

Competition In Construction Sector: A Research In Kastamonu¹

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Abstract

Construction sector has occupied an important place in Turkish economy. Turkish developers have achieved many giant projects both in Turkey and other countries such as Russian Federation, Turkic Republics, Africa and Arabian countries. In the other side, since 2002 we have witnessed an economic growth which has caused an increase in housing demand. Therefore analyzing construction industry is important in achieving macroeconomic goals. In this research we analyzed developers in Kastamonu by face to face interviews. By this way we obtained information about weakness and strength of Kastamonu developers, opportunities and threads for them. Also thoughts of developers about factors affecting housing demand and supply are obtained by this research.

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İnşaat Sektöründe Rekabet: Kastamonu'da Bir Araştırma

Özet

İnşaat sektörü Türkiye ekonomisi içinde özel bir öneme sahiptir. Türk İnşaat firmaları hem Türkiye'de hem de Rusya Federasyonu, Türki Cumhuriyetler, Afrika ve Arap ülkeleri gibi ülkelerde pek çok dev projeler gerçekleştirmişlerdir. Diğer yandan 2002 yılından itibaren Türkiye'de konut talebini artıran ekonomik büyüme gözlenmiştir. Bundan dolayı inşaat sektörünü analiz etmek makro iktisadi amaçları gerçekleştirmede önem arz etmektedir. Bu çalışmada Kastamonu inşaat firmaları ile yüz yüze görüşmeler yapılarak analiz gerçekleştirilmiştir. Bu yolla Kastamonu inşaat firmalarının güçlü ve zayıf yanları ile karşılaştıkları fırsat ve tehlikeler analiz edilmiştir. Ayrıca konut talebini ve arzını etkiledikleri düşünülen faktörler hakkında görüşler elde edilmiştir.

Anahtar Kelimeler: İnşaat Sektörü, Konut Talebi, Konut Arzı, İnşaat firmaları

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1. Introduction

Construction industry has importance due to added value, share on GDP, high employment potential, the weight of national capital and numbers of related industries. Addition to this construction industry has contributed on Turkish economy because of projects realized in other countries by Turkish developers. Demand side of construction industry has developed by mainly two reasons. Firstly economic growth has caused increase in housing, building etc. demand. Secondly, to achieve economic development, public should invest on infrastructure of state which includes bridges, tunnels, highways etc. Increase in internal demand is opportunity for construction industry. Importance of construction industry in whole economy does not only come from only itself but also from its relationship between other industries such as construction material production and sales, construction machines production and sales, finance, insurance etc.

Performance of industry is relied on success and performance of developers. Due to weight of construction industry on Turkish economy, success of developers is also important for macroeconomic goals. Another contribution of construction industry to region's economy is providing



economic development. Building Ilgaz 15th July Democracy Tunnell, Kastamonu Airport, Highways between Kastamonu and neighbour provinces and other projects have contributed on development and growth of Kastamonu economy. These projects both create new employment and contribute on development of Kastamonu region. Stable atmosphere in Turkish economy after 2002, establishment of Kastamonu University and increase in population of Kastamonu city caused increase in housing demand. Many residential projects were realized in Kuze Kent, Tosya way and Ankara way. Generally these residential projects have been built by local firms, developers. We have witnessed an increase in both sales figures and prices in Kastamonu.

Determining strong and weak sides of construction industry, analysing structure of industry in the framework of competitiveness, developing strategies for industry will contribute to industry. The aim of this research is to analyse structure of construction industry and firms in Kastamonu. Firstly, the weight of construction industry in Turkish and Kastamonu economy is investigated. After we mentioned importance of competition in sector we aimed to analyse Kastamonu developers. We interviewed the managers of construction firms and by this way we obtained information about strong and weak sides of Kastamonu construction firms, opportunities and threads meet by industry and factors affecting housing demand and supply in industry.

2. Importance Of Construction Industry In Economy

Construction industry is called as locomotive of economy. This approach is sourced from added value which is created in economic growth period, employment potential and input-output relationship between many sectors. Construction industry has occupied an important place in whole economy. The direct share of construction sector on Turkish GDP is approximately 8.6% in 2016 (tuik.gov.tr). The structure of construction sector responds to economic conjuncture quickly. In growth periods construction industry grows faster than the whole economy (Uzunkaya, 2013:3). Housing sector also played an important role in determining development process in western developed countries especially after Second World War (Eşkinat, 2012).



