MISMATCH OF LABOR FORCE AND INDUSTRY IN KONYA: ANALYSIS OF STRUCTURAL AND INDIVIDUAL FACTORS FROM EMPLOYER'S PERSPECTIVE

A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF SCIENCE IN SOCIAL POLICY

DECEMBER 2019

Approval of the Graduate School of Social Sciences

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ABSTRACT

MISMATCH OF LABOR FORCE AND INDUSTRY IN KONYA:
ANALYSIS OF STRUCTURAL AND INDIVIDUAL FACTORS FROM
EMPLOYER'S PERSPECTIVE

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December 2019, 135 pages

Turkey has experienced a significant economic growth after 2002 and GDP increased along with growing sectors and increasing income. However, growth was not reflected in the labor market outcomes. This study focuses on causes of not increasing labor force participation in a rapidly growing economy of a province, aims to understand underlying reasons, and identifying areas that need to be addressed in future. The research and discussions were carried out on the case of Konya province, by focusing on industry sector from employer perspective. A field research has been carried out through in-depth interviews with employers and experts and descriptive statistics were utilized. The research question addresses the issue by understanding the factors behind not increasing labor force during the significant economic growth: *How is the lack of increase in labor force participation rate explained by employers, despite growing economy and industry since 2008 in Konya province?* There are three main findings, among other findings considered, in answering this question, (i) inadequacy of job value in the industry in attracting and engaging workforce (ii) shortage of labor supply in quantity and quality in meeting labor demand of industry, and (iii) existence of skill mismatch. These findings which are strongly interconnected, also correspond to demand and supply sides of the

labor market as well as their interaction with each other. The case of Konya helps to understand challenges of the demand and supply sides of labor market in Turkey, which I believe could be generalized to other emerging cities in Turkey, and maybe to other cities with similar challenges in developing countries.

Keywords: Labor Market Mismatch, Skill Mismatch, Labor Force Participation, Job Value, Labor-Output Relation

ÖZ

KONYA'DA İŞ GÜCÜ VE SANAYİ UYUŞMAZLIĞI:
YAPISAL VE BİREYSEL FAKTÖRLERİN İŞVEREN BAKIŞ AÇISINDAN ANALİZİ

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Aralık 2019, 135 sayfa

Türkiye 2002 yılından sonra önemli bir ekonomik büyüme yaşamış ve büyüyen sektörler ve artan gelir ile birlikte GSYH artmıştır. Ancak ekonomik büyüme işgücü piyasası sonuçlarına aynı oranda yansımamıştır. Bu çalışma, ekonomisi hızla büyüyen bir ilin işgücü katılımının artmamasının nedenlerini anlamayı ve gelecekte odaklanılması gereken alanları tespit etmeyi amaçlamıştır. Araştırma ve tartışmalar Konya ili vakası üzerinden yapılmış, işveren perspektifinden sanayi sektörü odağa alınmıştır. İşverenler ve uzmanlarla derinlemesine mülakatlar yoluyla bir saha araştırması yürütülmüş ve beraberinde tanımlayıcı istatistiklerden faydalanılmıştır. Araştırma sorusu, büyüyen ekonomiye rağmen artmayan iş gücü katılımının nedenlerini anlamak üzere "*Konya ilinde 2008 yılından bu yana büyüyen ekonomi ve sanayiye rağmen işgücüne katılım oranının artmaması işverenler tarafından nasıl açıklanmaktadır?"* şeklinde tasarlanmıştır. Bu sorunun cevaplanmasında, diğer bulgular ile beraber, üç ana bulgu ortaya çıkmıştır. Bu üç bulgu, (i) sanayideki işlerin değerinin iş gücünü çekmekte ve elde tutmakta yetersiz kalması, (ii) iş gücü arzının nitelik ve nicelik olarak yetersizliği, (iii) beceri uyuşmazlığının mevcudiyeti şeklindedir. Güçlü bir şekilde birbiriyle bağlantılı olan bu bulgular, aynı zamanda işgücü piyasasının talep ve arz tarafları ile birbirleriyle

etkileşimlerine de karşılık gelmektedir. Konya örneğinde, Türkiye'de işgücü piyasasının talep ve arz taraflarının karşılaştığı zorlukların, Türkiye'nin gelişmekte olan diğer şehirlerine ve belki de gelişmekte olan ülkelerde benzer sorunları olan diğer şehirlere de genelleştirilebileceğine inanıyorum.

Anahtar Kelimeler: İşgücü Piyasası Uyuşmazlığı, Beceri Uyuşmazlığı, İş Gücü Katılımı, İş Değeri, İşgücü-Çıktı İlişkisi

To My Wife and Daughter

ACKNOWLEDGEMENTS

This study is a result of my observations and curiosity while working with various manufacturing companies in the emerging economical centers in Turkey. I would like to start with thanking to my clients for sharing their perceptions and experiences with me in joyful conversations.

I would like to thank all jury members for their valuable comments, Prof. Dr. Murat Yülek, Assoc. Prof. Dr. Fatma Umut Beşpınar, Assoc. Prof. Ayşe İdil Aybars. I would like to give special thanks to Assoc. Prof. Dr. Fatma Umut Beşpınar, for all of her support in my thesis process; for her guidance, patience and understanding. In addition, I would also like to give special thanks to Prof. Dr. Murat Yülek for his comments and guidance during my work.

Special thanks are owed to my dearest wife for all her support and my daughter for her patience while I spend nights and weekends working on this study instead of playing together.

Finally, I would like to thank all participants of field study, for sparing time and sharing their experiences and insightful comments.

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LIST OF ABREVIATIONS

CAGR	Compound Annual Growth Rate
G7	Group of Seven
GDP	Gross Domestic Product
GNP	Gross National Product
ICT	Information and Communication Technologies
ISO	International Organization for Standardization
ISKUR	Employment Agency
HR	Human Resources
KOSGEB	Small and Medium Industry Development Organization
LFPR	Labor Force Participation Rate
MEVKA	Mevlana Regional Development Agency
NACE	Nomenclature of Economic Activities
NUTS2	Nomenclature of Territorial Units for Statistics (Level 2)
OECD	Organization for Economic Cooperation and Development
SGK	Social Security Organization
TR52	Konya and Karaman Region
TRY	Turkish Lira
TURKSTAT	Turkish Statistical Institute

UNHCR	United Nations High Commissioner for Refugees
US	United States
USSR	Union of Soviet Socialist Republics

CHAPTER 1

INTRODUCTION

Turkey has experienced a significant economic growth after 2002 and GDP increased along with growing sectors and increasing income. The growth has been more prominent in the larger cities of the country, where population is concentrated, industry and service sectors are larger, and most businesses are located. In this period, in addition to the existing industrial centers of the country, which are primarily Marmara and Western Aegean Regions, new economic hot spots emerged in other parts of the country, with growing industry and service sectors.

Nevertheless, the economic growth is reflected in the labor market outcomes only to some extent in these regions. As a business consultant, I have been working with the large industrial companies in these emerging cities for the last 5 years, and my key observation was that employers struggle in attracting and retaining workforce. In a post-transformation period with high rates of growth, talent attraction to these newly emerging cities was a main problem. However, these businesses were also struggling in finding and keeping blue collars, and I was always curious to find out underlying reasons for it.

In this study, I focus on the case of Konya, one of the largest provinces in the inner-Anatolia and an emerging economic hot-spot, to examine mismatch of labor force and industry. In the selection of the case for this research, in addition to my observations while consulting to the businesses in this city; fluctuations in the labor force participation despite high economic growth performance made Konya a significant case.

1.1. Aim of the research and the research questions

Economic and more specifically industrial growth do not produce the intended outcome, i.e. the growth of labor force participation. Understanding the foundations of this issue is the main aim of the research. The research primarily provides an explanatory definition of the problem and agenda setting for the disparity in labor market and industry growth by focusing on the case of Konya.

The research question addresses the issue by understanding the factors behind shrinking labor force during the significant economic growth:

> *How is the lack of increase in labor force participation rate explained by employers, despite growing economy and industry since 2008 in Konya province?*

The main assumption behind this question is that with the growing economy and industry, it would be expected that increased job opportunities would encourage more people to participate in workforce and would eventually increase labor force participation. However, in the case of Konya, it is hypothesized that, existence of a labor market mismatch between expectations of the industry sector and characteristics of available workforce of Konya is the main structural factor behind not increased labor participation in a growing economy and industry, among other socio-economic and individual factors.

During the research, in addition to the main research question, other sub questions arose while the data is collected. These sub questions are:

a. *How do the structural socio-economic and individual factors play a role in shrinking labor force participation?*
b. *What are the characteristics of unmet labor demand in industry on Konya?*

The sub questions are also addressed in this research along with the main question as there might be various reasons behind the disparity in Konya case, which could be related to supply or demand sides as well as a result of external market forces. To understand the issue, and the factors behind it, the characteristics of employers and

employees, expectations from each other, dynamics of interaction of the two and consideration of external forces are critical to assess.

1.2. Scope of research: Case of Konya

Konya is a large, economically significant city in inner Anatolia, Turkey. Konya has performed outstanding GDP and industry growth in the examined decade (2008-2017). However, labor force participation has not changed after a decline in the first half of the decade, then fluctuating trend.[1]

Considering growing economy and industry, fluctuating but not increasing labor force participation and decreasing unemployment, it is possible to interpret that there had been an increase in labor demand in Konya in the given period. This verifies the first part of the assumption behind the research question, which was, "with growing economy and industry, it would be expected that increased job opportunities would encourage more people to participate in workforce and would eventually increase labor force participation". With increasing labor demand, job opportunities increased in Konya. However, this did not result in encouraging people to participate in labor market in the given period. Konya is differentiated from other economically large provinces with its low performance in labor participation, which is the main reason behind selecting Konya for the research.

1.3. Research methodology

The research methodology applied in this study is a primarily qualitative analysis of in-depth interviews that is conducted by the author in a field study, as well as utilization of descriptive statistics, in cross checking findings and providing a detailed answer to research question. The field study is conducted with a total of 18 interviews with employers and experts in Konya, in semi-structured in-depth interviews format. The

[1] See: 2.2.2. Konya for the details

interviews were carried out with experts from the relevant local and regional institutions and employers from the largest manufacturing industries of Konya.

Some of the interviewed organizations were either clients or stakeholders of previous studies and projects that the author carried out in Konya and Inner-Anatolian region. This network provided an advantage in identifying and contacting the relevant institutions and people. By also informing the local authorities in advance and utilizing the existing network to reach employers and experts in targeted sectors, most interviewees welcomed this study and were eager to contribute. On the other hand, there had been also some limitations, such as institutions and companies refusing to participate in interviews. In addition, there had been other constraints with the unavailability of the secondary data and detail level of it.

The results of interviews are analyzed qualitatively through mapping of both themes and sub-themes, and coding. The frequency of mentions and comments are analyzed per sub-themes. Types and sectors of interviewees are also considered in this analysis. The key limitation in this research is that the case is approached primarily from the perspective of employers and employer organizations. Employees are not directly covered in this field study, but rather analyzed through contributions of experts, such as trade unions. Thus, further studies that will also directly include employee side may uncover other issues and discussions not addressed in this thesis. Data collection methods and their scope are explained in detail further below.

1.3.1. Sector selection

This study focuses on the industry sector of Konya, more specifically, leading sub-sectors of manufacturing. These three major sub-sectors are (i) automotive and automotive parts, (ii) food, (iii) and machinery and agricultural machinery sectors. These three sectors selected on the basis of their share in employment in Konya. As shown in Table 1, (i) *Manufacture of food products,* (ii) *Manufacture of fabricated metal products, except machinery and equipment,* (iii) *Manufacture of machinery and equipment n.e.c.*,

(iv*) Manufacture of motor vehicles, trailers and semi-trailers* are largest employers in Konya. From this list:

- *Manufacture of food products* is directly included in the scope of field research and referred as *Food Industry* in this study.
- *Manufacture of machinery and equipment n.e.c.* is directly included in the scope of field research and referred as *Machinery and Agricultural Machinery* in this study.
- *Manufacture of motor vehicles, trailers and semi-trailers* is directly included in the scope of field research and referred as *Automotive Industry* in this study.
- *Manufacture of fabricated metal products, except machinery and equipment* subsector is the main supplier of *Machinery and Agricultural Machinery* and *Automotive Industry,* thus it is indirectly included in the study as the interviewed firms from these sectors also include this type of production in their capacities.

Table 1: Manufacturing subsectors and their formal employment in Konya (2015-2018) (NACE Rev. 2)

Manufacturing sectors	2015	2016	2017	2015 (%)	2016 (%)	2017 (%)
Manufacture of fabricated metal products, except machinery and equipment	17,656	20,655	20,813	19.6%	21.3%	20.4%
Manufacture of food products	16,974	17,680	18,903	18.8%	18.3%	18.5%
Manufacture of machinery and equipment n.e.c.	12,015	12,486	13,745	13.3%	12.9%	13.5%
Manufacture of motor vehicles, trailers and semi-trailers	7,027	7,634	8,817	7.8%	7.9%	8.6%
Manufacture of basic metals	6,062	5,988	6,167	6.7%	6.2%	6.0%
Manufacture of rubber and plastic products	5,129	5,645	5,580	5.7%	5.8%	5.5%
Manufacture of wearing apparel	4,197	4,333	4,235	4.7%	4.5%	4.1%
Manufacture of other non-metallic mineral products	4,146	4,277	4,618	4.6%	4.4%	4.5%
Manufacture of furniture	2,611	3,010	3,051	2.9%	3.1%	3.0%
Repair and installation of machinery and equipment	2,171	2,307	2,818	2.4%	2.4%	2.8%
Manufacture of leather and related products	2,480	2,459	2,611	2.8%	2.5%	2.6%
Manufacture of textiles	1,964	1,925	2,082	2.2%	2.0%	2.0%
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	1,910	2,221	1,688	2.1%	2.3%	1.7%
Manufacture of chemicals and chemical products	835	1,165	1,678	0.9%	1.2%	1.6%
Manufacture of electrical equipment	1,452	1,474	1,697	1.6%	1.5%	1.7%
Printing and reproduction of recorded media	1,482	1,272	1,329	1.6%	1.3%	1.3%
Manufacture of paper and paper products	772	857	844	0.9%	0.9%	0.8%
Other manufacturing	623	749	699	0.7%	0.8%	0.7%
Manufacture of basic pharmaceutical products and pharmaceutical preparations	179	199	212	0.2%	0.2%	0.2%
Manufacture of computer, electronic and optical products	111	107	173	0.1%	0.1%	0.2%
Manufacture of beverages	139	134	139	0.2%	0.1%	0.1%
Manufacture of coke and refined petroleum products	79	95	77	0.1%	0.1%	0.1%
Manufacture of other transport equipment	133	146	82	0.1%	0.2%	0.1%

Source: (MEVKA, 2019)

1.3.2. In depth interviews

A total of 18 interviews were carried out in Konya, 9 with employers and 9 with experts from selected sectors. The study has been carried out from employer perspective. Thus, nine employer interviews, and the expert interviews with professional organizations who are representatives of employers were utilized to obtain information on employer perspective. In addition, to catch employee perspective and balance employer views, other expert interviews with trade unions and public institutions utilized. Details of the interviews with each group are provided below.

1.3.2.1. Employer interviews

Nine interviews were conducted with the firms from three major manufacturing industry sectors of Konya; Food Industry, Machinery and Agricultural Machinery, and Automotive Industry. Three interviews were conducted per sub-sector. Interviewee firms included large and medium size firms. The large firms shortlisted from the list of largest firms in Konya in terms of their annual sales in the last financial year. Medium sized firms selected with recommendations of experts and other interviewed firms (snowball methodology). In the interviewee list, there had also been other targeted firms who refused to participate to the study due to unavailability, or other undisclosed reasons.

Interviewees included owners, professional executive level officers and HR managers of the companies. Five out of the nine interviewees were owners of the companies, three were founders and two were second generation owners/shareholders who were actively working in managing the company. Among the remaining four firms, professionals; two human resource executives, quality manager and sales manager were interviewed. The interviewees were defined based on their availability and level of knowledge of their workforce and labor issues.

Interviews were carried out by the author by visiting each firm in their headquarter (which is also their production base for all interviewed firms). Semi structured, in-depth

interview format was utilized, in which open questions were asked to the interviewees, and their answers and reflections were recorded in a written way. Each interview lasted between 30-60 minutes.

An introduction to the study and research question are provided in the beginning of each interview. Then, the interviews with employers were conducted by including but not being limited to the following topics:

a. Profile of the firm, operations and employment
b. Employee profile and skills
c. Workforce profile and skills needed in the firm and industry
d. Recommendations

1.3.2.2. Expert interviews

Nine interviews were conducted with the experts on Konya's labor market from relevant institutions in Konya. The interviewed experts were from relevant departments of chambers, regional development agency and development administration, universities, and trade unions. The institutions of interviewees were selected on the basis of their role in the labor market of Konya. Therefore, institutions representing employers (chambers), employees (trade unions), and relevant public institutions included in interviews.

Interviewees were selected from either the relevant departments of organizations or directly provincial representatives of selected trade unions. Most of the interviews were carried out from the list of targeted institutions but several of them were also added with recommendations of other interviewed experts (snowball methodology).

One lacking part of this study was that views from provincial office of public employment agency (İŞKUR) were not obtained and fed into this study, because they refused to participate in the interviews. Instead, their publicly available reports on Konya's labor market were utilized. There had also been other interviewees, who later refused to approve usage of their inputs without the approval of their superior officers.

These interviews were not used in the study as well and they are not counted in the nine interviews mentioned in this section.

Interviews were carried out by the author by visiting each institution in their office. Semi structured, in-depth interview format was utilized, in which open questions were asked to the interviewees, and their answers and reflections are recorded in a written way. Each interview lasted between 30-60 minutes.

An introduction on the study and research question are provided in the beginning of each interview. Then the interviews with experts are conducted with including but not being limited to the following topics:

a. Trends in labor market of Konya
b. Structure and trends of workforce in manufacturing industry of Konya
c. Labor market participation and barriers
d. Skills of workforce and matching with expectations of manufacturing industry
e. Recommendations

Some of the interviewees also provided additional resources for the study, in terms of data, research reports, and other relevant material.

1.3.3. Analysis of interviews

The interview notes are coded to identify key themes and sub-themes. There had been 27 themes, 146 sub-themes identified after analysis of the interview notes. The sub-themes are grouped under themes, and themes are grouped under 4 main categories, employer characteristics and expectations, employee characteristics, interaction of employee and employers and other factors.

The analyzed themes are their frequencies listed below. Analysis of sub themes are provided in chapter 3.

Table 2: List of the most mentioned themes in the interviews

Themes	Expert Comments	Employer Comments	Total
Education and Vocational Education	24	36	60
Woman Employment	15	16	31
Labor need of the industry	12	20	32
Refugees	10	20	30
Employee Commitment	6	15	21
Transformation	13	3	16
Location of employees	0	14	14
Wages	9	7	16
Trainings	0	13	13
Education profile of employees	0	13	13
Past experience of employees	0	12	12
Entry to labor force	2	10	12
Institutionalization	4	8	12
Qualifications employers seek	0	11	11
Preference	6	5	11
Automation	1	9	10
Employee turnover	0	9	9
Matching	6	4	10
Industry culture / discipline	2	3	5
Initiatives	3	1	4
Labor market policies	4	0	4
Trade unions	4	0	4
Unemployment Benefit	0	3	3
Informal labor market	3	0	3
Seasonality	0	3	3
Reputation of industry	2	0	2

Experts and employers' comments were analyzed separately, but were also compared with each other and their agreements and disagreements are identified. The discussions in this thesis are guided by the frequency of the sub-themes, but the propositions are also cross checked with the available statistics where applicable. Quotations from interviews are also provided in the discussion to support the discussion.

1.3.4. Descriptive Statistics

Statistics on national, regional and provincial macroeconomic, and sectorial indicators as well as indicators on labor market, vocational education provided by Turkstat, ISKUR, Social Security Organization (SGK) are collected from open sources, and through data requests from the institutions of interviewed experts. The data is used in the relevant chapters of the thesis in descriptive statistics format in order to support and confront the findings of interviews.

