fact that the housing sector is also effective on inflation, financial markets, balance of payments and the state budget increases its economic importance" (Ateş, 2011). Within the framework of social state principles, social policy measures should be developed in the context of reducing the systematic problems of issues that cause housing problems. In the solution of the housing problem; Strategic alternatives should be developed that include many parameters from political policies to economic activities, from security priorities to the life of the individual, and that will cover all aspects of the issue. In order to prevent exorbitant housing price increases, the floor-ceiling price determinations should be made on a regional basis, on the legal basis, so that the basis for speculation cannot be prepared for the houses that the consumer will buy, and the houses that the consumer will buy should be valued by this method. Another important way to ensure that the housing prices

stay in an optimal range is to focus on social housing projects. organizations should be supported. The state should regulate the functioning of the housing market when it deems necessary without making the producers and consumers suffer. “Spatial structures are more tangible and observable than other relationships because they are the carrier of social relations and, more importantly, they have an effect on them. With these features, space assumes an important function in understanding social structures. (Ercan, 2013).

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