Table 1. House Sales

Year	House Sales İn Turkey	House Sales in Kastamonu
2013	1.157.190	4716
2014	1.165.381	4942
2015	1.289.320	5542
2016	1.341.453	5477
2017	1.409.314	6709

Source: Turkstat

Construction industry has contributed on employment for especially unskilled workers. Employment in construction industry generally increases in summer and decreases in winter. One of the most important parts of construction industry is house production (Eşkinat, 2012). Houses are physical places which meets people's need for housing. House sales in Turkey and Kastamonu are given in Table 1. As it can be seen, sales of houses in Turkey have increased since 2013. This is also true for Kastamonu except 2016. Accelerating social transformation, increasing industrialization, urbanization, differentiating in house demand and will to live in luxury houses gain importance in housing industry.

One of the reasons which increase the importance of construction industry is housing. Houses have many functions such as sheltering which is one of the compulsory needs of individuals. Therefore construction industry and house production is generally supported by public government. TOKİ is an important actor which is non-profit government institution which aims to supply cheaper houses to poor people and to regulate markets (toki.gov.tr). TOKİ was established due to law with number of 2985 in 1984 by the instructions of Prime Minister Turgut Özal. However, most of house production was realized by private sector in Turkey (Eşkinat and Tepecik, 2012). Governments of European countries also support construction sector to reach their targets which includes building of new houses. The speeds at which houses are developed, has become an important political issue because if houses are developed slowly the prices and rents will increase (Adams et.al. 2009). So, low income groups have difficulty in paying their rents or in buying



houses. Some countries have planning system which allocates a scarce resource (land) without regulating prices (Cheshire, 2008) and land use planning systems varies from country to country. Cheshire and Sheppard (2005) defined land use planning as “allocation of scarce resource to different use but historically it has operated in a specialized arena of its own”. Changes in urban policy generally affect the release of land for developing new houses, demands and set significant transformations in both construction industry and urban life (Karadimitrou, 2005).

International projects that have developed by Turkish firms also contributed Turkish economy. Researches show that there are sufficient numbers of Turkish developers which actively realized projects in international markets. However their market share is lower than expected. Özorhon and Demirkesen (2014) studied competitive power of Turkish developers in international markets by Porter Diamond model. Due to these international projects, Turkish economy has found opportunity to decrease current account deficit.

3. Competition In Construction Industry

Competition is accepted as very useful tool in providing market efficiency and reaching economic goals by economists. There are many descriptions for competition in literature. According to popular one, competition is working of participants to earn a position or scarce situation in a relatively fair environment depending on the conditions of the competition (Dilek, 2017:198; Ekiz, 2010). It is thought that most favorable conditions in economic theory are the conditions of perfect competition market. Competition in markets cause several desirable solutions such as providing sovereignty of consumers, forcing to minimize costs, awarding successful firms, eliminating inefficient firms, supporting research and development investments, providing justice in income distribution, gaining importance of elasticity (Türkkan, 2001:83).

Because of weight of construction industry on Turkish economy, searching competitiveness of Turkish contractors is important. Özorhon and Demirkesen (2014) made SWOT analysis and revealed factors that create competitive advantages by the help of Porter’s Diamond Model. Low costs, high productivity of employee’s, communication between Turkish employee’s,



learning process due to experience in sector, higher customer satisfaction, capability to take risks, the presence of subsectors such as iron and cement are strong sides of Turkish contractors (Özorhon and Demirkesen, 2014:6842).

Uzunkaya (2013) studied structure of Turkish construction sector by the help of Porter's Diamond approach. Related and supporting industries are construction building materials, construction machineries, technical consultancy services while supporting industries are Real Estate Services, finance sector, tourism sector, transportation sector, irrigation, drinking water and sewerage sectors. According to this study, to improve sector and gain competitive power in global markets the efficiency of internal markets should be improved.

Eşkinat (2012) investigated the role of TOKİ on Turkish markets. TOKİ which was established in 1984, produced 43.145 houses between 1984 and 2003. After 2003, TOKİ started to work faster and produced 491.225 houses between 2003 and 2010. Most of these houses were built for low income groups. In reality TOKİ is used as regulator in markets by government.