The timeframe for the research is selected between 2008-2017. There are number of reasons behind selection of this timeframe, which can be listed as including recovery period of 2008 global economic crisis, forming a decade to capture fluctuations, and availability of data. The global economic crisis of 2008 is also reflected in the macro-economic and labor market indicators of Turkey. Thus 2008 is selected as starting year to capture recovery in these indicators. Moreover, 2008-2017 forms a decade that is just over when this study is prepared. It allows to see fluctuations in the post recovery period as well. This decade also represents a post transformative period, after high growth rates in previous years in Turkey. Finally, availability of data for the period became another factor in selecting time frame.

The secondary data is mostly available for the selected time frame but there had also been limitations with it. For the analyzed period in this study, 2008-2017, there is discontinuity of data in the same detail level. Labor market indicators are only available in province level until 2013; afterwards, data is provided on regional (NUTS 2) level. In this case, Konya and Karaman, two neighboring provinces are classified together in TR52 NUTS2 region, and their data is presented together. However, considering the comparison of sizes of the cities in terms of population, labor force and GDP[2], Konya has clear dominance. Thus, this issue provides a minor limitation for the study.

[2] Konya and Karaman's comparison in terms of population is 2,180,149 to 246,672 in 2017; labor force is (registered) 369,329 to 49,305 in 2017; and GDP is 66.1 Billion TRY to 8.7 Billion TRY in 2017, respectively.

1.4. Structure of the thesis

This thesis consists of four main chapters, (1) Introduction, (2) Background, (3) Issues in employee and employer interaction and (4) Discussion and Conclusion. The introduction chapter starts with explaining aim of the research, research question with sub questions and hypothesis. Then the reasons for the selection of Konya case is explained. The next sub-chapter is explaining research methodology where, sector selection, methodology and details of field research, analysis of findings, other data sources are elaborated as well as limitations of the study and each activity. The background chapter has two main sub chapters. In the first one, economic growth and key labor market trends of Turkey in the examined period are presented, followed by detailed analysis of Konya's economy and employment. In the second part, relevant literature to this study is reviewed. The third chapter, Issues in employee and employer interaction, include analysis of data, presentation and discussion of findings of the study. In this section, the discussion is structured in three main sub-headings and elaborated from demand, supply and interaction of demand and supply perspectives. The last chapter, discussion and conclusion include summary of the study; a brief on scope, methodology and limitations. Then synthesis of findings are provided and the research question is answered. The conclusion also includes recommendations addressing each finding.

CHAPTER 2

BACKGROUND

In this section, literature review is provided focusing on the relevant discussions in the area. The scope of the research touches different discussions in economics, sociology, and management science literatures, thus there are rich discussions behind, which are summarized and discussed under five sub-headings in this section. In the second part of background, economic growth and labor market developments in Turkey are provided to understand the economic context, in which the developments in Konya are also significantly affected.

2.1. Literature review

Supply of labor, as an input for producing goods and services, critical for functioning of an economy in terms of the quantity and quality of its supply. In fact, supply of labor force is dependent on the population, size of population willing to work, and time that the population is willing to spend in work in determining quantity of workforce; but quality is determined by education, skills and health of the workforce (Kaufman & Hotchkiss, 2006) (Reynolds, Masters, & Moser, 1991). In this study, labor market participation and its determinants are analyzed in detail from quantity and quality perspectives over the case of Konya in order to provide an answer to research question. On the other side, the literature on labor market participation, relation of labor and output, human capital, match and mismatch in labor market are reviewed to understand similarities and differences of the case to contribute to existing literature.

The discussions in this chapter start with providing baseline to the study with explaining labor participation and key discussions and trends on it, since labor force

participation is an important part of the research question. Then the discussion is broken into three parts, where demand, supply and interaction of demand and supply are elaborated.

On the demand side, output, in other words economic growth, was assumed to be the main driver of employment and employment growth, but the link between the two has been weakened in the past decades. The discussions between the link and its weakening are covered in this topic.

Discussion is followed by supply perspective, where more of the quality side of supply, human capital and discussions on it are elaborated. The interaction of demand and supply is covered in the literature over match and in a more prevailing way, mismatch. The section follows with labor market mismatch, types of mismatch, their prevalence and market outcomes. In the end of the literature review part, reflections of these discussions on the case of Turkey are presented. The weakening link between labor and output has a widespread discussion in Turkey especially after trade liberalization and structural adjustments followed. The mismatch, especially educational mismatch discussion is also more prevailing which include elements on human capital discussions. Below, the key discussions in the literature are presented and discussed under these topics.

2.1.1. Labor market basics: Participation

Labor market participation refers to the decision of working, and labor market participation rate[3] refers to the proportion of working age population who is working or unemployed but actively searching for job.

[3] Another use is "labor force participation rate" as it is referred in other parts of this study.

This choice of working, in other words, choice between labor or leisure[4] is foundation of participation literature, which is usually explained with a household model, where family decides on working and work division within (Kaufman & Hotchkiss, 2006) (Reynolds, Masters, & Moser, 1991). This decision is primarily affected by non-labor income and wages each member can receive in the market, as well as other factors such as division of work by gender (Kaufman & Hotchkiss, 2006). Earning potential in labor market positively correlates with labor market participation, while non-labor income correlates negatively (Mincer, 1962) (Bowen & Finegan, 2015).

The division of work within family is theoretical foundation of the discussion, which is heavily discussed later over participation of woman to the labor force. In addition to above discussion of wage potential of individuals in the market, Mincer finds out, income of husbands in the market negatively correlates with wife's participation in labor market; on the other hand, wife's capability of earnings positively correlates with participation to labor market (Mincer, 1962).

Unemployment level also affects participation. As it is also provided one of the key assumptions of this study, findings and discussions in the literature shows unemployment and labor force participation is negatively correlated. In other words, increase in unemployment decreases participation and vice a versa (Bowen & Finegan, 2015). Which could be explained by, with increased job openings or opportunities in the market, people eligible to work will be more encouraged to work as finding a job is easier. On the other hand, market developments might also lead other results, such as with fiscal expansions, both unemployment and participation might increase at the same time as observed in most of the country cases by Brückner and Pappa (Brückner & Pappa, 2012). As Brückner and Pappa also confirmed in their study, where they classified non-participants as outsiders, with more favorable demand conditions, non-participants of the market have extra incentive to look for a job, in fact, if entry of outsiders exceed matching

[4] In the labor and leisure ends of the discussion, other types of activities such as household work were added to leisure part later.

of insiders with jobs, unemployment increases (Brückner & Pappa, 2012). On the other hand, with less jobs and decreasing opportunities, it will be more challenging to find a job in increased competition in job market, which will discourage people and eventually decrease participation.

In addition to unemployment levels, there are other factors that affect participation rates to labor market such as taxes on labor. Taxes such as income or payroll taxes have direct impact on earning level, thus any increase on it would reduce earnings of employee and might lead to a shift in labor/leisure choice (Reynolds, Masters, & Moser, 1991).

Kapsos find out negative correlation between taxes and employment elasticity, meaning increase in individual tax rate decreases employment elasticity. Higher taxes on labor, lowers intensity of employment. This effect is stronger with woman employment (Kapsos, 2005). Beck and Park also explore social spending and tax policies relations with globalization and find out links between increased trade openness and increasing labor taxes. They argue, governments increase labor tax to finance increased social spending, and in return labor participation is negatively affected in domestic economies (Beck & Park, 2018).

The post war era has witnessed important changes in the labor market participation trends, and it is primarily affected by the decisions regarding division of work within family and through market forces affecting it. The overall trend in most countries has been a decrease in male participation and increase in woman participation, and rather increased or remained stable labor force participation in total (Parsons, 1980) (Sorrentino, 1983) (Haveman & Wolfe, 1984) (Mincer, 1985) (Killingsworth & J.Heckman, 1986) (Heintz, 2006).

On declining male participation, Parsons carried out an empirical study for 1960-70 period, and finds out a declining trend due to increasingly attractive alternatives to work such as more generous social security benefits in US (Parsons, 1980). However, Haveman and Wolfe criticize these results and argue there are critical other factors that

are not included in Parson's simulation model such as changing age composition of labor force, work related health problems, employment and earnings of family members and other factors. Thus, they suggest social security benefits have limited effect on labor participation (Haveman & Wolfe, 1984). Sorrentino also conducted a study on nine industrial countries and found out in the for most times in post-1960 period, participation rates for men declined in all countries (Sorrentino, 1983).

On increasing woman participation, Sorrentino, in his study on nine industrial countries, finds mixed results per country with an overall trend of increase. In half of the countries, "a strong, sustained rise" is observed from 1960s, and with other countries, after a decline until 1970s, an increase begins afterwards (Sorrentino, 1983). Mincer also studies growth of woman employment in 1960-80 period in 12 industrial countries with a survey study. Mincer finds out labor force growth of married woman increased with an exception of USSR where growth happened after 1970. However, wage gap between woman and man narrowed only partly (Mincer, 1985). Killingsworth and Heckman also carried out a survey study on labor participation of woman and found out a growth happened in different times with different paces after 1960s in the most advanced economies. Moreover, they also observed, growth is more significant for married woman (Killingsworth & J.Heckman, 1986). For the later periods, Heintz points out the continuation of the upward trend in woman participation in both developed and developing countries, relative to participation of men to labor market (Heintz, 2006).

In this section, key concepts and discussions over labor force participation are elaborated together with major trends in participation rates to provide a basis for the discussions in the other chapters of this study. Participation rates are primary determinant of labor supply with working age population and critical in supporting economy to function as a major factor of production. In fact, they are affected by various factors, yet level earnings is the primary determinant for individuals' decision to participate in labor force together with which person(s) in the family will participate. In fact, the changes in the composition of workforce with decreasing male and increasing female participation

from 1960s onwards shows impact of changing earnings levels and income sources on this decision.

2.1.2. Labor demand: Labor and output relation

The relation between output and labor, in other words economic growth and labor market outcomes such as number of workforce and working time, or level of unemployment or participation has been a matter of debate in the literature. As the two areas were correlated, grew and shrink together, mostly driven by manufacturing, there had been many studies measuring employment elasticity. These studies, which could be analyzed in two terms characterized with strong links between two main variables, labor growth and economic output (Okun, 1963) (Lee, 2000) (Freeman D. G., 2001), and weakened, even broken link between variables (Padalino & Vivarelli, 1997) (Caballero & Hammour, 1998) (Kapsos, 2005) (Heintz, 2006) (Onaran, 2008).

The relation is primarily set with Okun's law, which calculated elasticity of output and unemployment level over US data. Okun's law states that for every point change in unemployment (above 4% unemployment rate) there will be around three percent change in the output, in GNP terms (Okun, 1963). Later, this relationship was tested by various authors for developed and developing countries. Lee has found it as statistically significant for most of the OECD countries in post war period (Lee, 2000). Freeman tested it for ten industrial countries and found the coefficient 2 to 1 instead of Okun's 3 to 1 ratio (Freeman D. G., 2001). This provides a clear link between economic growth and growth of jobs.

In the latter period, the link between growth and labor market outcomes weakened (Padalino & Vivarelli, 1997), or as some authors argue, was broken. Jobless growth became a prevailing term to describe economic and especially industrial growth (Kapsos, 2005) (Heintz, 2006) (Onaran, 2008). Authors use employment elasticities in explaining the weakened or broken link between employment and growth. Padalino and Vivarelli

analyse employment elasticities in two periods, 1960-73 and 1980-94, which they call Fordist and post-Fordist periods respectively. From this classification, it could be argued that, Fordist period could be extended to the times when Okun's Law was applicable as authors were able to associate economic and employment growth with a clear link. On the other hand, the period called as post-Fordist, could be associated with the weakening link as latter studies argue (Padalino & Vivarelli, 1997) (Kapsos, 2005) (Heintz, 2006) (Onaran, 2008).

Technological progress and increased productivity with this progress leading to substitution of factors from employment to technology is argued as main driver for the weakening link between economic growth and employment (Padalino & Vivarelli, 1997) (Caballero & Hammour, 1998). The advancements not only lead to changes on quantity of employment, but have wider employment outcomes, such as earnings. Quality of employment opportunities deteriorates (Heintz, 2006). Investment and growth continue, but labor does not share the benefits of this growth in terms of earnings (Caballero & Hammour, 1998).

In the other regions as well, there had been variations in the weakening link between growth and employment (Kapsos, 2005). In example, according to the study conducted by Kapsos, Africa and the Middle East had higher employment intensive growth compared to other regions (between 1991-2003), which could be explained by various factors, such as structure of labor market, availability of labor supply and productivity levels in economies, as well as characteristics of growth. Heinz also finds a decline in employment elasticity of growth in most of the countries examined (comparing 1960s&70s with 1980s). In a study on manufacturing sector in Central and East European countries, Onaran finds varying results over countries, but most cases show a weakening, even broken link between employment and output (Onaran, 2008). However, Onaran points out to other factors in these transitionary economies which highly affect results, such as increase in foreign direct investment and trade with integration to Europe. Still these increases do not prevent job loss in manufacturing industry. In the examined cases, international competition offsets the favorable conditions brought by European integration (Onaran, 2008).

Still, there is discussions that jobless growth is not applicable for all geographies or all sectors. Padalino and Vivarelli argue, in G7 countries, employment growth observed in all economies, driven by service sector. However, in manufacturing it's mainly jobless growth, due to post Fordism and diffusion of ICT (Padalino & Vivarelli, 1997). Mourre also argued there had been a pattern of employment growth in euro area between 1997 and 2001, but he associated this growth with services sector which was growing fast with its job intensive structure, and growth in part time jobs with their lower costs (Mourre, 2006). Kapsos also points out to links between size of employment in services sector and employment elasticity (Kapsos, 2005). In addition to the sector differences, this arguments in employment growth do not falsify deterioration of other labor market outcomes such as earnings.

Kapsos and Heintz emphasize gender differences of these developments. Kapsos uses the term "catching up" effect to higher growth elasticities of woman compared to man in the examined period, but points out a reservation that, this increase might be in lower quality jobs. Heintz also stresses increasing woman participation to labor in both developed and developing world. However, he also stresses a reservation that, participation of woman might be the response of households in coping with economic changes (Heintz, 2006).

From the reviewed literature, it could be interpreted that, weakened link between the output and labor is being more visible despite variations across regions, sectors, and differences of trends between genders. Discussions show that improving technology and productivity gains it brings to primarily manufacturing sector is the main driver of the delinking output and employment growth. However, in more labor-intensive sectors such as services, these effects are rather unobserved or reverse, that the link still exist between two variables.

2.1.3. Labor supply: Human capital

Supply of labor market was discussed under the previous headings mainly from quantitative perspective. However, qualitative perspectives of labor supply is more significant in its contribution to productivity and eventually development in an economy. The qualitative perspective of the labor mainly discussed under the term human capital in the literature. As also covered in 2.2.2 Labor demand: Labor and output relation section, wage is one of the main determinants in the choice of participating labor force, but what determines wages? This question is discussed in human capital literature as well as income distribution, consumption, education, training and on the job training as key determinants.

Discussions over human capital, investment and returns of investment to human capital provide roots for most of the literature. The studies of Mincer on Investment in human capital and personal income distribution (Mincer, 1958), Schultz on investment in human capital (Schultz, 1961) and Becker with the human capital theory (Becker, 1964) became foundations of discussion. Spence contributed with his model on signaling an attempt to understand hiring decision and employee characteristics (Spence, 1973). The job competition theory by Thurow followed this discussion by challenging arguments of neoclassical marginal productivity discussions on labor force (Thurow, 1975).

Mincer, Schultz and Becker theorized on human capital by primarily trying to explain what happens with investment into skills and knowledge of an individual with different perspectives, on earnings and consumption, education and training and on the job training (Mincer, 1958) (Schultz, 1961) (Becker, 1964). Schultz argues, through these investments “quality of human effort can be greatly improved, and its productivity enhanced” (Schultz, 1961).

Mincer considered cost of education and training, and cost of income postponement as major investments in human capital (Mincer, 1958). Whereas Schultz argued most of the expenditures on consumption are spent on human capital. Education,

health, internal migration for better job opportunities are direct expenditure examples, and opportunity cost of earnings forgone, and on-the job trainings by workers are indirect examples for investments on human capital as Schultz referred in his study (Schultz, 1961). Becker also acknowledged education, training, medical care and child care as the areas invested for human capital (Becker, 1964).

The returns of these investments and earnings are affected by are inter-occupational differences caused by training, experience and age according to Mincer. In this argument, training is the defining factor for occupation which is primary determinant of income level. Age and tenure too, through accumulated knowledge and experience, contribute to this earning level (Mincer, 1958). Spence relates workers earning, or wage provided by employer, to workers' marginal contribution to the company (Spence, 1973). On these earning determinants, Becker further elaborates experience by arguing productivity of a worker is not constant, but affected by work itself. In other words, workers develop their skills during the work and increase their productivity over time (Becker, 1964).

Thurow partially rejects this idea on earnings and proposes "job competition" model in his book "Generating Inequality" (Thurow, 1975). Thurow's job competition model relates wage to the characteristics of the job rather than the worker. He calls this model as job competition to distinguish it from marginal productivity approach of "wage competition". However, Thurow does not completely deny wage competition, he argues, job competition and wage competition exist together, and they are not mutually exclusive. He states, "the marginal product resides in the job and not in the man" (Thurow, 1975).

Authors acknowledged significance of on-the job trainings in developing skills and knowledge that constitute human capital. Schultz referred to on-the job trainings by workers as indirect examples for investments on human capital (Schultz, 1961). On the other hand, Becker goes into more details on on-the-job trainings and further elaborates the discussion by conceptualizing trainings as general and specific. In short, general training is basic training that provides skills applicable for future jobs of the trainee as

well, while, specific training is for a specific job in the company who provide the training. Thus, this type of training might not be applicable in other companies (Becker, 1964).

General training is provided for increasing marginal productivity of employee. However, as this will provide returns in long term, employees might not want to bear the costs of it. Thus, it is usually paid by the trainee working with low wages in the early years of career. Workers accept this to increase their future earnings via learned skills. Specific training is type of training that the returns are obtained for providing employer, but probably not in other companies in the long run. According to Becker, on-the-job trainings are neither complete general trainings or specific trainings. However, as the providing company want to receive the returns in short run, on-the-job trainings are more specific trainings in general (Becker, 1964).

Thurow also partially agrees with this discussion by opposing the traditional idea of workers come with a standardized skill set, and argues labor market and employers train their recruits with heterogeneous skills to standardize them for the requirements of the job (Thurow, 1975). In addition, he also sees on-the-job training as an efficient training method. He argues, on the job training from one worker to another might be the cheapest method, since the worker will learn essentials to get the job done and not the knowledge that will not be utilized (Thurow, 1975).

Becker and Thurow also commented on who pays for the trainings. According to Becker, the learning process creates a cost for both sides, trainer and trainee, in other words worker and the workplace. Trainee provides time and effort to learn and develop, on the other hand, trainer and/or the workplace provides teaching time, material and equipment used during the training. From this training and skill development both sides gain in short and long term. The workplace gains through increased productivity in short run, and trainee in increased earnings in long run (Becker, 1964). Thurow partially agree that the training costs are paid by both sides. Thurow argue, most job-related skills are not obtained before entering the job, they are gained through on-the-job training.

Therefore, labor market is a more of a training market rather than a skill market. Thurow states,“everyone is paid his marginal product minus his training costs” (Thurow, 1975).

In Thurow’s model, employers are willing to minimize the training costs, so they try to find the suitable workers with lower training costs. This puts workers in “labour queue”, a concept proposed by Thurow, where workers compete to get better jobs with their background characteristics. Workers with better credentials take the highest-ranking jobs, on the other hand, workers having no credentials or low-level credentials either get the lowest ranking jobs or become unemployable, because their training costs will be higher than other alternatives.