Also in competition in European countries are studied. Regulation types vary from country to country (Ronn, 2016; Ostman, 2014, Karadimitrou, 2005).

4. Aim

In this research we aim to reveal factors affecting competition between construction firms in Kastamonu.

5. Method

Therefore we firstly take list of developers in Kastamonu. There exist 70 developers which are registered in Kastamonu Chamber of Commerce and Industry (KATSO) and Independent Industrialists and Businessmen's Association (MÜSİAD) Kastamonu Branch in January 2018.

We reached 55 of them and conducted a survey to get information about construction market, strength and weakness of Kastamonu developers. In other words, we reached %78 of Kastamonu Developers. Questionnaire form includes three parts. In first part questions are about demographic while second part asks factors affecting housing demand and supply. The last part is prepared to make SWOT analysis. SWOT analysis is a successful tool to reveal



strength and weakness of firms, opportunities and threads faced by firms (Dilek, 2017; Dilek and Kesgingöz, 2016).

Questions are prepared by the help of previous studies Öztürk and Fitöz (2009), Özorhan and Demirkesen (2014).

6. Findings

In Table 1 there are demographic results about participants. Generally firms are older than 6 year. Firms which are between 6 and 10 years old are 22, while firms which are older than 11 years are 23. More than half of participants are owner of firms (56%). Because generally developers in Kastamonu are small firms and their organization is not complex and does not include many officials.

Experience is important for success of firms in construction industry. Because of this reason owner and managers of firms are generally older than 36. In this research, 40% of participants have ages between 36 and 45 while other 40% of them have ages older than 46.

The complexity of management and construction industry makes it compulsory for firm owner and managers to receive university education. More than half of participants have bachelor degree. Because of the structure of construction industry and social structure of Turkish society generally males prefer to work in this industry. 96,4% of participants are male.



Table 1. Demographic Results

Firm's Age	Frequency	Percent (%)	Participant Position In Firm	Frequency	Percent (%)
0-5 Year	10	18,2	Owner	31	56,4
6-10 Year	22	40,0	Manager	20	36,4
11+ Year	23	41,8	High Level Staff	4	7,2
Total	55	100	Total	55	100
Age	Frequency	Percent (%)	Education Level	Frequency	Percent (%)
18-35	11	20	Primary- Secondary	3	5,5
36-45	22	40,0	(Lycee)	20	36,4
46+	22	40,0	Bachelor	28	50,9
Total	55	100	Master/Doctorate	4	7,2
Gender	Frequency	Percent (%)	Total	55	100
Male	53	96,4			
Female	2	3,6			
Total	55	100			

In Table 2 There are results about factors affecting Housing Demand.

We wanted participants to write the most important item into first place and enumerate them. As a result we rank the factors according to their importance in affecting housing demand. Most of participants agree that prices are the most important factor which influences demand in housing market.



Table 2. Factors Affecting Housing Demand

R		1	2	3	4	5	6	7	8	9	10
1	Decrease in Prices	41	9	4	1	0	0	0	0	0	0
2	Decrease in Interest Rates	8	39	6	2	0	0	0	0	0	0
3	Increase In Income	6	7	35	6	1	0	0	0	0	0
4	Proximity To Places Such as School, Hospital etc.	0	0	10	34	6	5	0	0	0	0
5	Increase in Population	0	0	0	11	36	3	4	1	0	0
6	Improvement In Income Distribution	0	0	0	1	10	33	8	3	0	0
7	Increase In the number of marriage	0	0	0	0	2	9	39	1	1	3
8	Expectation of increase in prices	0	0	0	0	0	2	0	32	11	10
9	Increase In the Quality of Houses	0	0	0	0	0	3	3	10	38	1
10	Increase in profits of other investment instruments	0	0	0	0	0	0	1	8	5	41

41 participants think that prices are in the first rank. 39 of participants think that the second important factor which affects housing demand is interest rates. Also 8 participants think that interest rates are the most important factor. Because generally consumers use mortgage loans and give importance to interest rates. According to answers of participants we ranked factors. Consumer's income is in the third rank, Proximity to important places is in the fourth rank, Population is in the fifth rank. The factors goes on with the rank of income distribution, number of marriage, price expectations, increase in quality of houses and increase in profits of other investment instruments.