Spence claims hiring is an investment decision under uncertainty (Spence, 1973). As the traits of the worker and their future contribution to the company are unknown before the hiring decision is given, Spence resembles it with lottery. However, applicants give signals with their fixed and alterable characteristics as Spence conceptualizes them as “indices” and “signals” respectively. For example, education is an alterable characteristic, a “signal”, that can be changed with investment on time and money. On the other hand, characteristics such as race and gender are unalterable, “indices” as author calls. Signals are alterable and this alteration creates signaling cost. These costs make it not eligible for everyone and education functions as a useful signal for the ones who take it (Spence, 1973).

On the other hand, Thurow also discusses on imperfect information in the market over the training cost. He argues, in the “labour queue”, employers have problem with imperfect information, thus they are unable to clearly decide which worker will have less training costs (Thurow, 1975). Then he suggests background characteristics and uses education background as main input for his model. Thurow sees education as a measure of trainability and associates education with “learning how to be trained”. Thus, the credential mentioned above is usually about attained schooling of the worker. However, Thurow also includes other key factors of productivity in the definition of training costs,

> "Training costs, as the term is used here, include the costs of inculcating norms of industrial discipline, good work habits, and the uncertainty costs associated with hiring workers whose training costs are more variable or unknown."

Thurow also emphasizes significance of "industrial discipline". He refers education as a credential for workers to show as having "industrial discipline" which is essential for work and could be more important than job specific skills. Education provide abilities to workers such as *"show up on time, take orders, do unpleasant tasks, and observe certain norms of group behavior"*. As education would also increase one's rank in *labour queue*, Thurow sees investments in education as *"good investments"* in the job-competition model (Thurow, 1975).

The quality of the labor force is discussed over investment in human capital and type of these investments. Although authors count many types of investments such as health, child care, even mobility and other types of consumptions affecting human capital, the most significant one is education and training as many agree. In fact, this also continues after one enters work via on-the-job trainings, in a competitive job market, where characteristics of the job primarily determine the earnings, while characteristics of employee has lower effect on it.

2.1.4. Demand and supply interaction: Match and mismatch in labor market

The discussions under human capital and labor market are closely linked to the matching in the labor market. The investments individuals do to find a favorable job and maximize their lifetime earnings, and efforts of employers to find most suitable workers in terms of education, skills and other treads that will make them fit to the work are to ensure matching in the market. This makes, mismatch in labor market is a prevailing discussion with rich literature from 1960s onwards in sociology, economics and management science literatures. In this study, types of mismatch (educational, skill mismatch, field of study mismatch), and job search, quit and turnover discussions are elaborated, which is defined as a "distant" part of mismatch literature (Jovanovic, 1979).

The labor market mismatch literature in detail focused on mainly educational mismatch but also on other subtopics like skill mismatch and field of study mismatch, which are presented below.

2.1.4.1. Educational mismatch

In the literature, educational mismatch is discussed from return of investment point of view. Most of the studies examine whether individual and social investments in education pay off in the job market (Freeman R. B., 1975) (Duncan & Hoffman, 1981) (Bauer, 2002) (Groeneveld & Hartog, 2003) (Leuven & Oosterbeek, 2011) (MA, 2017). Authors discuss in their studies returns or losses of overeducation and undereducation and how market will balance itself in the long run.

The wage effects of schooling and investment return of education is studied by various authors, and in general results are pessimistic. In other words, overeducation does not pay off, although it provides certain advantages to the employee. (Freeman R. B., 1975). Bauer also investigates wage effects of over and undereducation with analyzing panel data from Germany. Bauer's key conclusion is return of over education, or penalty of under education is lower than return of required education (Bauer, 2002). Leuven and Oosterbeek review economics literature on overeducation (Leuven & Oosterbeek, 2011). In their study, they found out, the overeducation and its costs and benefits are widely discussed in the literature. Their key finding is that the economics literature on overeducation is mainly pessimistic, meaning most of the studies conclude, either investment in over education or savings from undereducation do not create better results than required education (Leuven & Oosterbeek, 2011).

MA provides a different perspective to investment returns of overeducation in the study where he investigates over and undereducation's wage affects (MA, 2017). MA argues, dynamics of ability should also be considered in job matching and overeducation discussion. MA concludes, overeducation does not necessarily have negative effect from efficiency perspective as it helps workers with unobserved low ability to find an

acceptable place in the labor market; even, they would seem overqualified from schooling perspective. In short, MA argues, low ability workers need to be more educated to compensate their abilities (MA, 2017). Another perspective for understanding investment returns of education comes from Groeneveld and Hartog, in their study where they explore effect of education and how does it impact the wage level and workers position with considering internal and external[5] labor markets of a single firm case. They find out, in the internal market of a company, overeducation provides better career progress than required education, with effects diminish over time (Groeneveld & Hartog, 2003). This would suggest, despite the pessimistic results derived from the economics literature on the returns of over or under schooling, over education might still provide certain advantages to the employee in a competitive job market.

In addition to wage and investment returns, there are other market outcomes of overeducation. One of the key conclusions of Freeman is decision for college enrolment is affected by job market, as economic forces affect career choice. He finds out, worsening career opportunities for college graduates and reduced rates of return for education affects the college enrollment in latter period (Freeman R. B., 1975).

The market outcomes are not limited to education demand. Duncan and Hoffman study employer (demand) side of over and under education with their empirical study on US labor market. They discuss the view of increasing skill level of workforce through education has little effect on changing demanded skillset by employers. As production techniques require a certain skill set from employees, assuming the production techniques remain similar, overeducation will eventually lead to some workers to work in jobs that require lower skill level in short run (Duncan & Hoffman, 1981). These arguments could also be related to Thurow's job competition model, where characteristics of the work determine the value (Thurow, 1975). However, Duncan and Hoffman question this technologically determined structure. They argue, in long run, with availability of larger

[5] Internal and external labor markets of the firm refers to two main sections of the firm. Internal is the business unit, the energy section, that is less exposed to external labour market. External is the commercial section which operates in a competitive environment and more exposed to external market.

and qualified work force, labor costs will fall, and it will give employers room for redesigning their production. This would eventually help them to change market conditions forcing workers to work below their skill set (Duncan & Hoffman, 1981).

In addition to the benefits or penalties attached to over and undereducation, another major debate in the literature is the measurement of it. In the mismatch literature, education mismatch is mainly assessed in quantitative ways. There had been different approaches, but they all started with defining level of required education for an occupation. Bauer (Bauer, 2002) and Leuven and Oosterbeek (Leuven & Oosterbeek, 2011) identified three main methods in their review of literature to define required education, (i) job analysis, (ii) self-assessment of workers, (iii) realized job matches. Desjardins and Rubenson named these a bit differently as normative, self-reported, and statistical, respectively and further breakdown self-reported as direct (by asking whether they are over or under qualified for their job) and indirect (by asking required education level for the job) (Desjardins & Rubenson, 2011). Groeneveld and Hartog (Groeneveld & Hartog, 2003) used insights of hiring experts of a single firm while analysing educational requirements with a single firm case assuming job analysis is done by the firms hiring experts. Duncan and Hoffman (Duncan & Hoffman, 1981) based their study on self-assessment of workers, individuals' grading on requirements of their job. Other authors suggested statistical methods, over realized job matches. Verdugo and Verdugo (Verdugo & Verdugo, 1989) used mean level of schooling in defining required level; whereas Kiker Santos and De Oliveira suggested using mode level instead of mean (Kiker, Santos, & De Oliveira, 1997). Then assessment usually happened by analyzing difference between this required schooling and actual schooling of individuals.

In educational mismatch, the key finding in the literature is, it is not paying off, considering the returns of overeducation or penalties associated to undereducation are less than returns of required education as most of the literature points out. However, it brings other advantages to individual workers in a competitive job market, by easing their matching and through promotions in their workplace. In addition, maturity of the concepts and methodologies to define and measure educational mismatch are quite

developed as it was a popular area of investigation. However, these methodologies primarily focus on quantitative side of mismatch. Due to lack of systematic measurement methodologies and data, they are unable to assess quality of graduates and education, which is partially covered in skill mismatch literature presented below.

2.1.4.2. Skill mismatch

Educational mismatch deals with schooling of individuals, whether it is excess or under schooling, or in a required level for a specific occupation. On the other hand, skill mismatch is more of a qualitative subject, often using self-assessment of workers as a setting point. Although qualifications are widely used as proxies for skills, skill mismatch is more precise in measuring mismatch since it considers skills obtained and lost (Adalet McGowan & Andrews, 2015a).

In the literature, authors focus on skill mismatch, it's causes, impacts, measurement problems and methods in their studies (Handel, 2003) (Desjardins & Rubenson, 2011) (Bloom, Genakos, Sadun, & Reenen, 2012) (Adalet McGowan & Andrews, 2015a) (Adalet McGowan & Andrews, 2015b) (McGuinness, Pouliakas, & Redmond, 2017).

Handel, and Desjardins and Rubenson discuss skill mismatch in demand and supply ends; in other words, "workers skills" and "job skill requirements" as Handel refers (Handel, 2003) (Desjardins & Rubenson, 2011). Most of the skill mismatch literature follows the same path, especially in explaining characteristics, causes, and impacts of skill mismatch.

On supply side, causes of mismatch are counted as inadequate education, and on demand side, market and employers' level of effort and it's appropriateness in identifying and fixing the mismatch (Desjardins & Rubenson, 2011).

Adalet Mcgowan and Andrews also associate individual and job characteristics link with mismatch. They define individual characteristics as age, migration status and firm size. In their study and in literature, they found links with those individual characteristics and mismatch, such as over-skilling being more common among young people compared to older, or over-qualification being more common among migrants compared to natives. When it comes to firms size, they also point out links in literature to increasing incidence of over skilling with firm size (Adalet McGowan & Andrews, 2015b).

In addition to firm size, Adalet Mcgowan and Andrews, find out skill mismatch decreases with growing management quality, mainly through adoption of up to date HR practices. They also refer to Bloom, Genakos, Sadun and Reenen's (Bloom, Genakos, Sadun, & Reenen, 2012) finding on relation between ownership structure and management capability (Adalet McGowan & Andrews, 2015b). Bloom et al. argue, companies that are run by external and non-family professional management are better managed compared to family owned firms. They also suggestthat multinational firms adopt good management practices globally. They associate productivity, competitiveness and higher worker skills with good management (Bloom, Genakos, Sadun, & Reenen, 2012).

In another study by Adalet Mcgovan and Andrews, they explore relation between policies and skill mismatch outcomes in 22 OECD countries (Adalet McGowan & Andrews, 2015b). Their main finding is that the differences in skill mismatch across countries are associated with differences in policy environment. Although skill mismatch could be impacted by various policy areas, they point out importance of framework policies promoting productivity and efficient resource allocation. The framework policies that have less rigidity in labor market, policies decreasing market barriers and promoting competition and lowering barriers for firms to exit market have better outcomes in reducing mismatch. In addition to framework policies, other policy areas such as housing policies that ease mobility, flexible wage negotiation practices, and longer time in life-long learning are linked with lower mismatch.

Another perspective to policy debate, a criticism, to the links between policy agenda and base evidence on skill mismatch comes from by McGuinness et al. by analyzing recommendations for skill mismatch. Their findings pointed out the disparity between the focus of policy recommendations and base evidence. They argue, although mismatch literature is mainly on educational and skill mismatch, policy debate is mainly on skill gaps, skill obsolescence and skill shortages (McGuinness, Pouliakas, & Redmond, 2017).

In addition to the causes of skill mismatch and policy debate addressing those causes, outcomes of skill mismatch are also discussed in wages, productivity perspective. On wage mismatch, Handel questions neo-classical economic argument stating that wage mismatch between demand and supply will find an equilibrium and the mismatch will happen only in transition period. From the skill mismatch perspective Handel discusses that increasing skills of the workers will not increase wages, as they are determined by structure of jobs and demand for work where he refers to Thurow (Handel, 2003). Desjardins and Rubenson also list requirements of job as key determinant for earning level, however, they do not deny that skills also have an impact. They argue, interaction between worker and the work is significant for productivity and eventually is effective on wage (Desjardins & Rubenson, 2011).

On productivity perspective, Adalet Mcgowan and Andrews explore relation between skill and qualification mismatch with labor productivity using 19 OECD countries industry data (Adalet McGowan & Andrews, 2015a). Their main finding associates skill and qualification mismatch with lower “aggregate” labor productivity. Efficiency of resource allocation in labor market is key determinant in the links between skill mismatch and labor productivity. They find out, especially in industries where over skilled workers are denser, more productive firms struggle in attracting suitable labor that will allow them to expand their operations. In fact, this inefficiency in resource allocation results in overall productivity loss. In example, recruiting an over qualified employee could be beneficial for a specific firm which might be increasing the overall skill level

within the firm, however, it happens in an expense of another, loss of a suitable employee of better performing firm (Adalet McGowan & Andrews, 2015a).

Other discussions on the outcomes of skill mismatch include Desjardins and Rubenson's arguments on impact of mismatch on adult education. They find out, skill content of jobs drive participation to adult education and training (Desjardins & Rubenson, 2011). In addition to causes and outcomes of skill mismatch, measurement is addressed in the literature as a major shortcoming. Authors discuss, there is not enough evidence to assess the skills that workers possess and skills job requires (Handel, 2003) (Desjardins & Rubenson, 2011). Handel points out, the lack of evidence with historic data makes it even more difficult to argue any increase or decline in the mismatch. Desjardins and Rubenson argue, the available discussions ignore education background, skills, work experience, trainings obtained, usually because lack of data (Desjardins & Rubenson, 2011).

Other authors provide overview for types of mismatch and discusses measurement of each in their study (McGuinness, Pouliakas, & Redmond, 2017) (Adalet McGowan & Andrews, 2015a). Their discussion covers the main types of mismatch, education and skill mismatch to Horizontal (field-of-study) mismatch, skill obsolescence, skill gap and skill shortage (McGuinness, Pouliakas, & Redmond, 2017).

Skill mismatch literature is not as rich as educational mismatch literature, it is relatively new area of investigation which is still defining its concepts and developing methodologies to measure. However, the literature covers causes, outcomes and policy debate of skill mismatch. As discussed in previous section on educational mismatch, educational mismatch is inconclusive in explaining quality side of education. Moreover, it is unable to explain dynamic developments in job market, such as skills obtained and lost during one's career (Adalet McGowan & Andrews, 2015a). Skill mismatch is more precise in these terms, as employees are affected and developed by their jobs.

2.1.4.3. Field-of-study mismatch

Field of Study mismatch, as also referred in above section, which is partially related to educational mismatch (McGuinness, Pouliakas, & Redmond, 2017), also finds a place in the literature with Montt's study on wage impacts of this type of mismatch (Montt, 2017).

Montt explores field-of-study mismatch and overqualification and their relationship with wages. Field-of-study mismatch refers to working outside of the field where the training is received (Montt, 2017). In the study, Montt argues, the field of study mismatch could be driven by primarily demand, but also by supply of skills. On demand side, field of study mismatch usually happens not because of an individual choice, but due to labor market conditions. The demand for skills in a market could drive mismatch. However, on supply side, the supply of skills could also be a driver through the characteristics of skills and their transferability (Montt, 2017).

One of the key findings of Montt is, unless there is overqualification, field-of-study mismatch does not necessarily cause wage penalty, in most country cases. It means, workers move between fields but generally in similar qualification levels (Montt, 2017). With this finding, it could also be interpreted that field of study mismatch does not necessarily cause educational mismatch. But it is still a new area that is open to further exploration.

2.1.4.4. Other literature of mismatch: job search, quit and turnover

In a "distant" part of mismatch literature (Jovanovic, 1979), Jovanovic, Burdett, and Hersch debate on job search, quit and turnover. Burdett and Jovanovic have conflicting arguments over job search and quits. Burdett conceptualizes job search behavior while being employed (Burdett, 1978). Burdett argues, cost of job search is higher when working, relative to being unemployed. Thus, he focuses on job search and changes while being employed and conceptualizes "wage quits". He offers two type of

wage quits, “dynamic wage quits” which happens when earnings of a worker decline relatively, and “equilibrium wage quits” occurring when quit happens as a result of optimal search strategy. The first one usually happens in short run, usually with market shocks, but second one happens in long term. Offering this conceptualization, Burdett assumes job change will occur with better wage offer to worker (Burdett, 1978). On the other hand, Jovanovic, discusses that the moves in labor market happen not only from job to job and unemployment to job, but also from job to unemployment. Jovanovic links those moves with “changes in the perceived value of their market opportunities” (Jovanovic, 1979). In Jovanovic’s discussion, *job to job* move might happen even if the latter job pays less but promises more in terms of growth through on the job training, as human capital theory would suggest. Unemployment to job move will happen depending on existence and duration of coverage during unemployment, such as unemployment insurance. As the period to receive insurance expires, the worker will take any job opportunity. In the job to unemployment move, if the worker perceives there will be a better offer from another employer, worker could choose unemployment even if it is not a pleasant option (Jovanovic, 1979).

Hersch, approaches the issue from a different perspective by also bringing a discussion on employee satisfaction and education mismatch, by arguing overqualified workers’ satisfaction will be lower and they will be constantly searching for better opportunities (Hersch, 1991). Moreover, as job signaling model by Spence also suggested (Spence, 1973), education is primary signal for a hire decision. Thus, employers will be willing to employ over educated and over skilled workers if available; and these workers will be willing to accept job offers until they find a better opportunity that fits to their needs (Hersch, 1991). These will result in employee turnover for the employer.

The literature on job search, quit and turnover suggest, workers would be willing to change jobs or choose to move to unemployment in some cases, if they would perceive better opportunities in terms of value both in short term gains with higher wages, and in long term gains through training and development. Moreover, these arguments are consistent with the motivation of labor to maximize lifetime earnings. Accordingly, in

cases of mismatch, whether educational, skill or other type, workers will be following a rational search strategy for better opportunities, which will increase turnover in the market and create an additional hiring and training cost for companies as Becker (Becker, 1964) and Thurow also suggest (Thurow, 1975).

2.1.5. Studies on Turkey

The main discussions on labor force participation, relation of labor and output, human capital and match and mismatch in labor market are discussed in detail in the above sections. In this section, studies on Turkey contributing to labor output relation and labor market mismatch including discussions on human capital are reviewed.

The weakening link between economic growth and labor growth has also been discussed in the literature over Turkey, especially with specific attention to economy's opening after 1980s, structural adjustment and privatizations. In this period, parallel to the international trends, in Turkey the relation between economic growth and labor growth has weakened (Akçoraoğlu, 2010) (Demir & Erdem, 2010) (Ercan & Yeldan, 2011). Akçoraoğlu argues slow employment growth is a structural phenomenon for Turkey for the last two decades. Between 1995-2017 Akçoraoğlu finds a positive but weak empirical relationship (with employment elasticity coefficient 0.20) between GDP and employment growth (Akçoraoğlu, 2010). This could be also interpreted as slow employment growth despite rapid output growth. Demir and Erdem also point out, in post 2002 period, high rates of economic growth were not reflected in employment growth, despite increased labor market flexibility with structural adjustment (Demir & Erdem, 2010). Ercan and Yeldan defines post 2001 growth in Turkey as "jobless". They also refer to post 1980 period by stating economic growth rate was average 4% between 1980-2002, and 7% between 2002-2007; but employment growth in two periods could not exceed 0,8% average, which might be a cap for Turkish economy as they argue (Ercan & Yeldan, 2011).

Likewise, this period should be carefully examined in Turkey case because significant developments affecting economy and job market occurred. For instance, trade liberalization in 1980s and following structural adjustment policies including increasing flexibility to labor market and privatizations. Khrishnaa, Mitrab and Chinoyc explore employment outcomes of trade openness over the case of Turkey. Using 1983-86 data, they try to understand impact of trade openness on labor demand elasticities. Yet, their results are inconclusive as they are unable to find significant links between the two (Krishnaa, Mitrab, & Chinoyc, 2001). Özmucur studied the changes in employment with what he calls structural break and privatization, in the cement establishments in Turkey and finds out the decision of privatization[6] led to higher downsizing in employment compared to the privatization itself, in the studied Cement production companies. In example, employment in privatized cement establishments in Konya[7] (government ownership was less than %50 before privatization) has dropped dramatically between 1981-1995 (Özmucur, 1998). Yeldan also investigates outcomes of privatizations and finds out that productivity gains in privatized establishments are due mostly to labor cuts (Yeldan, 2005). On the other hand, Tansel explores other employment outcomes of privatization rather than employment growth and focuses on change in earnings. Tansel finds out significant earning loss in dismissed workers, in addition to decaying quality of post dismissal jobs and moves to informal sector as done by some of the workers (Tansel, 2002a).

In addition to slowing employment growth and weakened relation between output and labor, labor market mismatch is discussed densely in the literature on Turkish labor market. These discussions on Turkey mainly focus on economic returns of education, labor outcomes of education and educational mismatch. Nevertheless, skill mismatch and field-of study mismatch is also studied by authors.

[6] Author argues the actual downsizing in employee numbers started with the decision to privatize to make the state-owned enterprises look more attractive for investors.

[7] Government ownership was less than %50 before privatization

Tansel, Ogawa and Tansel, and Aydede and Orbay study labor market outcomes of education (Tansel, 2002b) (Ogawa & Tansel, 2005) (Aydede & Orbay, 2016). Whereas Filiztekin, Mercan et al., Duman, and Dereli focused on educational mismatch and incidences of overeducation and undereducation (Filiztekin, 2011) (Mercan, Citci, Babacan, & Karakas, 2015) (Dereli, 2017). On educational mismatch, the findings of the studies are in line with the findings in international literature suggesting that their returns or savings of over and undereducation are less than required education. Yet in some cases, there are other advantages provided by overeducation.

On labor market outcomes of education, Tansel investigates labor market outcomes of general and vocational high schools on wages (Tansel, 2002b). She studies wage differential between general and vocational high school graduates, using individual level survey data. Tansel also estimates the results for men and woman separately and finds out men graduated from vocational high schools receive higher wages compared than men graduated from general high schools. For men, private returns of vocational school are also higher compared to the other group. On woman aspect, the results for both indicators are inconclusive (Tansel, 2002b). Aydede and Orbay also studied wage outcomes of majors obtained in education also by comparing the vocational high school and university degree holders in Turkey (Aydede & Orbay, 2016). They find out, for most of the majors analyzed, university graduates receive higher wage premiums compared to non-degree holders and vocational high school graduates. Aydede and Orbay also conclude that almost half of the majors in vocational high schools do not provide wage premiums for their graduates, compared to non-degree holders. Authors point out as one of the reasons of this situation, the overeducation of the graduates in their current positions, although these require elementary degree. Authors define this as a policy failure in identifying skills demanded by the market (Aydede & Orbay, 2016).

On other market outcomes of education Tansel also finds out unemployment rate is lower in vocational high school graduates compared to general high school graduates. She concludes, vocational high schools produce more efficient labor market outcomes over observed indicators in Turkey (Tansel, 2002b). In another study, Ogawa and Tansel

empirically explore (i) the linkage between secondary vocational school/higher education graduates and labor market opportunities and (ii) impact of apprenticeship training and course attendance programmes on employment in Turkish labor market. Their conclusion on the first area of investigation is that education contributes positively to job performance, as respondents believes. For the impact of apprenticeship and course attendance programmes, they see them as positive labor market outcomes since these increase probabilities of being employed significantly (Ogawa & Tansel, 2005).

On the investment returns of education, Filiztekin studies overeducation in Turkey using data from two different years (Filiztekin, 2011) and Duman also studies educational mismatch in Turkey in public and private sectors comparison (Duman, 2018). Their findings on wage impacts are similar to other country cases. Overeducated workers receive higher earnings, but these earnings are less than the level of earnings if the worker would find a matching job (Filiztekin, 2011) (Duman, 2018). Filiztekin also finds evidence on other impacts of overeducation, such as its helping employees to compensate for experience (Filiztekin, 2011).

Prevalence of education mismatch is also explored by authors. In Dereli's study, prevalence of education mismatch empirically analyzed over household labor force surveys between 2009-2014 (Dereli, 2017). Study is focusing on difference between high school and university graduates. With analyzing profile of overeducated workers, Dereli finds out, in high school graduates, overeducation incidence is increasing, and gap between genders is greater, with overeducated female mismatch is lower than male, but gap is narrowing over the observed years. Another key finding of Dereli is, on age groups, younger workers with less tenure have higher probability of being overeducated (Dereli, 2017). Mercan et al. and Duman study prevalence of education mismatch in sector level. Mercan et al.'s main finding is education mismatch is common in most of the sectors in Turkey, with exceptions, especially in highly regulated occupations (Mercan, Citci, Babacan, & Karakas, 2015). Duman also finds out considerable rates of overeducation and undereducation among Turkish workers, which is even higher in subjective measurements. On sector level, Duman carries out analysis on two sectors. According to

Duman's findings, undereducation is more prevailing in private sector, while overeducation is a more significant problem for public sector.

Other areas of mismatch such as skill mismatch or field of study mismatch are not discussed in same density as educational mismatch on Turkey. On field of study mismatch, Aydede and Orbay also find evidence that could cause field-of-study mismatch, as graduates in observed group concentrate in certain majors. One example of this concentration is reported to be observed in business and administrative sciences, as %30 percent of higher education graduate workers holds degree in this area. Business and administrative science graduates are also among lowest earning group (5th lowest wage differential among 21 majors), which is interpreted by authors as the result of oversupply in this area (Aydede & Orbay, 2016).

On skill mismatch, Owings et al., covers a discussion on skill, education and field-of-study mismatch in Turkey in their review on human capital challenges of Turkey (Owings, Kaplan, & Pirim, 2012). Alpaydın also refers to skill mismatch and proposes methodologies, policies and actions to measure and address these challenges (Alpaydın, 2015).

Owings, Kaplan and Pirim, provide a review on Turkey's issues, policies and actions in addressing human capital challenges in their study (Owings, Kaplan, & Pirim, 2012). The study also touches to skill mismatch as a challenge required to be addressed through education policy. Authors point out school and industry mismatch in knowledge and skills of secondary education and higher education graduates, especially in manufacturing industry. Authors emphasize existence of overeducation and field-of-study mismatch among tertiary education graduates, as well as underutilization issue by referring Scarpetta and Sonnett (Scarpetta & Sonnet, 2012), for Turkey's being among six OECD countries where unemployment risk for tertiary graduates is even higher than low-skilled youth.

Alpaydin also surveys the existing literature on higher education mismatch in Turkey and finds out high level of skill mismatch in Turkey. However, author points out lack of sufficient data to compare manpower needs and graduate skills. Author also suggest policies for measurement, research and corporate initiatives to identify needs, design activities and reduce mismatch (Alpaydın, 2015).

The case of Turkey provides a laboratory environment to study relations of labor and economy and labor market matching with important economic developments, some of which are called by authors as structural break (Özmucur, 1998), in the previous decades. On this environment the discussions are focused on primarily relation of labor and output with effects of trade liberalization, structural adjustments and privatizations, and later on economic growth versus labor growth. Moreover, labor market mismatch, primarily educational mismatch had a widespread discussion. These discussions focused on prevalence of educational mismatch, wage and market outcomes of this type of mismatch. However, the area connecting output-labor relation with matching and mismatch is still open to exploration as there is not many studies in the literature.

Another key feature of the research in Turkey is, dominance of educational mismatch in literature. Partially it may be because the data and measurement problems, as panel and survey data exist and measurement methods are more mature in areas such as education, those discussions dominate literature. However, existence, prevalence, causes and impacts of other types of mismatch still require further research.

In this study, I intended to contribute to the area connecting output-labor relation with matching and mismatch in labor market over Konya case. Moreover, as data availability is an issue in the area, and to avoid streetlight effect[8], I carried out the study

[8] Streetlight effect is a common metaphor for conducting research where data exist. It is searching the lost key, dark in the night, just under the streetlight. Immanuel Wallerstein associate streetlight effect with research by arguing, a problem should not be selected because of existence of solid, quantitative data, instead, intellectual problem should drive search for appropriate data.

with a primary data collected by myself. This also allowed questioning other types of mismatch, and the answers are provided in the following chapters of this thesis.

2.2.Economic growth and labor market developments in Turkey and Konya

2.2.1. Turkey

Turkey as an emerging economy, has shown significant economic growth, with a series of economic crisis from 1980s onwards. Especially in the last two decade, with exceptions of its banking crisis in 2001 and global economic crisis of 2008, there has been high rates of growth observed, which led World Bank to classify Turkey in uppermiddle-income country (World Bank, 2019).

Despite these high rates of growth which slowed down after 2011, labor market performance and employment generation was not parallel in Turkey. The labor market performance could be characterized by employment challenges such as high unemployment rate, low participation rate, low female participation rate, and high informal market rates in Turkey.

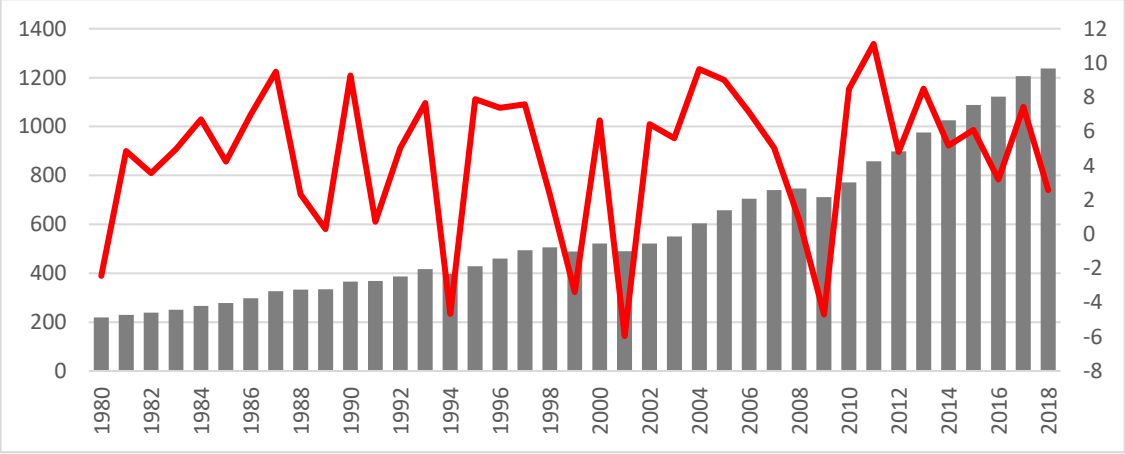

Figure 1: GDP and GDP growth of Turkey (constant 2010 US$) (Billions) (World Bank, 2019)

Overall employment rate and LFPR of Turkey shows a steady increase over the years. On the other hand, LFPR rate of woman significantly low, but it also shows steady increase.

Table 3: Labor force indicators for Turkey (%)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Labor force participation rate	44.9	45.7	46.5	47.4	47.6	48.3	50.5	51.3	52.0	52.8
Unemployment rate	10.0	13.1	11.1	9.1	8.4	9.0	9.9	10.3	10.9	10.9
Non-agr. unemployment rate	12.3	16.0	13.7	11.3	10.3	10.9	12.0	12.4	13.0	13.0
Employment rate	40.4	39.8	41.3	43.1	43.6	43.9	45.5	46.0	46.3	47.1

Source: Turkstat, 2019

Table 4: Comparison of Male and Female LFPR and Unemployment Rates over the years

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
LFPR-Male	70.1	70.5	70.8	71.7	71.0	71.5	71.3	71.6	72.0	72.5
LFPR-Female	24.5	26.0	27.6	28.8	29.5	30.8	30.3	31.5	32.5	33.6
Unemployment Rate-Male	10.7	13.9	11.4	9.2	8.5	8.7	9.0	9.2	9.6	9.4
Unemployment Rate-Female	11.6	14.3	13.0	11.3	10.8	11.9	11.9	12.6	13.7	14.1

Source: Turkstat, 2019

On the other hand, there is significant gap between unemployment rates of men and woman as well. Unemployment of woman increased over the years while unemployment of men fluctuated.

Table 5: Employment growth in sectors breakdown in Turkey (thousands)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Agriculture	4,621	4,752	5,084	5,412	5,301	5,204	5,470	5,483	5,305	5,464
Industry	4,537	4,179	4,615	4,842	4,903	5,101	5,316	5,332	5,296	5,383
Construction	1,238	1,305	1,434	1,680	1,717	1,768	1,912	1,914	1,987	2,095
Services	10,208	10,380	10,725	11,332	12,016	12,528	13,235	13,891	14,617	15,246
Total	20,604	20,615	21,858	23,266	23,937	24,601	25,933	26,620	27,205	28,188

Source: Turkstat, 2019

The total employment numbers were increasing in the given period in Turkey with 3.54% CAGR. This increase is driven by services and construction sectors with 4.56% and 6.02% CAGRs respectively. Although number of people employed in industry is growing as well, the rate of growth is much below services and construction with 1.92% CAGR, which is followed by slowest growing sector, agriculture with 1.88% CAGR.

Table 6: Employment shares of sectors in Turkey (%)

	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Agriculture	22.4	23.1	23.3	23.3	22.1	21.2	21.1	20.6	19.5	19.4
Industry	22.0	20.3	21.1	20.8	20.5	20.7	20.5	20.0	19.5	19.1
Construction	6.0	6.3	6.6	7.2	7.2	7.2	7.4	7.2	7.3	7.4
Services	49.5	50.4	49.1	48.7	50.2	50.9	51.0	52.2	53.7	54.1

Source: Turkstat, 2019

When the shares of the sectors in total economy examined, services sector dominated other sectors by far. Industry sector is losing its share in the total employment. Moreover, the informal employment is recorded as 34% in total in 2017, which is 22.1% in non-agriculture employment (Turkstat, 2019).

In the examined period, economy of Turkey sustained high growth rates until 2013, then growth decreased and fluctuated in the following years. However, the labor market performance did not follow the same growth pace. Employment challenges such as high unemployment, low participation, low female participation, and high informal employment are still valid. Moreover, “jobless” growth due to weakening link between output and labor, in other words economic growth and employment growth, is also sustained in this period as it is further elaborated in literature review, under the heading 2.1.5 Studies on Turkey.

2.2.2. Konya

Konya is a large, economically significant city in inner Anatolia, Turkey, located in the south of capital, Ankara. Konya has largest surface area (41,001 km^2) among the provinces in Turkey. Geography of Konya mainly consists of plain and plateaus, which makes the province suitable for agriculture and husbandry (MEVKA, 2019).

Figure 2: Map of Turkey and Location of Konya Province

Table 7: Top 10 ranking provinces in Turkey in terms of GDP in 2008 and 2017 (current prices; Thousand TRY)

Rank	Province	2008	Province	2017
1	İstanbul	301,385,096	İstanbul	970,188,957
2	Ankara	100,112,159	Ankara	280,580,928
3	İzmir	62,513,987	İzmir	191,467,959
4	Bursa	40,261,521	Bursa	127,583,972
5	Kocaeli	32,623,740	Kocaeli	120,073,662
6	Antalya	32,125,153	Antalya	90,123,458
7	**Konya**	19,987,167	**Konya**	66,122,142
8	Adana	19,712,464	Adana	62,341,484
9	Mersin	17,983,848	Gaziantep	55,583,482
10	Manisa	16,691,329	Mersin	55,569,151

Source: Turkstat, 2019

Konya is in 7th place among top 10 provinces in GDP in Turkey and has shown noticeable GDP growth and industrial growth in the last decade. Konya has increased its GDP by 231% (14% CAGR - compound annual growth rate) in current prices and increased its industry sector GDP by 344% (18% CAGR) in current prices between 2008-2014 and ranked 3rd in GDP growth and 2nd in industry sector GDP growth among top 10 provinces.

Table 8: Growth rates of top 10 ranking provinces in GDP between 2008-2017

Rank	Province	2008-2017 GDP Growth (CAGR)	Rank	Province	2008-2017 Industry Sector GDP Growth (CAGR)
1	Gaziantep	16.4%	1	Gaziantep	18.8%
2	Kocaeli	15.6%	2	**Konya**	**18.0%**
3	**Konya**	**14.2%**	3	Mersin	16.7%
4	İstanbul	13.9%	4	Kocaeli	16.0%
5	Bursa	13.7%	5	Adana	15.8%
6	Adana	13.6%		**Turkey**	**15.5%**
	Turkey	**13.5%**	6	İzmir	14.8%
7	Mersin	13.4%	7	Bursa	14.8%
8	İzmir	13.2%	8	İstanbul	14.6%
9	Antalya	12.9%	9	Antalya	14.2%
10	Ankara	12.1%	10	Ankara	13.7%

Source: Turkstat, 2019, current prices, TRY

Almost all the top provinces in GDP were able to increase their labor market participation in the 2008-2013 period[9], except Konya. In the below table, labor force participation rates (LFPR) of provinces for 2008 and 2013 are provided. In the given period, LFPR of Turkey and its 9 largest provinces increased in varying rates. However, Konya has a decreasing rate in LFPR, despite growth in GDP with 13.5% CAGR, and in industry with 17.2% CAGR in the same period.

[9] 2014-2107 is not included in this analysis as the data of the provinces are presented in NUTS2 regions and it could be misleading.

Table 9: Labor force participation of provinces in 2008 and 2013 and the rate of increase

Provinces	2008	2013	Rate of increase
Gaziantep	43.9	46.8	6.61%
Kocaeli	46.3	54.8	18.36%
Konya	**50.3**	**48.4**	**-3.78%**
İstanbul	46.5	52.2	12.26%
Bursa	50.2	51.4	2.39%
Adana	45.6	49.9	9.43%
Turkey	**44.9**	**48.3**	**7.57%**
Mersin	49.2	50.7	3.05%
İzmir	45.2	55.9	23.67%
Antalya	57.3	57.5	0.35%
Ankara	45.0	49.5	10.00%

Source: Turkstat, 2019

Despite high performance in economic growth and particularly industrial growth in the given decade, Konya fails to increase its labor force participation. In fact, participation fell from 2009 to 2012 in Konya. From 2014 onwards labor force indicators are not provided in province level, thus Konya's indicators are presented within TR52 region, together with Karaman[10]. Even though this possesses a minor limitation to see the trend in the entire decade[11], it still provides an indicator to show fluctuation in later years. Considering that Karaman's LFPR is higher than Konya in pre-2014 period, it is assumed it did not decrease, in contrary, it might help even increasing TR52 region's overall LFPR in the post 2014 period. Thus, it could be interpreted that, Konya's LFPR did not increased significantly in the 2014-2017 period as well, and only reached the 2008 level after almost a decade. However, in the given decade, labor force participation in Turkey increased significantly, from 44.9% in 2008 to 52.8% in 2017.

[10] Turkstat data for labor market indicators are not available in province level from 2014 onwards. Data is provided in NUTS2 level. Konya and Karaman, two neighboring provinces are classified together in TR52 NUTS2 region.

[11] Please see 1.3. Research methodology, 1.3.4. Descriptive statistics section for more details.

Table 10: Labor Force Participation in Konya and TR52 Region versus Turkey (2008-2017)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Konya	50.3	51.6	50.7	49.0	48.4	48.4				
TR52 (Konya, Karaman)							49.1	51.2	50.0	50.3
Karaman	56.3	56.6	53.4	51.6	50.5	50.3				
Turkey	44.9	45.7	46.5	47.4	47.6	48.3	50.5	51.3	52.0	52.8

Source: Turkstat, 2019

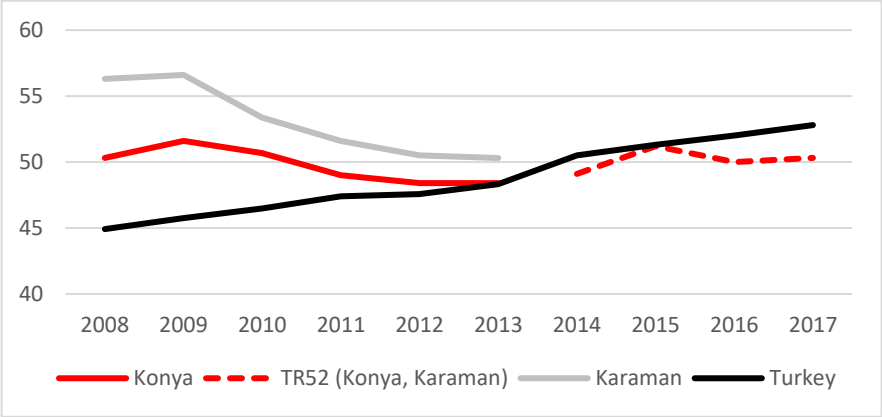

Figure 3: Trends in labor force participation in Konya, TR52 Region and Turkey (2008-2017) (Turkstat, 2019)

In the gender breakdown of labor force participation[12], TR52 region which includes Konya together with Karaman province, is above national level in male participation, but significantly below national level in female participation from 2011 onwards. In 2017, Turkey's LFPR is estimated as 33.6%, whereas TR52 Region's is 27.8%.