In Table 3 we presented answers of question about the factors which affect Housing supply. We again want participants to enumerate factors according to importance degree. This time we revealed that managers or owners evaluate interest rates as the most important factor which has influences on housing supply and prices as the second factor. Other factors go on with the rank of urbanization, support of banks, support of government, tax rates, input prices, wages, land production and construction technology.



Table 3. Factors Affecting Housing Supply

R		1	2	3	4	5	6	7	8	9	10
1	Decrease in Interest Rates	32	13	10	0	0	0	0	0	0	0
2	Increase in Prices	18	26	11	0	0	0	0	0	0	0
3	Increase in Urbanization	3	11	29	10	2	0	0	0	0	0
4	Increase in Support of Banks	1	4	5	31	6	8	0	0	0	0
5	Increase in Support of Government	1	1	0	12	33	5	3	0	0	0
6	Decrease in Tax Rates	0	0	0	2	10	30	8	4	1	0
7	Decrease in Prices of inputs (Cement, brick etc)	0	0	0	0	3	7	36	9	0	0
8	Decrease in wages of workers	0	0	0	0	1	5	6	40	3	0
9	Increase in land production	0	0	0	0	0	0	2	2	46	5
10	Increase in Construction methods	0	0	0	0	0	0	0	0	5	50

We also investigate strong and weak sides of Kastamonu developers. While asking these questions we used five Likert scale (1: I am Stringly Disagree; 2: I am disagree, 3: Neither agree nor disagree; 4: I am agree and 5: I am stringly agree). We benefit from the research of Özorhon and Demirkesen (2014: 6842).

Table 4 presents the means, skewness and kurtosis values about the Questions about the strength of Kastamonu developers. According to Küçük (2016:239) scores less than 2,33 are evaluated as low; scores between 2,34 and 3,67 are evaluated as medium and scores higher than 3,67 are evaluated as high. We evaluated the answers according to these scores. The means of questions about low costs (Question C1) and customer satisfaction (Question C5) are higher because they exceeds 3,67. So it can be accepted that low costs and high customer satisfactions are strength of Kastamonu developers. Meanwhile Questions C6 and C7 which are about ability to take risks and relationships between suppliers have low values because they have less average than 2,33. These results show that the ability and encouragement to take risks and relationships between suppliers are not strength of Kastamonu developers. Questions C2, C3 and C4 have means between 2,33 and 3,66 so



that they can be evaluated as medium. These questions are about productivity of workers, the ease of communication between workers and learning process and capacity of organizations. However their means are very close to 2,33 rather than 3,66. It is not possible to say definitely, but it seems that workers are not so productive and have not higher communication skills.

Table 4. Strength of Kastamonu Developers

	Mean	Skewness	Kurtosis	Degree
C1. Low Costs are Strength of Kastamonu Developers	3,87	-0,413	-0,473	High
C2. High productivity of workers are Strength of Kastamonu Developers	2,71	0,173	-0,396	Medium
C3. The Ease of Communication Between Turk workers are Strength of Kastamonu Developers	2,65	0,032	-0,565	Medium
C4. The Learning Process and Capacity are Strength of Kastamonu Developers.	2,56	0,103	-0,109	Medium
C5. High Customer Satisfaction are Strength of Kastamonu Developers.	3,89	-0,470	-0,354	High
C6. The ability and encouragement to take risks are Strength of Kastamonu Developers	2,07	0,102	-0,829	Low
C7. The Relationships with suppliers such as cement, bricks etc. are Strength of Kastamonu Developers.	2,35	0,450	-0,239	Low

In Table 5 results of Questions about weakness of Kastamonu Developers are represented. Questions are again prepared by the help of Özorhon and Demirkesen (2014:6842). This time all question have means bigger than 3,66 so that participants accept these hypotheses with high value. Question D1 is about and risk management and it has average which is bigger than 4. Participants generally accept that risk management is weak side of Kastamonu Developers. It can be seen that participants generally think that the ability and encouragement to take risks are not strength of Kastamonu Developers in Question C6. Shortly, Kastamonu developers have problems in taking and managing risks. In question D2 we see that participants think that high losses in work productivity are an important problem for Kastamonu developers. If we look again at Table 4 we will see that Question C2 which was