[12] Provincial data is not available for any years for LFPR in gender breakdown.

Table 11: Gender breakdown of labor force participation rate in TR52 (Konya, Karaman) region and Turkey (2008-2017) (%)

Region	Indicator	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
TR52	LFPR - Male	75.9	76.2	74.7	73.2	72.9	71.3	73.3	73.4	73.3	73.7
TR52	LFPR - Female	27.6	30.3	29.3	26.7	25.8	26.9	25.7	29.0	27.4	27.8
Turkey	LFPR - Male	70.1	70.5	70.8	71.7	71.0	71.5	71.3	71.6	72.0	72.5
Turkey	LFPR - Female	24.5	26.0	27.6	28.8	29.5	30.8	30.3	31.5	32.5	33.6

Source: Turkstat, 2019

In addition, when trends of participation are compared between genders, despite that female participation increases slightly in the given period (by 0.2%), male participation decreases by more than two points. Both male and female labor force participation rates of the region, follows different trends than Turkey's overall male and female participation. Female labor force participation follows a fluctuating trend in the region, while Turkey's overall female participation trend is increasing strikingly.

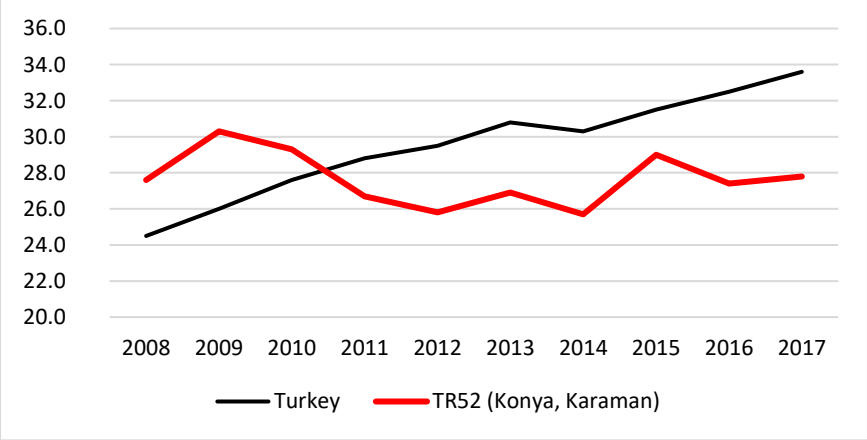

Figure 4: Female labor force participation rate comparison of TR52 Region and Turkey (%) (Turkstat, 2019)

Male participation has decreasing trend until 2013, when it hits bottom in a level below national male participation rate. After 2014, it recovers slightly and reaches 73.7% in 2017. Whereas, Turkey's male participation trend demonstrates a steady increase.

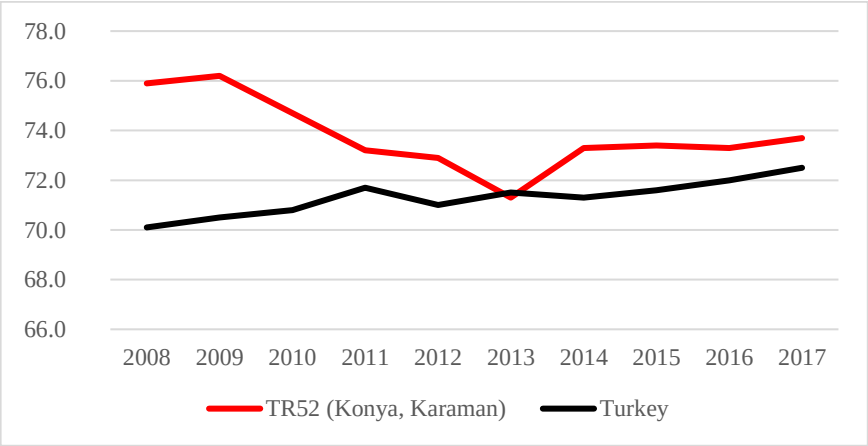

Figure 5: Male labor force participation rate comparison of TR52 Region and Turkey (%) (Turkstat, 2019)

Contrary to the development of trends in the labor force participation, unemployment rate follows a similar trend between Turkey and Konya. Konya and TR52 region, has a significantly lower unemployment rate than Turkey from 2009 onwards. In 2013, unemployment in Konya reaches to bottom with 4.7%, while Turkey has 9.0% unemployment in the same year.

Table 12: Unemployment rate (2008-2017) (%)

	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Konya	10.7	10.8	8.2	6.9	6.2	4.7				
TR52 (Konya, Karaman)							5.6	6.5	6.1	5.9
Turkey	10.0	13.1	11.1	9.1	8.4	9.0	9.9	10.3	10.9	10.9

Source: Turkstat, 2019

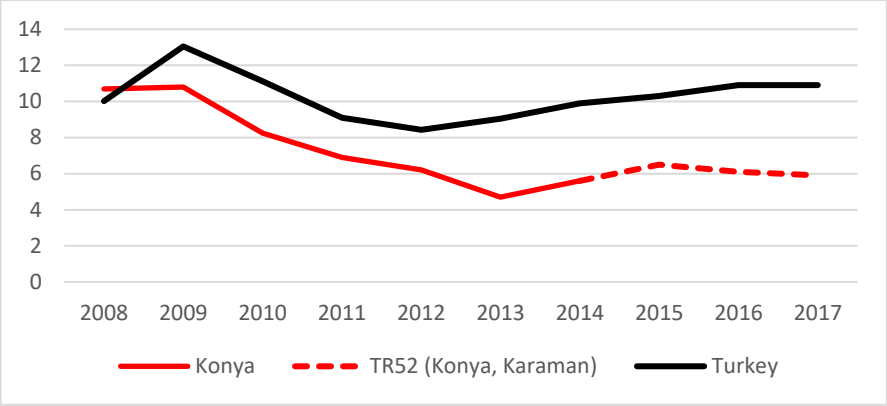

Figure 6: Unemployment rate comparison of TR52 Region and Turkey (%) (Turkstat, 2019)

In the size of labor force, as participation data above demonstrates, there is a shrinking between 2009-2012, then growth observed except 2016. Between 2008-2018, the compound annual growth rate of labor force is below working age population with 0.88% and 1.09% CAGR respectively.

Table 13: Size of working age population and Labor force, TR52 (Konya and Karaman) (Thousands)

	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Population 15 years and over	1 584	1 573	1 592	1 608	1 613	1 634	1 663	1 690	1 691	1 747
Labor force	812	830	820	796	789	795	817	865	845	879

Source: Turkstat, 2019

Population is key determinant of size of labor force, which is affected by migration inflows and outflows as well as birth rates. Below, population trends of Konya are also presented.

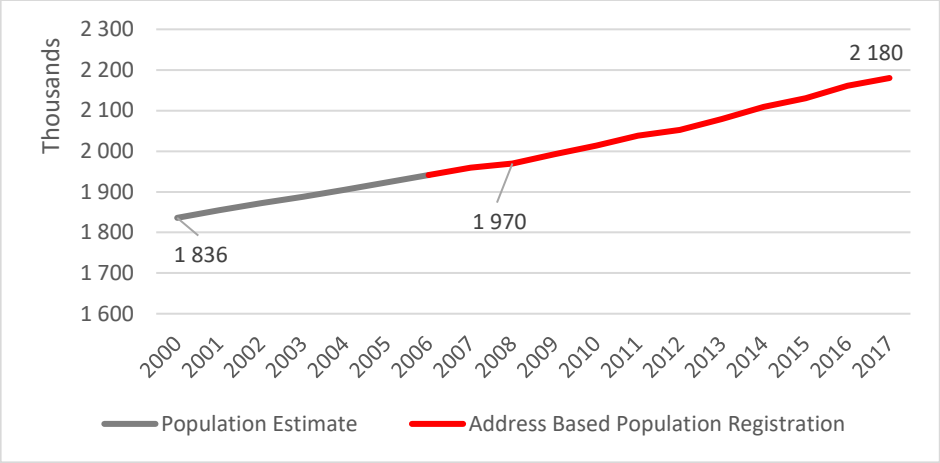

Figure 7: Population of Konya by years, 2000-2017 (Turkstat, 2019)

Population of Konya has an increasing trend, but rate of increase between 2000-2017 is below national average. Konya's rate of population increase is recorded as 1.02% CAGR, whereas Turkey overall had 1.31% CAGR in the same period.

Table 14: Population and population growth of provinces with top GDPs (2000-2017)

	Population			Population Growth (CAGR)		
Province	**2000**	**2008**	**2017**	**2000-2007**	**2008-2017**	**2000-2017**
Antalya	1,430,539	1,859,275	2,364,396	2.71%	3.25%	3.00%
Kocaeli	1,192,053	1,490,358	1,883,270	2.63%	2.72%	2.73%
Gaziantep	1,292,817	1,612,223	2,005,515	2.46%	2.72%	2.62%
Ankara	3,889,199	4,548,939	5,445,026	2.02%	2.00%	2.00%
Bursa	2,150,571	2,507,963	2,936,803	1.77%	1.82%	1.85%
İstanbul	11,076,840	12,697,164	15,029,231	1.89%	1.83%	1.81%
Turkey	**64,729,501**	**71,517,100**	**80,810,525**	**1.37%**	**1.25%**	**1.31%**
İzmir	3,431,204	3,795,978	4,279,677	1.34%	1.24%	1.31%
Mersin	1,488,755	1,602,908	1,793,931	1.26%	1.00%	1.10%
Konya	**1,835,987**	**1,969,868**	**2,180,149**	**1.13%**	**0.93%**	**1.02%**
Adana	1,879,695	2,026,319	2,216,475	1.00%	0.94%	0.97%

Source: Turkstat, 2019

The top 10 provinces with GDP had high population growth rates in the given period presented above. The top 10 province had 46% of the population in Turkey in 2000, then they increased their share to 48% in 2008 and 50% in 2017. It means, half of the population of Turkey is living in the 10 provinces with highest GDPs. The main reason behind Konya's relatively low population growth is, migration outflows. Contrary to most cities compared, Konya has negative net migration rate in the given years, which means, there is more migration outflow than inflow in Konya.

Table 15: Net migration rate of provinces with top GDPs

	2008-2009	**2009-2010**	**2010-2011**	**2011-2012**	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**	**2016-2017**	**Average**
Kocaeli	7.9	9.7	8.3	7.0	9.8	14.4	17.1	13.8	14.7	11.4
Antalya	8.9	12.8	13.2	9.9	11.4	12.9	12.3	2.6	6.4	10.1
Ankara	8.0	10.4	11.2	4.5	6.5	7.8	9.7	3.2	5.9	7.5
Bursa	4.0	5.9	6.0	2.3	5.0	5.6	7.0	7.1	7.2	5.6
İzmir	7.0	2.9	2.3	2.5	3.5	5.6	5.0	5.6	5.8	4.5
İstanbul	3.1	7.8	9.0	2.2	4.7	1.0	3.5	-4.8	-0.4	2.9
Gaziantep	1.2	2.4	4.2	1.3	-0.2	1.1	-1.3	-2.2	-1.5	0.6
Konya	**-2.5**	**-4.4**	**-1.2**	**1.8**	**-1.9**	**0.2**	**-0.1**	**0.8**	**-1.6**	**-1.0**
Mersin	-0.5	-0.8	-2.0	-4.0	-2.4	0.4	-1.3	1.2	-0.5	-1.1
Adana	-0.2	-2.1	-5.6	-6.3	-5.7	-5.4	-5.3	-4.2	-6.0	-4.5

Source: Turkstat, 2019

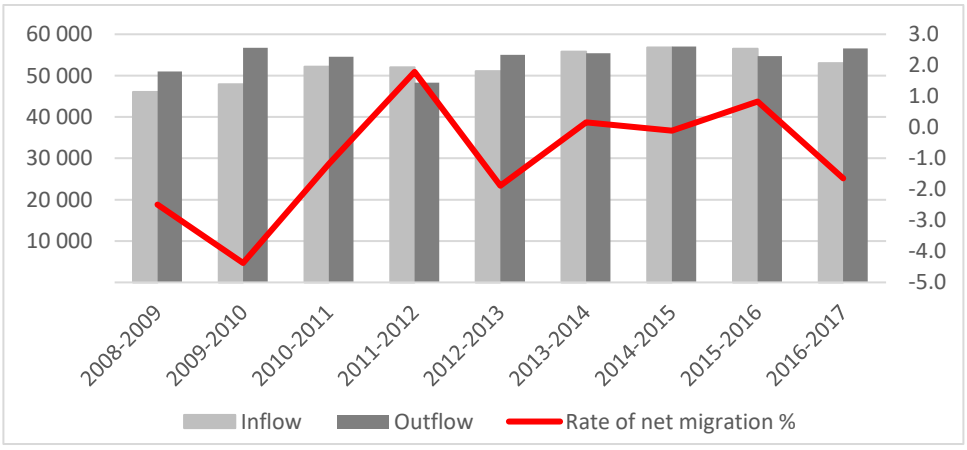

Figure 8: Migration inflow, outflows and net migration rate of Konya (2007-2017) (Turkstat, 2019) (Foreigners residing within the borders of the country are not covered)

Population and migration trends have considerable effect on labor supply, however, given Konya's population increase and migration trends above, its effects on labor force considered as insignificant in this study.

CHAPTER 3

ISSUES IN EMPLOYEE AND EMPLOYER INTERACTION

Considering the nature of Konya case with fluctuating labor market participation, low-woman participation, high economic growth and industry growth in a post economic transition period, there is no simple answer to the research question. Thus, in this section the labor market is analyzed in demand and supply ends as the causes of the issue lies in both ends. Demand and supply approach is also frequently used in the literature by Thurow (Thurow, 1975), Handel (Handel, 2003), Desjardins and Rubenson (Desjardins & Rubenson, 2011), and Montt (Montt, 2017).

Thurow discusses demand and supply in labor market are not independent from each other as job opening leads workers training (Thurow, 1975). Thus, supply of trained labor follows demand. In this explanation, demand primarily determine the number of job openings and number of labor to be trained. Eventually, labor supply is affected by demand, as demanded skills and qualifications are developed in labor supply by the market in the long run. However, in the short run, demand reposition itself with availability of labor and its characteristics. In example, incidences of educational mismatch, such as overeducation, occurs under this type of circumstances. Thus, demand and supply are dependent on each other on various aspects.

In the field study conducted with employers and experts, the problem is questioned from different perspectives. Employee characteristics and employer expectations are examined, as well as, how the two interact with each other. In addition to these three perspectives, the circumstances where interactions happen is also considered in the discussion.

The study is carried out from employer perspective, with their views are directly obtained from interviewed employers, and indirectly from the interviewed organizations representing employers such as chambers. However, supply side views also obtained from experts, and to some degree from employers, as some of the interviewed employers were professional managers and human resource managers, who were able to provide employee perspective. Thus, in this section, the issue is explained and discussed from demand perspective first, later discussion continues with supply perspective, which is more critical in giving answer to research question. It is followed by interaction of demand and supply, where employers' responses to the issue and other factors affecting demand-supply interaction are covered. This chapter ends with discussion, where an answer to the research question is given in the light of research findings.

3.1. Demand perspective: Failure of sector to differentiate from other sectors and attract labor

Konya has transformed from an agricultural economy to a more mixed economy where industry increased its share in the provinces' GDP significantly. Even in the 2008-2017 period this thesis is examining, share of industry increased from %22 to %30 in the GDP of the province. Yet, this growth did not bring an increase in the number of employees in the sector in the same level. Increased productivity and weakening link between economic and employment growth (Padalino & Vivarelli, 1997) (Kapsos, 2005) (Heintz, 2006) (Onaran, 2008) (Akçoraoğlu, 2010) (Demir & Erdem, 2010) are probably main cause of this but at the same time, enterprises struggled to attract workforce to the industry. Moreover, firms are unable to maintain the existing workforce due to high turnover rates.

Table 16: Results of coding of interviews on the theme " Labor need of the industry"

Sub-themes of "Labor need of the industry"	Expert Comments	Employer Comments	Total
Labor need of the industry	5	8	13
Need for qualified blue-collar	4	8	12
Unable to find unqualified labor	2	2	4
Transferring qualified workforce (white-collar/manager) from outside of the region	1	2	3

Almost all employers and majority of the experts confirmed the need for labor force in the industry. Most of them said industry is unable to reach the qualified labor. Some said, they are even unable to find enough unqualified labor. In defining the labor needs of the industry one of the experts from a chamber quoted:

> *Workforce is a primary problem in Konya. We are unable to transform the existing human resources. Let it alone qualified, we are even unable to find unqualified worker. When required we train people, but it is challenging even without unqualified supply.*

Table 17: Results of coding of interviews on the theme "Employee turnover"

Sub-themes of "Employee turnover"	Expert Comments	Employer Comments	Total
Employee turnover is high	0	4	4
Employee turnover is high because of family support to workers	0	2	2
Employee turnover is higher among young people	0	2	2
Employee turnover is high because of employees low education level	0	1	1

Employers also confirmed they have high employee turnover, especially with an increasing pace until 2018. They acknowledge high turnover as a serious problem. One of the founders of agriculture machinery firm quoted, *There became a moving worker group* referring to workers change their jobs frequently. A professional manager in food industry quoted *We stopped monitoring employee turnover after it hit 300%.*

These job-quits could highly be associated with low cost of searching for jobs. In Konya case, with low unemployment in the examined period, and many job openings in the growing industry, cost of job search has decreased for workers. In fact, it made easier for workers to decide not only job-to-job quits, but for job-to-unemployment quits as well. This is not because of the expectation that they will find a better job as Jovanovic argues (Jovanovic, 1979), but for knowing they can find an equivalent or similar job easily.

Table 18: Results of coding of interviews on the theme " Preference"

Sub-themes of "Preference"	Expert Comments	Employer Comments	Total
Industry is not preferred	4	3	7
Workers have unconscious/short-term perspective in their choice	1	1	2
Engineers do not want to work in the field	1	1	2

Experts and employers similarly agreed on workers choice of sectors. Seven interviewees commented that industry sector is not preferred by workers. A human resource manager from the food industry quoted:

> *Most workers work in service sector, let's say in retail, for a while. They see wage level is similar to the industry there. It is also easy to change jobs, if their career isn't moving on in one supermarket, they can easily move to another.*

referring to the easy and low-cost job change for employees with undifferentiated wages between sectors.

Some of the interviewees sees this either being unconscious or having short term perspective for a career choice. They refer to opportunities in industry in learning skills and developing an expertise with on the job opportunities. On the other hand, interviewees see these low-quality service sector jobs offer little in learning and development. This perception includes an assumption that, industry sector offers learning

and development opportunities and enables career progress in long run. This assumption might not be valid, as it is further discussed in below sub-sections[13].

Other interviewees also add reluctance of engineers in working in the sector by criticising them for avoiding working in shop-floor[14], and preferring desk jobs. This is also associated with the unwillingness of the employees in working in industry, with seeking clean and comfortable working environment.

Failure of industry and more specifically of manufacturing sector to differentiate from other sectors, especially service sector, in wages and working conditions is the leading factor of these problems. However, wages are not the only reason behind this. Although earnings could be considered as primary factor in employee commitment, it also depends on other factors such as job security, career path, training and development opportunities, and more importantly, promise of future earnings. However, in order to provide these commitments, a company should adopt certain management practices and establish internal structures to execute these commitments, which requires a degree of institutionalization. In the end, in order to provide certain level of wages and other commitments, companies should succeed financially, and generate a level of profit to do these investments in people and structures. Under following sub-headings, the discussions on wage levels, employee commitment and market pressures on companies are discussed in detail.

3.1.1. Employer commitment factors affecting employee attraction and engagement

Commitment of employers and structures within the firm to execute these commitments are key determinants to attract workforce and develop and maintain employee engagement. Eventually, it is assumed that, existence of commitments and

[13] See 3.1.1.2 Opportunities to learn and grow

[14] Production site or section of the factory.

execution of them increases attractiveness of the companies for employees and candidates, and eventually reduces the employee turnover in the companies.

Table 19: Results of coding of interviews on the theme "Employee engagement"

Sub-themes of "Employee engagement"	Expert Comments	Employer Comments	Total
Unwillingness of employees to work	0	5	5
Unwillingness of employees to learn	0	4	4
Cost cutting over employees	3	0	3
Need for career planning	1	1	2
Lack of attachment to the product	0	2	2
Lack of sense of belonging	0	1	1
Lack of engagement preventing personal development	1	0	1
Unwillingness of employees to take responsibility	0	1	1
Employer attitude reducing employee engagement	0	1	1
Low employee engagement causing low unionization	1	0	1

The analysis of interviews shows, especially comments of employers on low employee engagement by reporting unwillingness of employees to work, learn and take responsibility, lack of sense of belonging and lack of attachment to product. One of the owners of automotive industry company interviewed quoted:

> *Previously, workers valued product they produced, and conditions workplace provided. Now workers do not even have respect to product they produce.*

in criticizing workers for not devoting themselves to their job and job product as well as decaying sense of belonging. Eventually, this type of comments, argue employee engagement and commitment to work is decreasing.

In other comments, interviewees linked lack of employee commitment with employer commitment. Especially experts, criticized employers' cost cutting actions on workforce. There had also been other comments, such as need for career planning in companies and criticizing employer attitude towards workers regarding reduction of

engagement. These demonstrate employee engagement is not one sided but require employer to demonstrate certain commitments and take actions.

Employer commitment to workers occurs via renumeration (wages, side benefits and other payments), and provision of career paths, training and development. In this section, discussions are provided for (i) wage level, (ii) opportunities to learn and grow as a type of non-wage commitments, (iii) provision of job security to employees, and (iv) institutionalization and existence of internal structures to plan and execute these commitments.

3.1.1.1. Level of wages

Experts and employers agree that workers prefer to work in other sectors, such as services, rather than working in industry or manufacturing. Many say employees seek more comfort in the work place, and prefer desk jobs or less tiring, cleaner jobs. Engineers avoid working in the field according to some experts and employers. However, employee preference is also driven by the earnings, in other words, wages and other side benefits that the workplace offers is one of the leading factors behind employee's selection of a sector, workplace or job. Burdett relates quits with wages, by assuming job change will occur with better wage offer to the worker (Burdett, 1978).

Table 20: Results of coding of interviews on the theme "Wages"

Sub-themes of "Wages"	Expert Comments	Employer Comments	Total
Wages are low in industry	3	3	6
Employees might change jobs for little wage differences	0	2	2
Wages of engineers are low in industry	2	0	2
Qualified and unqualified workers do not differentiate significantly with wages	1	1	2
Industry and service sectors do not differentiate in wages	2	0	2
There is no pay scale in most companies	0	1	1
Income in industry does not differentiate from agriculture	1	0	1

As it is also stated by experts and some of employees during interviews, level of wages in the industry is usually minimum wage or slightly above minimum wage for blue-collar, and some of the white-collar positions. A professional manager in food industry quoted:

> *Salaries in the companies must be increased. This is a matter of supply and demand. If there is a problem in supply, we must solve it other way around.*

referring to requirement of increasing wage level to differentiate industry from other sectors to make it more competitive in attracting labor.

Some of the interviewees reported that wages do not differentiate from jobs in other sectors such as services. Thus, employees do not prefer industry or easily change jobs when another job opportunity arises. This is confirmed with the above-mentioned discussion on high employee turnover, especially for unqualified positions which do not differentiate on wages. An interviewed expert from a public institution quoted,

> *We observe that there is no wage difference between a vocational high school graduate and a person who took a vocational training course. However, high school graduates see themselves more qualified and wants their earnings to be differentiated.*

This problem is also pointed out in the Ministry of National Education's report on vocational and technical education in Turkey. According to the report, graduates of vocational and technical schools are not prioritized in employment and their wages do not differentiate (Milli Eğitim Bakanlığı, 2018).

The differentiation of wages with education, qualification or tenure is also heavily discussed in human capital literature and mismatch literature. Becker argued, younger workers are eager to accept lower wages in the early years of their career, to fulfill their goal to obtain higher lifelong earnings, with their tenure and wages increase together. Thurow suggests otherwise, by referring job characteristics as primary factor in defining

wages, but he did not deny wage competition as well. In educational mismatch discussions, most authors also find out positive impacts of schooling over earnings, although it does not provide excess returns as Leuven and Oosterbeek pointed out in their review of relevant literature (Leuven & Oosterbeek, 2011).

In the case of Konya, as reported by interviewees, wages increase with experience and developed skills in a workplace but only to a certain degree, which is not motivating most of the workers. On pay scales, a human resources manager of a food industry company quoted:

> *Wage differentiation with qualification or experience is not determined by pay-scales in most companies.*

Especially, younger workers, who are reported to have higher turnover than older ones, are not eager to invest in skills development by accepting low wages in early years. Employers also reported during the interviews that employees have lack of motivation to learn and develop their skills. This could be associated with lack of long-term commitment to workplace and the job, as high turnover rates confirm[15].

3.1.1.2. Opportunities to learn and grow

"Job to job" moves might happen even if the latter job pays less but promise more in terms of growth through on the job training, Jovanovic argues by also referring to human capital theory (Jovanovic, 1979). The growth mentioned here could also be interpreted as developing expertise and climbing career ladder, in addition to growth of earnings. In Konya case, although workplace trainings and on-the-job trainings are provided to the workforce, these are reported not being effective in some cases. The desired results from these trainings are not obtained due to employee turnover and engagement level of workers, among other reasons.

[15] See Table 17: Results of coding of interviews on the theme "Employee turnover"

Table 21: Results of coding of interviews on the theme " Trainings"

Sub-themes of "Trainings"	Expert Comments	Employer Comments	Total
Technical trainings are provided	0	5	5
Non-technical trainings are provided	0	5	5
Trainings are not effective	0	2	2
Additional trainings are provided for critical equipment	0	1	1

In Konya case, most employers mentioned they provide technical and non-technical trainings to the employees, although some only provide compulsory trainings (i.e. trainings required by workplace safety regulation, ISO standards etc.). Most employers mentioned they provide on-the-job trainings to their new hires. Moreover, they prefer to train/develop their workers themselves. Thurow defines on-the-job training as one of the most cost-effective way to develop workforce, as only required skills and competences are transferred (Thurow, 1975). Thus, this approach is considered in the best interest of workplace in decreasing training costs, and firms in Konya moving with this motivation as well.

Some of the employers complained about ineffectiveness of trainings due to high turnover rates. Still, these trainings would be assumed to contribute overall development of the workforce, but an interviewee quoted:

> *Worker who previous experience in another factory knows only their practices and way of working.*

referring workers need for re-training for work each time they change jobs and being unable to accumulate experience and technical skills to expertise. Another employer quoted, *Unqualification became a qualification* meaning, employees change their jobs frequently and are not motivated to learn and develop, they stay in *unqualified status*.

This is highly related with Becker's discussion on general and specific training (Becker, 1964). General training is for building skills that will be applicable for a worker in long run, that the worker will be able to utilize in other jobs and companies as well; on

the other hand, specific training is for a specific company or a job, so might not be applicable in other companies and jobs. Becker also argues, there is no pure general or specific training, each training includes elements from others (Becker, 1964). However, for Konya case, it could be interpreted that, on-the-job trainings provided in the companies are generally specific and include few general elements. Thus, considering high turnover and job moves of workers, these do not provide return of investment neither to the providing workplace, nor to the industry overall.

Both experts and employers also referred to the loss off apprenticeship system[16]. Apprenticeship is defined as a way of vocational education through on-the-job training from the early ages of the worker. Especially employers criticized loss of apprenticeship in the recent generations. Interviewed employers have a number of workers who are coming from apprenticeship, mainly mid or older ages. They see these workers more engaged and productive than others. Employers blame longer schooling and changes of expectations of newer generations in ending apprenticeship. Schooling and expectations of younger generations are discussed under supply side in more details[17].

3.1.1.3. Degree of institutionalization

Institutionalization provides an organizational structure and existence of bodies in companies, to plan and execute the commitments to employees; among other commitments to clients and other stakeholders. The interviewed companies in Konya had generally low level of institutionalization although it varied significantly by sector and company size. Sectors more regulated by specific regulations, or the quality standards of their clients such as food industry and automotive industry to some extend had relatively higher level of institutionalization compared to machinery and agricultural machinery. Company size had larger impact on institutionalization that, larger firms had higher level

[16] See Table 25: Results of coding of interviews on the theme "Vocational Education"

[17] See 3.2.1.1 Value attribution to vocational education and industry sector and 3.2.1.2 Delayed entry to labor market: Inflation in university numbers and eased accession

of institutionalization as observed in the field study. Lack of institutionalization is argued by experts and supported by some of the employers, as one of the key reasons of low employee engagement and high turnover in the industry of Konya where most of the interviewed companies were family enterprises.

Table 22: Results of coding of interviews on the theme " Institutionalization"

Sub-themes of "Institutionalization"	Expert Comments	Employer Comments	Total
We are a family firm	0	5	5
Private sector needs institutionalization	3	1	4
Supplier industries struggle to institutionalize without existence of main industry	0	1	1
HR functions are recently emerging	0	1	1
Incentives push employers to institutionalize	1	0	1

Employers are criticized by experts on lack of institutionalization over administration and governance. Administration was associated with reporting capabilities. In other words, capacity to keep relevant records and documentation including documentation related to employees.

> *Some of the employers are even unable to provide proof and documentation in their defense to the business court against employees*

quoted one of the experts representing a trade union. On the other hand, the criticism on governance included management approach to provide and execute commitments to employees, primarily in providing job security.

> *Employees do not prioritize the industry to work because they do not have trust against employers, job security, and long-term employment there*

quoted one of the experts. The problems in governance and lack of institutionalization associated with most of the enterprises in the industry of Konya being family enterprises, as field study with employers also confirmed. Some of these enterprises are still run by

their founders, but transition to second generation also started, which would mean that these enterprises would be more open to institutionalization in future.

Employers criticize themselves on institutionalization too. They associate the problem with internal and external factors. Among internal factors, company size - companies being mid-size in general- and lack of finance to invest in institutionalization were mentioned. On the other hand, value chain in Konya and availability of talent in the labor market were discussed as external factors. Especially for automotive industry, absence of main industry (assemblers) was shown as main reason because these main contractors push their suppliers to be institutionalized with their management quality systems. As observed during the field study, the enterprises in the automotive sector in Konya are mainly third-tier[18] or aftermarket[19] suppliers, most of which do not have main contractors to pursue institutionalization.

Employers see lack of talent as another shortcoming. Especially in food industry and automotive, employers think there is a shortage of talent for professional management positions. Some companies mentioned that they transferred executives, mid-level managers and professionals from other industrial cities such as Bursa, Kocaeli and Düzce[20]. Shortage of talent in the labor pool could associated with Thurow's argument that job openings would lead labor training (Thurow, 1975). The low number of job openings in these executive and mid-managers positions did not allow to train and develop labor force with relevant capabilities. In fact, talent shortage would also increase cost of labor for these positions, which constitute another barrier for institutionalization.

Lack of institutionalization led to absence of commitments and bodies to plan and execute these commitments as some of experts and employers agree. *Development of Human Resources functions are very new in Konya* quoted one of the employers. Without

[18] Suppliers of the basic parts and products which require limited investment and skill level in production. (Humphrey & Memedovic, 2003)

[19] Suppliers of replacement parts. (Humphrey & Memedovic, 2003)

[20] See Table 16: Results of coding of interviews on the theme " Labor need of the industry"

a functioning HR, it is not possible to plan systematic career paths for employees, and without career planning, employees hardly could see a future in a company. *Employee needs to see career plan, a level of income to foresee in future* quoted one of the employers while explaining reasons for lack of employee motivation to learn and develop.

This issue is discussed in the literature as well. Adalet Mcgowan and Andrews, find links between management quality and skill mismatch. They find out that with increasing management quality, mainly through adoption of up to date HR practices, skill mismatch is decreasing (Adalet McGowan & Andrews, 2015b). Bloom et al. also associated productivity, competitiveness and higher worker skills with good management (Bloom, Genakos, Sadun, & Reenen, 2012). Institutionalization and existence of human resources and other functions would help companies to plan their workforce better in terms of quantity and skills and develop initiatives to attract and engage workers, which would eventually reduce turnover and training costs and increase productivity.

3.1.1.4. Provision of job security

Provision of job security by employer is one of the other areas that had significant impact on employee engagement. Reducing workforce with cost cutting activities is decreasing the future engagement of the discharged workforce and affecting current engagement of the remaining workforce in the company. Moreover, in the sectors where seasonal employment is common, it is challenging to engage seasonal workers to the company.

In the case of Konya, employers' commitments to employees is criticized over cost-cutting actions, and seasonality of work in some sectors and subsectors. Experts criticize the industry of Konya to focus their cost cutting activities on employee costs[21], in other words, on headcount of their workforce. On the other hand, some of the employers acknowledged, but defend it with the argument that these reductions happened

[21] See Table 19: Results of coding of interviews on the theme "Employee engagement"

after increases in minimum wage, to keep overall production costs under control. However, reducing workforce for cost cutting, feeds the insecurity of workers and reduces their engagement with the firms.

Table 23: Results of coding of interviews on the theme "Seasonality"

Sub-themes of "Seasonality"	Expert Comments	Employer Comments	Total
Seasonally fluctuating labor need	0	3	3

Seasonality of work is not relevant for all sectors in Konya, but in two of the examined sectors it contributes to irregular employment and affects employee engagement. The food industry and machinery and agricultural machinery has partial seasonality. The food industry in Konya is mainly based on agriculture and the employment demand of the sector increases after harvests. In machinery and agricultural machinery sector, especially agricultural machinery has seasonal demand, which starts after harvest and ends before plantation, thus their employee demand is fluctuating. *We have seasonal contracts and permanent contracts with our employees* quoted one of the employers in agricultural machinery, referring only a part of the workforce is seasonally fluctuating.

3.1.2. Competition in commodity market pressures wages and employment

As also discussed above, low level of wages in industry and employer's cost cutting actions over employees are key problems feeding the mismatch. The both problems are related to cost of labor and its share in overall production costs of the companies and companies' (in)ability to set desired prices in the market.

Yulek discusses, firms that are producing standard, undifferentiated products "commodities", should passively accept the market prices. Otherwise, if they would increase their price above market level, the demand for their products will fall. On the other hand, differentiation, such as branding or technological leadership allows firms to

create and manage their demand curve, rather than sharing it with competitors (Yülek, 2018).

In the case of Konya, most of the firms in the examined sectors are producing the "commodity" products that are unable to differentiate in the market, thus they compete with international market prices. As experts and some of the employers also pointed out during interviews, branding is a problem for the industry of Konya. In fact, firms are unable to set prices and create desired margins (profits) that will allow them to invest in their organization, people, innovation and so on. This puts them in an endless loop where they are in a constant destructive price-oriented competition, in which production tools and labor are only areas to pursue efficiency. Then, to improve efficiency they focus on increasing capacity and providing scale of economics or putting more pressure on workforce.

In neoclassical economics, it is simply assumed that marginal productivity of worker is equal, or in line with the wage. In other words, each worker is paid as much as he or she contribute to increasing production. This assumption is partially true. Marginal production has an impact on determining value of the job, and wages eventually. However, as Thurow also argues, worker alone is not able to define their marginal contribution and value creation (Thurow, 1975). The characteristics of the job has a larger role in defining the value, rather than worker. The world prices of the product are primarily determining value of a job. On the other hand, for the specific job, size of labor queue, and size of workforce supply capable of doing it, is critical in determining wages.

Table 24: Results of coding of interviews on the theme " Transformation"

Sub-themes of "Transformation"	Expert Comments	Employer Comments	Total
Transformation from agriculture to industry	8	0	8
Relations continue with agriculture and agricultural production	1	2	3
Branding is a major problem for industry of Konya	0	1	1

The problem with differentiation is also related to the experience in industry. Konya has been recently transformed and to some extend still being transforming from agricultural economy to industrial economy. In fact, firms in the industry are still accumulating experience that will help them to increase their productivity. Productivity increase will only help these companies to increase their value add to some extend as Yulek argues, but with accumulated knowledge and experience, they could be able to increase value within the same value chain, or they might jump into new domains with more value add (Yülek, 2018). However, this topic is a subject for another research and will not be further discussed here.

In the current situation for the examined sectors in Konya, their position in value creation points to a structural phenomenon. The structure of the economy and product types of industry pushes them to price-oriented competition and eventually they are unable to differentiate in wages. In fact, with any wage increase (such as governments increase of minimum wage) or market shocks they tend to cut their costs over employees as marginal production of employees is considered low as well.

3.2. Supply perspective: Shortage of supply in quantity and quality

The focus of this study is driven by the issue pointed out in the research question, shrinking and then fluctuating labor force participation. In the previous chapter, the problem and conditions of the demand side is discussed in detail as the study also carried out mainly in employer perspective. However, to understand issues from supply side, supply perspective is also included in the study, primarily by contributions of interviewed experts, descriptive statistics analyzed, and partially via employer interviews, as these interviews also included professional managers and human resource managers.

As presented in the previous chapters, there had been first decreasing, fluctuating then slightly increasing participation in labor force. Moreover, as discussed in above chapter of demand perspective, an unmet demand of labor exists in the industry of Konya.

In fact, this unmet demand has both quantitative and qualitative perspectives. In other words, it is about quantity and quality of available workforce, as interviewees also confirmed with reporting industry has an unmet labor demand both in terms of qualified and unqualified workforce[22].

In the quantity side of discussion, population and working-age population, migration and participation trends are discussed. In participation trends, it is critical to understand participation of different segments such as woman and young people as well as transition to work. In quality side, quality of workforce, schools and education are discussed as well as requested skills.

3.2.1. Quantity issue in labor market

To understand supply side of the problem, quantity of workforce and more importantly working-age population[23] and participation of different segments should be examined as well as factors behind these.

In order to provide workforce to the industries, there should be certain number of working-age people available to work. The drivers of working age population are having a young population and migration inflows and not having migration outflow to a significant extend. When Konya is examined in terms of population, there is a growing trend[24], which happened with 1.02% CAGR between 2000-2017[25]. However, this population growth below Turkey average which is 1.31% CAGR in the same period and is in 9th place out of 10 top provinces with GDP. This would mean, Konya had slower population growth than other economically significant cities. However, this is associated

[22] See Table 16: Results of coding of interviews on the theme " Labor need of the industry"

[23] Population with 15+ age

[24] See Table 8: Population and population growth of provinces with top GDPs (2000-2017)

[25] See Table 8: Population and population growth of provinces with top GDPs (2000-2017)

with lower net migration rate as Konya has larger population outflow than inflow[26]. Still the growth rate is significant and migration outflow is not enough to explain a quantity problem in labor market.