about productivity of workers have only average of 2,71 which is close to 2,33. Results of Question D2 and C2 show that Kastamonu developers have some problems with worker productivity. Though Kastamonu entrepreneurs have not enough capital accumulation they have low tendencies to establish partnership. According to results of Question D3 Kastamonu entrepreneurs have difficulty in establishing partnership. Question D4 is about institutional structure and culture. Generally Kastamonu firms are family firms with small scale, so it is normal for them not to set up successful organizations. To design successful projects developers need qualified architects. However, such as many developing provinces Kastamonu have problems in attracting qualified personnel like architects, engineers. Therefore designing and qualified staff is weak sides of Kastamonu developers as it can be seen in Question D5 and D6. These questions are also related to Question D2, because lack of qualified staff causes losses in productivity.

Table 5. Weakness of Kastamonu Developers

	Mean	Skewness	Kurtosis	Degree
D1. Risk Management in high risky markets are weak sides of Kastamonu developers.	4,04	-0,493	-0,288	High
D2. High losses in work productivity are weak sides of Kastamonu developers.	3,82	-0,882	0,766	High
D3. Kastamonu firms rarely establish partnership and this is weak side of Kastamonu developers.	3,91	-0,283	-0,416	High
D4. The lack of institutional structure and culture is weak side of Kastamonu developers.	3,96	-0,770	1,003	High
D5. The weakness in designing is weak side of Kastamonu developers.	4,05	-0,626	0,476	High
D6. The lack of qualified staff is weak side of Kastamonu developers.	3,84	-0,710	0,080	High

We asked questions about opportunities faced by Kastamonu developers by using the research of Özorhon and Demirkesen (2014:6842). Government subsidies are important in construction industry. Because developing countries should complete their infrastructure about education, communication, transportation etc. To achieve this goal governments generally support construction industry. Result of Question E1 support this



item due to high average (4,05). Also generally academic researches support that economic growth and construction industry have strongly linked each other. Result of Question 4 shows that participants generally agree that economic growth is an important factor which supports construction industry. Due to medium scores of Question E2 and E3 it is not possible to say anything about other provinces. Kastamonu is close to Karabük, Çankırı, Sinop, Bartın and Çorum which are small cities. The nearest big city to Kastamonu is Ankara and it is possible reach Ankara in approximately 3 hours by highway. Proximity to small cities (Karabük, Çankırı, Sinop, Bartın and Çorum) is not thought as strong opportunity for Kastamonu developers by participants. However participants don't reject the importance of being close to these cities.

Table 6. Opportunities For Kastamonu Developers

	Mean	Skewness	Kurtosis	Degree
E1. Government subsidies are opportunity for Kastamonu Developers	4,05	-0,406	0,189	High
E2. Geographical and Cultural proximity to other provinces are opportunity for Kastamonu Developers.	2,75	0,444	-0,538	Medium
E3. The needs to construction in other provinces are opportunity for Kastamonu Developers.	2,65	0,323	-0,446	Medium
E4. Economic Growth that is seen in Turkey is opportunity for Kastamonu Developers	3,98	-0,235	-0,499	High

We asked questions about threats faced by Kastamonu developers and benefit from the research of Özorhon and Demirkesen (2014:6842) during preparing questions. All three questions have exceeded 3,66 so that they have higher value. It is predictable that Kastamonu developers have difficulty in financing projects due to being small firms with insufficient capital accumulation.

According to result of Question F1, participants generally agree that developers have difficulty in financing their projects. Kastamonu is located on earthquake fault line. Addition to this in Middle East and Caucasia we have witnessed many conflicts and chaos. Participants agree that earthquakes, natural disasters and wars are threats for Kastamonu developers. Also the quality of inputs is important for the quality of constructions. However



participants think that this is a threat for developers or in other words they think that building materials have not sufficient quality.

Table 7. Threats For Kastamonu Developers

	Mean	Skewness	Kurtosis	Degree
F1. The difficulties in project finance are threats for Kastamonu Developers.	4,11	-0,481	0,213	High
F2. Earthquakes, natural disasters and wars are threats for Kastamonu Developers.	3,91	-0,535	-0,484	High
F3. The Poor Quality of building materials, the incompatibility with standards are threats for Kastamonu Developers.	4,05	-0,340	-0,536	High

7. Conclusion

Construction industry has an important place in Turkish economy such as in other developing countries. Kastamonu is one of the provinces who did not complete its development. In developing cities generally population will increase so housing needs will increase. In this research we aimed to look at Kastamonu construction industry.