In this section, factors affecting labor force participation and quantity side of unmet demand in industry is examined. In this perspective, value attribution by society to vocational education[27] and industry is major issue affecting both participation, education, and later sector choice of people. Moreover, through extended schooling via university education with increased number and enrollment capacities of universities in Konya, labor market entry is also delayed, which decreases participation of significant number of working age young people to labor force. Another factor is low level of woman participation and more importantly, lack of woman in the major sectors of Konya through narrowing the labor pool for the industry in general. In this section, (i) value attribution to vocational education and industry, (ii) delayed entry to labor market, and (iii) lack of woman in industry sector is discussed in below sub headings.

3.2.1.1. Value attribution to vocational education and industry sector

In the field study, vocational education was primary discussion topic for almost all interviewed actors, and current status of vocational education is heavily criticized. Although the criticism primarily targets quality and quantity problems, reputation of the vocational and technical schools, and later on having a career in industry, especially as a blue-collar worker, were primary areas of discussion.

Society, students, and their families attribute social and economic value to general secondary education and higher education, expecting a better future with decent job and higher earnings. This value attribution is decreasing the demand in vocational and

[26] See Table 9: Net migration rate of provinces with top GDPs

[27] Vocational and Technical Education do not only provide education for industry sector occupations. However, as most of the production positions in the industry sector require vocational and technical education, other occupations relevant to other sectors are ignored in this study.

technical secondary schools; the reputation and preference escalating quality[28] and quantity problem.

In the below table, the results of coding analysis of interviews are presented in the most discussed topic, vocational education. As it could be seen in the table, there had been discussions by primarily employers on quantity problem, shortage of vocational schools and graduates. Sub themes such as "Quantity problem with vocational and technical high schools", "Choice of university education decreasing demand for vocational education", "Excess number of universities", "Vocational high school demand decreased because of school registry regulations", and "Vocational schools are not preferred" point out the quantity issues with schools and graduates available as workforce in the market.

[28] The quality discussion was presented in next chapter of this thesis. Please see 3.2.2. Quality issue in labor market.

Table 25: Results of coding of interviews on the theme "Vocational Education"

Sub-themes of "Vocational Education"	Expert Comments	Employer Comments	Total
Decreasing quality in vocational education	3	4	7
Engineers do not meet required qualifications	2	4	6
Disappearance of apprenticeship in getting a profession	1	4	5
Reputation loss of vocational education	4	1	5
Decreasing quality of university education	0	5	5
Need for collaboration with industry for university and technical school curriculums	3	1	4
Quantity problem with vocational and technical high schools	0	3	3
Choice of university education decreasing demand for vocational education	0	3	3
Excess number of universities	1	2	3
Decaying student profile of vocational schools	0	2	2
Vocational education stays behind requirements of our time	2	0	2
Need for starting vocational education in earlier ages	0	2	2
Vocational education does not support required fields	2	0	2
Need for applied vocational education	0	2	2
Experienced (Alaylı[29]) - Schooled conflict	0	1	1
Discreditation of apprenticeship	1	0	1
Vocational training programs do not overcome structural problem	1	0	1
Eased university transition from vocational schools	0	1	1
Infrastructure in vocational schools is behind technology in sectors	1	0	1
Firms do not appreciate education in vocational high schools	1	0	1
Vocational high school demand decreased because of school registry regulations	1	0	1
Vocational schools are not preferred	0	1	1
Industry needs to organize and train their own personnel	1	0	1

[29] The foreman or masters who have developed their profession with on the job training and years of experience instead of schooling.

In addition to the above table, frequency of discussions by reputation of vocational school are quite high, primarily advocated by experts such as “Reputation loss of vocational education”, “discreditation of apprenticeship”, or “Need for restoring reputation of working in industry” as presented in below table.

Table 26: Results of coding of interviews on the theme "Reputation of industry"

Sub-themes of "Reputation of industry"	Expert Comments	Employer Comments	Total
Need for restoring reputation of working in industry	2	0	2

Decreased demand for vocational schools, by also considering “decaying student profile” would be related to value attribution of society to the outcomes of these schools. Vocational and technical schools are usually associated with a blue-collar career in the industry sector. By also considering the discussions of demand side[30], characteristics of employers, it could be argued that students and families do not see a bright future in these careers and pursue general high schools or university education for a better career and higher income in long term.

The issue is also highlighted in the Ministry of National Education’s report on vocational education. Report discusses, social and economic value is attributed to general secondary education and higher education rather than vocational education. In fact, this perception is keeping successful students distant from choosing vocational and technical education. According to the report, parents also attribute more value to higher education (Milli Eğitim Bakanlığı, 2018).

Perception of vocational education is also fed by the image of manufacturing industry to some extent. Manufacturing industry and its working conditions are perceived

[30] Please see 3.1. Demand Perspective: Failure of sector to differentiate from other sectors and became attractive for labor.

by the students and families and society in general as unfavorable. During the interviews one of the employers quoted:

> *especially young people do not have tendency for industry, they do not want to work in manufacturing. … They would prefer to work as a waiter or shopkeeper. ... Manufacturing is dirty, and they do not like it.*

Experts also pointed out the need for restoring reputation of manufacturing to make it attractive again for workers.

Table 27: Taken and Unfilled Vacancies by year (Thousands) (2008-2017)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Vacancies Taken										
Manufacturing	76	58	128	188	336	536	604	665	654	899
Total	179	166	369	661	992	1,481	1,736	2,043	2,105	2,691
Vacancies Unfilled										
Manufacturing	21	17	55	82	166	277	367	417	435	586
Total	56	37	148	266	394	751	977	1,105	1,270	1,585
Vacancies Unfilled (%)										
Manufacturing	28%	29%	43%	43%	49%	52%	61%	63%	67%	65%
Total	31%	22%	40%	40%	40%	51%	56%	54%	60%	59%

Source: İŞKUR, 2019; Analysis of author

The statistics of public employment agency show that, in country wide, manufacturing sector is the sector where most vacancies are taken, in other words, it is the sector that most of the demand is coming for workers. Between 2008-2017, manufacturing sector is by far most demanded sector[31] for workers in terms on vacancy openings in public employment agency. On the other hand, rate of unfilled vacancies had increasing trend until 2016 when it peaked. In 2016, 67% of the manufacturing vacancies were unfilled, whereas total unfilled vacancies were 60%. The increasing trend of unfilled

[31] With the exception of 2011, in which year "Other Community, Social And Personal Services" sector has the highest number of demands.

vacancy rate in manufacturing, and manufacturing having higher unfilled vacancy rate than overall would also be associated to the value attribution of workers to other sectors.

The comments of interviewees reflect their perceptions, which is usually not supported by information. There are number of comments received for the sub theme "Quantity problem with vocational and technical high schools"[32]. Contrary to these perceptions, there might not be a quantity problem in Konya case, considering the number of vocational schools and student numbers. Number and capacity of vocational schools increased tremendously in Konya during the period that is analyzed in this thesis (2008-2017).

Table 28: Change in number of schools and number of students in general and vocational and technical secondary education schools in Turkey and Konya (between 2008-2009 and 2017-2018)

	Number of Schools			Number of Students		
	2008-2009	2017-2018	Change	2008-2009	2017-2018	Change
Turkey						
General Secondary Education	4,053	5,717	41%	2,271,900	3,074,642	35%
Vocational and Technical Secondary Education	4,622	4,461	-3%	1,565,264	1,987,282	27%
Konya						
General Secondary Education	120	139	16%	54,616	80,044	47%
Vocational and Technical Secondary Education	145	209	44%	45,447	86,286	90%

Source: Ministry of National Education, 2019

Number of general secondary education schools increased 16%, while vocational and technical secondary education schools increased by 44% in Konya, contrary the overall trend of Turkey where number of vocational schools decreased by 3%. In Konya,

[32] See Table 25: Results of coding of interviews on the theme "Vocational Education"

number of students in the vocational schools almost doubled (90% increase) in the given period, while overall trend in Turkey shows relatively smaller increase (27%) (TC Milli Eğitim Bakanlığı, 2019). This would suggest, the quantity problem might not be related to vocational school numbers, but rather to graduates preference to pursue a blue-collar career in industry, seek job in another sector, or continue with university education, which is elaborated in the following sub-heading.

3.2.1.2. Delayed entry to labor market: Inflation in university numbers and eased accession

Despite the growing vocational and technical school and student numbers discussed in previous sub-chapter, interviewees also reported shortage of vocational and technical school graduates in the market. Although with high growth rates in economy and industry in the past decade, and current capacities, there might still be a shortage of staff in industry sector, but the shortage is fed by increased availability and eased accession to university education. In this section, two major trends are discussed, eased accession of vocational and technical school graduates to universities and inflation of university numbers.

In Turkish education system, admission of secondary school graduates to university education requires going through an exam. However, for vocational and technical school graduates, admission is eased and requirement of taking the exam was cancelled for associate programs in relevant fields in 2001 with Law no 4702 (Official Gazette, 2001). Moreover, there had also been a quota is established for vertical transfer from associate programmes to undergraduate programs for vocational and technical school graduates. This has also been criticized by some experts for delaying entry of students to labor force by extending schooling time.

Another major criticism is received primarily from employers, on increasing number of universities, arguing the key reason for low demand in vocational schools is due to higher number of students attending university. There had been comments under

the sub themes of “Choice of university education decreasing demand for vocational education”, “Excess number of universities”, “Eased university transition from vocational schools”[33]. The argument assumes that students tend to choose general high schools in order to enroll university afterwards and increasing availability of university education encourage this choice. In Freeman’s study as well, it is argued that decision for college enrolment is affected by job market, as economic forces affect career choice (Freeman R. B., 1975). Considering the previous discussions on employer commitments[34], wage levels, and value attribution of society[35], Freeman’s argument could be valid for Konya case. Job characteristics affect choice of university education, and eased accession to university would encourage more people to pursue it.

In Konya case, number of universities increased from 1 to 4 and number of university students increased from 75,699 to 132.802 in Konya between 2008-2017[36]. The inflation in university and student numbers are not unique to Konya case as number of universities increased 162 to 203 and number of university students 2,876,778 to 7,560,371 in the respective years in Turkey. In the period that is analyzed in this thesis (2008-2017), number of students enrolled to universities is 66% higher than previous decade (1998-2007) in Turkey (Yükseköğretim Kurulu, 2019).

The increase on university number and enrolment capacities is criticized in multiple ways as it has diverse impacts on labor market. Key criticism that experts and employers agreed is that impacts on delaying labor market transition for young people. The delayed transition affects number of young people entering to labor market and eventually availability of labor pool for industry.

[33] See Table 25: Results of coding of interviews on the theme "Vocational Education"

[34] See 3.1.1 Employer commitment factors affecting employee attraction and engagement

[35] See 3.2.1.1 Value attribution to vocational education and industry sector

[36] In 2018, the number of universities increased to 5 in Konya

> *There had been many universities and higher education institutions established in the last decade in Turkey. People who can immediately join workforce was directed to higher education. We see this unplanned and think it is harming our workforce.*

one of the experts from an organization representing employers quoted on the impacts of inflating university numbers on workforce.

With increased availability of universities, and decreased reputation of blue-collar career in manufacturing, less people tend to choose it. The employee profile of interviewed companies verifies the shortage of vocational school graduates. Most of the employers stated majority of their blue-collar employees have education level below secondary school. They stated, number of vocational or technical school graduate employees is very low[37].

On the other hand, not all graduates of vocational schools are able to enroll into a university. In 2017, 27% of the applicants[38] in Turkey were placed to a higher education programme (Yükseköğretim Kurulu, 2019). Hence, eased access to university education might not be enough to explain shortage of people in labor market. Still, eased accession to associate programs for vocational and technical school graduates, and more importantly, increased number and enrollment capacity of universities are delaying labor market transition for young people and affecting size of labor force in Turkey and in Konya as facts also suggest.

3.2.1.3. Lack of women in industry

Lack of women in industry of Konya is another issue affecting quantity side of labor pool, apart from other problems related with value attribution and delayed labor

[37] See Table 30: Results of coding of interviews on the theme " Education profile of workers"

[38] 6% to undergraduate programme, 15% to associate programme and 6% to open education.

market entry discussed above. In the industry sector in Konya, especially in the examined major manufacturing sectors, there are low number of women employees in companies. The openness of sectors to women, and social norms affecting woman participation to workforce are narrowing size of labor pool for sectors and further escalating quantity issue in unmet labor demand of industry.

Table 29: Results of coding of interviews on the theme "Woman employment"

Sub-themes of "Woman employment"	Expert Comments	Employer Comments	Total
Almost all of the employees in production are male	0	8	8
Woman employment is concentrated to certain sectors	6	0	6
There are woman employed in white collar or service positions	0	5	5
Conservative structure influences low woman participation	4	0	4
Shift system in industry has an effect in woman employment	1	1	2
Our sector is male dominant	0	2	2
Quitting after child birth is affecting woman participation	1	0	1
Child care affects woman participation	1	0	1
Level of education affects woman participation	1	0	1
Agriculture and husbandry positively contribute woman participation	1	0	1

A major problem in labor market mismatch and existence of unmet workforce demand of manufacturing industry is the low level of woman participation in the labor market for Konya. TR52 region[39], (which includes Konya and Karaman) has significantly lower LFPR for woman compared to national level. Turkey's LFPR is 33.6% and TR52 region is 27.8% for woman in 2017.

Cultural and social reasons are reported as the main causes of low woman participation in labor force. Conservative social structure and closed society is not encouraging woman to participate in the labor market. Majority of experts reported

[39] Karaman is also reported by experts to have larger LFPR for woman than Konya due to its sectorial composition. Thus, Konya's LFPR is assumed to be slightly lower than the TR52 region.

conservative social structure is the main reason behind low woman participation. On social structure, one of the experts quoted:

> *Konya has an introvert society. That is the reason for woman participation staying behind. Despite growing rates of schooling, still it doesn't mean they will be working, by her choice or family's choice. Konya's work life is culturally difficult for women. The environment is more supportive to be a housewife.*

Others added factors as relatively low education and being unqualified or leaving work after child birth as factors limiting woman participation. On the other hand, economic activities such as agriculture and husbandry were mentioned as contributing to woman participation.

In addition to low LFPR, manufacturing sector has deeper problems in utilizing woman workforce. Among the three main sectors, following services and agriculture, industry sector has lowest share of woman employment (in TR52 region, 42%, 41%, and 17% respectively) (Turkstat, 2019). For the three manufacturing sectors this field study was carried on, there are none or limited number of women in production (for machinery and agricultural machinery there are no women reported in production in the three companies interviewed). Women are employed in limited number either in white collar positions, or service jobs such as cleaning and catering in the studied sectors.

In the industry and more specifically in manufacturing, two main reasons considered for low participation of woman in labor force in Konya are sectorial composition and openness of sectors for woman employment and working arrangements (shifts).

First, sector openness could be defined as, willingness of sectors to employ women in their core processes, where majority of the workers are employed. The three sectors studied in this research are major employers for manufacturing industry in the province and have significant representation in overall employment. Considering this sector concentration and three sectors (and their suppliers) openness to employ women,

it is a major barrier to increase participation. As most of the positions, and job openings are targeting men in these sectors, there is fewer opportunities for women.

Experts also agree that there is sectorial concentration in women employment in Konya. Sectors which are defined as requiring with hard labor such as molding, metal processing, machinery, automotive, and even some sub-sectors of food industry do not include woman in core production. Women only employed for "lighter" processes, such as packaging. Women employment is concentrated in sectors such as apparel and footwear, as well as sub-sectors of the food industry, such as diary and confectionary, as reported. One of the experts quoted:

> *Women prefer more hygienic enterprises such as food, food packaging, footwear and textiles. Those sectors heavily employ women in Konya*

on woman's sector preference.

Second one, working arrangements, especially working in shifts, is among practical reasons which is keeping labor participation low for woman in manufacturing. Manufacturers applying serial/mass production have 2 or 3 shifts in a day to utilize their capital at maximum capacity. The shifts require workers to rotate weekly in day/night or day/evening/night shifts. In the interviews working in shifts is reported as not being preferred by women and/or their families. Inconvenience of work hours, housework, family responsibilities, and conservative social structure are counted among reasons for not preferring working in shifts. One of the experts quoted on housework:

> *The understanding of housework should be done by women is possessing problem. Housework and work together are heavy burden for women. If they hire someone for helping in the house, then she should earn much more than this at work.*

These factors, willingness of major sectors to employ women and desirability of working arrangements in these sectors affect preference of woman to work in the industry and define size of labor pool available for the sector. In Konya, in addition to the lower

woman LFPR than country average, these two factors discussed, downsize the labor pool available to industry and further escalate unmet labor demand.

3.2.1.4. Ties with agricultural production

There are also individual factors observed impacting labor market in Konya. These individual factors are mainly, agricultural background of workers, ties with agricultural production, and ties with rural which provide benefit and support from families or relatives in rural. Experts also confirmed transition from agricultural economy to industry[40]. This transition also shifted part of the workforce from agriculture to industry sector[41]. However, some of the experts mentions this is valid for central Konya; in most of the outer districts, agriculture is still main activity.

Some of the experts and employers also agreed on the impact of sector transition in labor market. Ties with agriculture and agricultural production continue for some of the industrial workers directly or via their families[42]. Employers reported cases of employees taking time off or quitting in harvest times, to work on their own fields or to help their family or relatives.

The agricultural background, or ties with rural and agricultural production is reported to have negative impacts on labor market due to two factors. First, in some of the interviews, workers with agricultural background are criticized for low industrial discipline, in forms of difficulties in obeying norms of workplace (absenteeism, respecting work hours or workplace rules etc.). Second, rural and agricultural ties are

[40] See Table 24: Results of coding of interviews on the theme " Transformation"

[41] In Konya, less than 2% of the workers registered for the agriculture sector, whereas 27% registered for manufacturing in 2017. However, it should also e considered that, in agriculture sector informal work is more prevailing thus, statistics on registered workforce might not reflect actual ratios. (NACE code A01, Agriculture, forestry and fishery sector and NACE code C25 for Manufacturing sector. Social Security Organization, 2015-2018 data provided by Mevka RDA)

[42] See Table 24: Results of coding of interviews on the theme " Transformation"

reported to provide a safety network for employees by decreasing their dependence on wage and easing decision to quit.

The cases discussed in this section are rather minor and could not be generalized to entire labor force. These incidents are reported by some of the employers referring to not all employees but individual cases they had in their companies. Thus, these are treated as more minor, individual factors affecting supply side of labor market.

3.2.2. Quality issue in labor market

One of the main problems addressed related to labor participation in Konya, "the unmet labor demand of industry", also has quality perspective, although quantity discussion is more relevant to participation rates in general. In this quality discussion, aspects such as employee characteristics, and quality of labor pool are primary areas of discussion that was reported by mainly employers in the field study. On the other hand, in the root of these discussion, quality of vocational education, and matching of skills requested and provided are primary factors that should be understood.

The profile and characteristics of employees are critical in understanding quality discussion over existing workforce in Konya. In below tables, education profile, previous experience, and location of workers are provided from the coding of interview notes with employers.

Table 30: Results of coding of interviews on the theme " Education profile of workers"

Sub-themes of "Education profile of workers"	Employer Comments	Total
There are few workers with vocational education	6	6
Most workers have education level below high school	5	5
Older workers are usually primary school graduates	1	1
Younger workers are usually high school graduates	1	1

On the education side, most employers reported that they have few workers with vocational education, and most of their workers have education level below secondary education. This provides an indication for quality of labor pool from education perspective. The unmet labor demand of employers includes the educational background, as the market does not supply workforce with vocational education.

Table 31: Results of coding of interviews on the theme " Previous experiences of workers"

Sub-themes of "Previous experiences of workers"	Employer Comments	Total
Unqualified, different workplaces with short periods	4	4
Similar industrial companies	2	2
Agricultural sector background	2	2
New graduates	1	1
With lack of production experience	1	1
From construction industry	1	1

When the previous experiences of workers were examined, there were varying answers from employers, the most common ones were “Unqualified, different workplaces with short periods”, “Similar industrial companies”, “Workers with agricultural background”, or “From construction industry”. Among these, the first one also refers to the problem of high employee turnover that is discussed in 3.1 Demand perspective: Failure of sector to differentiate from other sectors and attract labor. However, it also includes an element for “unqualified” which would mean non-vocational school graduates.