We investigated factors affecting housing demand and supply in Kastamonu, Strength and weakness of Kastamonu developers, opportunities and threats faced by Kastamonu developers. It is found that the most important factors which affect housing demand are prices, interest rates and consumer's income. Meanwhile the most important factors which have an impact on housing supply are interest rates, prices and urbanization. Though interest rates affect both demand and supply it's affecting direction is different. If interest rates increase, financing house purchase will be more expensive for consumers and some of consumers will give up purchasing. So house demand will decrease. On the other hand if interest rates increase, developers will prefer to lend their money instead of realizing house project. So supply will decrease.

As result of questions about strength of Kastamonu developers it is revealed that low costs and high customer satisfaction are strength for Kastamonu developers. At the same time risk management, losses in work productivity, tendency to establish partnership, lack of institutional structure and culture, designing are weakness for Kastamonu developers. Questions about opportunities faced by developers revealed that government subsidies and economic growth are opportunity for Kastamonu developers while difficulties in financing, natural disasters and poor quality of inputs are threats for Kastamonu developers.



References

- Adams, D.; Leishman, C. and Moore, C. (2009), Why Not Build Faster? Explaining The Speed At Which British House Builders Develop New Homes For Owner-Occupation. **The Town Planning Review**. 80(3), 291-314
- Cheshire, P. (2008), Reflections On the Nature and Policy Implications of Planning Restrictions On Housing Supply. Discussion of Planning Policy, Planning Practise and Housing Supply By Kate Barker, **Oxford Review of Economic Policy**, 24(1), 50-58.
- Cheshire, P. and Sheppard, S. (2005). The Introduction of Price Signals Into Land Use Planning Decision Making: A Proposal, **Urban Studies**, 42(4), 647-663.
- Dilek, S. (2017), **Oyun Teorisi Eşliğinde Sanayi Ekonomisi**, Seçkin Yayınları.
- Dilek, S. and Kesgingöz, H. (2016). SWOT Analysis of Safranbolu City In Terms of Tourism. **Research In Business and Social Sciences**. 5(1). 54-64.
- Ekiz, C. (2010), **Türkiye’de Rekabet Yönetimi: Tekelci Düzenlemenin Ekonomi Politikası**. Siyasal Kitapevi.
- Eşkinat, R. (2012), “Türk İnşaat Sektöründe (TOKİ’nin) Yeri ve Etkisi”, **DPUJSS**, 32(2), April
- Eşkinat, R. and Tepecik, F. (2012), “İnşaat Sektörüne Küresel Küresel Bakış”, **Afyon Kocatepe Üniversitesi İİBF**, 14(1), 25-41.
- Karadimitrou, N. (2005), “Changing The Way UK Cities Are Built. The Shifting Urban Policy and The Adaptation of London’s Housebuilders”, **Journal of Housing and The Built Environment**, 20, 270-286.
- Östman, L. (2014), “An Explorative Study Of Municipal Developer Competitions In Helsinki”, **Formakademisk**, 7(1), 1-19.
- Özorhon, B. and Demirkesen, S. (2014), “Türk Müteahhitlik Hizmetlerinin Uluslararası Rekabetçilik Analizi”, **İMO Teknik Dergi**, 6831-6848.
- Öztürk, N. and Fitöz, E. (2009), “Türkiye’de Konut Piyasasının Belirleyicileri: Amprik Bir Uygulama”, **ZKÜ Sosyal Bilimler Dergisi**, 5(10), 21-46.
- Ronn, M. (2016), “Developer Competition In Gothenburg: A Case Study On Architectural Design, Building and Housing Cost”, **Kulturlandskapet**, Royal Institute of Technology, Stocholm.
- Türkkan, E. (2001), **Rekabet Teorisi ve Endüstri İktisadi**, Turhan Kitapevi.



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Uzunkaya, M. (2013). "Uluslararası Rekabet Edebilirlik Çerçevesinde Türk İnşaat Sektörünün Yapısal Analizi", **TC. Kalkınma Bakanlığı İktisadi Sektörler ve Koordinasyon Genel Müdürlüğü.**