Two employers mentioned similar industrial companies, which was desired case for employers, as they seek to minimize on-the-job training costs. In addition, two other employer said agriculture sector background, which is again referring to an effort to meet labor need, but from not-desired areas, with increased cost of training.

Table 32: Results of coding of interviews on the theme " Location of workers"

Sub-themes of "Location of workers"	Employer Comments	Total
Most workers are coming from central Konya	7	7
Bringing workers from districts and villages partially exists	6	6
Workers are mainly from villages	1	1

When the location of their workers is examined, majority of the employers replied that they are from central Konya. Yet, at the same time, most of them mentioned that they partially are bringing some workers from the districts of Konya, because their labor need is unmet. Only one company mentioned their workers are mainly coming from villages.

To sum up on employee profiles, an average worker in examined companies do not have vocational education. In fact, most of them probably have education level below high school, are unqualified, worked in different companies with short periods, and probably living in central Konya or commuting from one of the districts of nearby villages of the province. This suggests, an inconsistency with the comments of employers on quality of vocational education graduates. As they have few workers from these schools, their comments on quality of education should be considered with caution. However, it is still important to check their expected qualifications in workers and comparing it with which are provided by schooling or by the market. In below two sub-headings, discussions on quality of vocational schools and discussions over expected versus provided qualifications of workers are elaborated.

3.2.2.1. Quality of education

Many of the employers and experts complained on decreasing quality of vocational education. As previously stated, employer comments on the quality should be considered with caution. However, especially experts associated the quality problem with the decreasing quality of the student profile in these schools due to reputation of vocational education, and even reputation of the industry. Thus, quality problem is highly

associated with value attribution that is discussed in above sections[43]. On the other hand, student profile is not the only determinant of quality of education. During the interviews, quality of education is also criticized over level of up to date and applied knowledge provided, inadequate infrastructure of vocational schools, and mismatch between department of schools and required fields in the market[44].

Quality of vocational education is heavily criticized by employers for not being up to date and not providing applied knowledge. *Curriculum in vocational schools should be updated according to needs of Industry 4.0* one of the experts from an organization representing employers quoted. Employers also emphasize need for applied knowledge to provide students with practical experience by making vocational education and industry closer to each other. Moreover, it is also associated with lack of adequate infrastructure in schools, as not being able to provide them experience with the technology widely used in the manufacturing industry. *The technology used in vocational schools is far behind the industry* one of the interviewed experts quoted.

The mismatch between school departments and required fields in the market reported as another problem affecting quality. Some of the experts also think the departments available in vocational schools and required fields in the labor market do not match, as schools open more popular departments demanded by students and their parents. One of the experts in an organization representing employers quoted:

> *We develop people for unnecessary fields rather than manufacturing. We need technicians, but accounting and computer departments in vocational schools are more demanded.*

to point out the mismatch between departments and needs in labor market. However, additional studies are required to assess the need and mismatch in this area.

[43] See 3.2.1.1 Value attribution to vocational education and industry sector

[44] See Table 25: Results of coding of interviews on the theme "Vocational Education"

In addition to discussion in quality of vocational education, many comments were received on sub-themes “Decreasing quality of university education” and “Engineers do not meet required qualifications”[45]. This could also be associated with inflation of university numbers and eased accession to university as discussed in quantity side. Further studies are required to deep dive into this topic, but the received comments suggest, the quality of education discussion is also relevant to higher education.

3.2.2.2. Requested skills

Despite the above discussed criticism against the vocational schools on quality perspective, skills that employers prioritize in employee candidates are focusing on soft skills and non-technical skills, rather than technical skills. Vocational education is usually associated with providing occupation related technical skills to the students, along with overall mission education in providing other non-technical skills. Employer’s comments on quantity problem in vocational education also had the assumption that workers with vocational education would meet their needs. However, prioritization of non-technical skills suggests otherwise that, vocational education might not be the solution alone.

Table 33: Results of coding of interviews on the theme " Education profile of workers"

Sub-themes of "Requested qualifications"	Employer Comments	Total
Quality awareness	3	3
Technical competence and production experience	3	3
Personal traits	2	2
Non-technical skills	2	2
Industry culture	1	1

From the coding analysis of interviews, “technical competence and production experience” is considered as referring to technical skills. “Non-technical skills”, “personal traits” and “quality awareness” are considered non-technical yet were mentioned more frequently than technical ones.

[45] See Table 16: Results of coding of interviews on the theme " Labor need of the industry"

Handel provided a review on "Unresolved issues in the skills mismatch literature". In this review, Handel highlights mainly non-technical skills that are in short supply along with technical or basic skills. In Handel's work, the skills that are in short supply are listed as

> "(i) advanced cognitive/intellectual skills, (ii) problem-solving skills, (iii) interpersonal ("soft") skills, and (iv) attitudes and work ethics, effort, diligence, commitment, sense of responsibility, respect for authority" (Handel, 2003).

Among these listed skills, employers in Konya usually highlighted soft skills such as communication, openness to team work, sense of responsibility, sense of belonging and personal threads such as honesty, trustworthiness, morality, and industry discipline or culture. These could be classified as non-technical skills.

Employers also criticize lack of "quality awareness", sensitivity against the quality requirements of the work product. This could also be associated with industry culture. One of the employers, owner of an automotive industry company quoted:

> *The most problematic skill is quality awareness, awareness regarding the product worker produces*

pointing out lack of devotion to produce in designated quality standards. This could also be interpreted as another interaction problem between worker and the work. Desjardins and Rubenson argued, interaction between worker and the work is crucial for productivity (Desjardins & Rubenson, 2011).

From these non-technical skills, many of them cannot be provided with schooling, except industry discipline. In Throw's description "industry discipline" includes abilities such as *show up on time, take orders, do unpleasant tasks, and observe certain norms of group behavior*. Thurow defined industrial discipline as essential for work and could be more important than job specific skills. He referred to education as a credential for workers to show having "industrial discipline" (Thurow, 1975). However, when

education fails to provide it, workplace becomes obliged to give it to the workers. One of the human resources manager from food industry quoted:

> *Workers usually come to an industrial organization for the first time, they do not know it. Culture is obtained with 2-3 years' work. We win the worker afterwards unless they go somewhere else.*

referring failure of schools in providing industry discipline and increasing cost of employee training for workplace.

On the other hand, the technical qualifications employers seek vary. These include ability to read technical drawings, do technical measurements, operate specific production machinery, tools and equipment. In fact, employees tend to hire unqualified labor and seek to develop these people according to the needs of their production processes, as they are unable to find skilled worker. Moreover, employers emphasized their willingness to develop their employees for long term endorsement but criticized high employee turnover and low level of willingness for not allowing to do so.

The investment in human capital in its job returns are argued by both Becker and Thurow in different but complimentary ways. Becker employers are more willing to provide specific training rather than general training because latter brings results in longer term, and they seek to maximize their benefit in short term (Becker, 1964). Thurow argues, job market is a training market and employers are seeking to gain by minimizing their training costs (Thurow, 1975). Both authors referred to the employer's motivation to minimize training costs.

In Konya case, employer's willingness to invest in development of technical skills of employees could also be associated with their dissatisfaction with quality of education in vocational and technical schools. On the other hand, on non-technical skills side, their prioritization of these skills over technical ones is the result of their motivation to minimize costs of on-the-job training. They seek candidates that will be "trainable" and loyal, to whom they will invest for technical skills. Thus, for the quality discussion on the

schools, it could be interpreted that the issue is not the quality of provision of technical skills, but failure to develop non-technical ones, which cannot be reduced to vocational schools alone.

3.3. Interaction of demand and supply

In previous chapters, the findings and discussions are elaborated from demand and supply sides of labor market. The interaction of the demand and supply is partially covered under these discussions. However, interaction also has other discussions, worth to handle separately. The unmet labor demand of the industry has led an employee response, which also provide another evidence to the problems addressed in this study. Moreover, there had also been other issues of interaction, which do not have enough evidence to suggest conclusions, but could not be denied either. These are also discussed in this section together with employer's response to unmet labor demand.

3.3.1. Employers response to unmet labor demand

The employer (demand) side issues as well as employee (supply) side issues in labor force participation and unmet labor demand in Konya's labor market are discussed under the previous headings. However, employers also developed a response to these challenges with different means. This response includes, individual and collective initiatives to develop labor force, investment in technologies that will decrease dependency on qualified labor and hiring new comers in industry.

3.3.1.1. Initiatives to address the challenges

Employers are trying to address the issue, their unmet labor demand, with individual and collective initiatives. On individual level, several corporate and individual level initiatives and investments to employees over workplace trainings are emphasized. On collective level, more institutionalized initiatives are observed, such as sponsoring

vocational schools and investing in vocational education centers by employers' organizations.

Individual initiatives (to address labor need of the industry) are mainly focusing on workplace trainings. Most employers stated they provide technical and non-technical trainings to their employees. Trainings are either organized inhouse or in cooperation with public agencies, such as ISKUR[46] and KOSGEB[47] and professional organizations where available. Trainings include on-the job and class trainings, depending of the need of the work. However, some of the employers reported these trainings are not effective and do not bring desired results in all cases.

Other individual initiatives include non-institutional initiatives of employers or the managers of the companies, such as recruiting students as interns from relevant departments of vocational schools and engineering departments of local universities and personally mentoring them. These internships and mentoring activities aim to support development of the students and eventually employ them in the long term.

The individual initiatives rather have small impact as they are only able to reach a small group as exemplified in non-institutional initiatives, or ineffective in the long run as the workplace trainings focus on practicalities for requirements of special production or process. As also discussed in this study[48] workers need for re-training for work each time they change jobs and are unable to accumulate experience and technical skills to expertise.

Collective initiatives are beyond individual and company level, they are mainly carried out by employer organizations. Two main, institutionalized initiatives are reported during the interviews. The first one is, establishment of *Vocational Training Center* by Konya Chamber of Commerce. The project aims to provide mainly on-demand vocational

[46] Public employment agency

[47] Public agency to develop small and medium enterprises

[48] See 3.1.1.2 Opportunities to learn and grow

training programmes especially for young people from districts of Konya and matching them with employers. The second one is, Konya Chamber of Industry's collaboration with a vocational and technical secondary school. Chamber is providing sponsorship to school for infrastructure, operational expenses and even some of student's expenses, such as transportation and catering. The chambers' sponsoring the school aims to make it more attractive for students and being able to develop and provide workforce to the manufacturing industry of Konya.

The collective initiatives are more promising in helping industry in tackling unmet labor demand, but still they would only have medium level of impact as they have limited resources and not able to serve wider population.

3.3.1.2. Acceleration of automation investments

Automation of production processes and eventually reduction of workforce are discussed to have direct impact on employee demand and indirect on employee engagement. Automation investments are primarily carried out to increase efficiency and quality, but in Konya case they do have a connection with unmet labor demand of the industry as well.

The level of automation in the industry of Konya is not known exactly but reported to be increasing. However, as observed during interviews, there is clear distinction between the three manufacturing sectors examined. Among those, food industry has the highest level of automation in the core production processes, while automation in non-core processes such as packaging or loading varies between companies. Due to the complexity of products and production processes, automotive sector and machinery and agricultural machinery sectors could not be clearly differentiated from each other with the level of automation, but in general machinery and agriculture machinery is relatively less automized. This is mainly because the production volumes of parts and products in automotive is higher.

Table 34: Results of coding of interviews on the theme "Automation "

Sub-themes of "Automation"	Expert Comments	Employer Comments	Total
Critical processes are automatized	0	2	2
Reasons for automation investments productivity and quality	0	2	2
The last processes are generally manual (packaging etc.)	0	2	2
Entire process is automated	0	2	2
Employee and cost reduction with automation	0	1	1
Increasing productivity is one of the reasons for not increasing labor force participation	1	0	1

This differentiated level of automation directly effects the workforce requirements of companies. Companies with higher level of automation in core processes need fewer qualified workers, but they need more unqualified workers in non-core processes. This provides another motivation to employers for automation. The shortage of qualified workers and concerns on the quality of products drives them to increase automation in core production processes, when available. Indeed, the main motivation of employers with automation investments is increasing their efficiency and eventually competitiveness in the market. However, impact of qualified labor shortage could not be underestimated. In fact, most of the interviewed companies obtained welding robots. This investment could be associated with lack of qualified human resources in the area. One of the employers quoted, *We invest in robots for critical operations* referring to rather complex production processes with higher quality necessities.

In the era of smart production, level of automation constantly increases and needs for human involvement decreases. Whether we will require humans at all in production in near future and should we still invest in vocational education to develop a large workforce, this is another discussion not covered in this thesis. However, the labor and qualification of the needs of the industries with increasing automation is critical to be considered in resource planning for vocational education.

3.3.1.3. Hiring new comers: Refugees and asylum seekers

Turkey is the top refugee hosting country according to UNHCR. There are 3.6 million "Syrians Under Temporary Protection Regime"[49] according to UNHCR Turkey in 2019. These people are distributed to different cities of Turkey. In Konya, 70.226 registered Syrians were reported in 2016 (Ministry Interior of Turkey Directorate General of Migration Management, 2019). These refugees are not technically called as refugees due to Turkey's protection regime, but to ease explanation, in this study they are called simply as "refugees".

Table 35: Results of coding of interviews on the theme "Refugees and asylum seekers"

Sub-themes of "Refugees and asylum seekers"	Expert Comments	Employer Comments	Total
Refugees meet labor demand of industry	6	3	9
Refugees accept to work in unwanted low paying jobs	3	2	5
We do not employ refugees due to lack of work permit	0	4	4
Small enterprises employ refugees	0	3	3
Refugees work informally	1	2	3
We do employ refugees	0	2	2
Refugees are exploited by low paying jobs	0	2	2
We do not employ refugees due to lack of work discipline	0	1	1
We do not employ refugees to preserve labor peace	0	1	1

Both experts and employers reported entry of refugees (mostly Syrians) to the labor market especially in the recent years. They think entrance of Syrians in the labor market supported meeting the labor demand of the industry. Employers said they do not employ refugees as they cannot employ unregistered workers. However, they said smaller enterprises employed refugees (in most cases unregistered and with lower wages). Refugees also accepted to work in low paying, unwanted jobs, but at the same time, they

[49] Temporary protection is defined as immediate and temporal protection executed with decree of cabinet in cases of mass migration movements where individual international protection application mechanisms cannot be implemented effectively (Ministry Interior of Turkey Directorate General of Migration Management, 2019).

replaced some of the local workers in those companies. Eventually, local people who lost their jobs in those enterprises provided and extended labor pool for larger companies in industry, which helped to overcome unmet labor demand of the industry to some extend in the last years of examined period.

3.3.2. Other issues of interaction

There are other issues related to interaction of demand and supply reported during field study, but with lower frequency. Thus, these issues are rather inconclusive as further research is required to support solid findings. These issues are inefficiencies in matching mechanism, effects of labor market policies, and low level of unionization in Konya.

3.3.2.1. Inefficiencies of matching mechanism

Matching mechanisms which refer to the intermediaries facilitating matching job and employee became another topic of discussion in the field study. Some of experts and employers pointed out usage of alternative channels rather than formal mechanisms and some of the employers also complained on ineffectiveness of employment agencies.

Table 36: Results of coding of interviews on the theme "Matching"

Sub-themes of "Matching"	Expert Comments	Employer Comments	Total
Different networks are utilized in job/employee search	3	1	4
Matching mechanisms are ineffective	0	3	3
Employer and employee are unable to match	3	0	3

Experts pointed out matching problem in the interviews and mentioned usage of different networks rather than formal channels such as public or private agencies. Among these other networks, private networks of existing employees (workers personal, family, or neighboring networks) are most prevailing. In addition, some companies also utilize

reaching out to local administrations (such as district governor and muhtars) to help identifying employee candidates for recruitment.

Employers too criticized inefficiency of matching mechanisms, as comments received from all sectors. These comments include being unable to receive candidates in sufficient quality and quantity from public employment agency, and lack of potential candidates' backgrounds in the systems of public and private agencies. Some also criticize public employment agency as being ineffective and inefficient as well as only registering the employees that the employer finds. In fact, employers are willing to register the employees they find to be eligible to receive incentives from state.

In fact, the rates of unfilled vacancies in Turkey have increasing trend according to public employment agency statistics. The rate of total unfilled vacancies increased from 31% in 2008 to 59% in 2017. Moreover, in manufacturing sector, the unfilled vacancy rates peaked in 2016 with 67%, and recorded as 65% in 2017[50]. The performance of Konya office of employment agency is not able to be assessed as the number of filled vacancies are provided, but number of vacancies taken (job openings) are not given in their annual reports[51].

These facts are crucial to understand the performance of formal channels in facilitating matching in the labor market. In the absence of local level statistics in filled vacancies, and assuming they would not be a lot different than country average, the criticism by employers as these mechanisms being ineffective might be true. Moreover, usage of other networks for matching validates this proposal to some extent.

3.3.2.2. Effects of labor market policies

The labor market policies in Turkey are not analyzed in this study, but during the field research number of comments and criticism received for government campaigns for

[50] See Table 27: Taken and Unfilled Vacancies by year (Thousands) (2008-2017)

[51] Provincial Employment and Vocational Education Board Annual Activity Report

employment, training programmes supported by public employment agency, and provision of unemployment benefit by government.

Table 37: Results of coding of interviews on the theme "Labor market interventions"

Sub-themes of "Labor market interventions"	Expert Comments	Employer Comments	Total
Employment programmes are creating disguised employment	1	0	1
Employment campaigns are not creating sustainable results	1	0	1
Local platforms for labor market are inefficient	1	0	1
Need for transforming incentives with human resource focus	1	0	1

Experts criticized ineffectiveness of labor market interventions such as employment programmes of ISKUR[52] and employment campaigns of government[53]. These interventions were accused of being short term, ineffective and contributing to "disguised unemployment".

Table 38: Results of coding of interviews on the theme "Unemployment benefits"

Sub-themes of "Unemployment benefits"	Expert Comments	Employer Comments	Total
Low participation of unqualified labor due to social aid	0	1	1
Unemployment benefit lead cases of informal labor	0	1	1
Cases of getting fired to be eligible for compensation and unemployment benefit	0	1	1

On the other hand, employers primarily criticized labor market impacts of unemployment benefit. In Turkey, employees, employers and state contribute to unemployment fund, through unemployment insurance. Eligible unemployed workers are

[52] In order to provide trained workforce to the companies, ISKUR, the public employment agency of Turkey provides support for on-the-job training programmes in the companies.

[53] Government of Turkey has announced an employment campaign to encourage companies to employ more worker during economic shocks. The first campaign was introduced in the beginning of 2017 and included and incentive programme to decrease costs of employment for each additional hire.

able to receive payments from the fund to compensate their income loss. Although the unemployment benefit payments are smaller than the work time income of employees, it is criticized by employers for increasing employee turnover especially among unqualified workers. Moreover, employers mention cases where employees getting themselves fired to be eligible for unemployment benefit, then negotiate with new employers for working unregistered to receive the benefit and salary together. However, as there are few comments received under this topic, this issue remains inconclusive and further studies are required to analyze impact of labor market policies and unemployment benefit on labor market participation.

3.3.2.3. Low unionization

Unionization of labor in Konya industry is also low and concentrated in specific sectors and companies only, the union representatives reported during interviews. Two interviewed major confederations of unions said they have few members from companies in the industry sector, they are rather organized in services and agriculture; in fact, in services their primary member base is public institutions and municipalities.

Table 39: Results of coding of interviews on the theme "Trade unions"

Sub-themes of "Trade unions"	Expert Comments	Employer Comments	Total
Industrialists stay away from trade unions	2	0	2
Trade unions are not organized in industry	2	0	2

On employers' side, no noteworthy comments were received on trade unions. On the other hand, representatives of major trade unions see employer's avoidance of trade unions as a key reason for low unionization.

Another trade union interviewed, who has a relatively large member base in industry in a single company, provides a contrary case. In this case, cooperation of trade union and the company on management of labor affairs, and company's provision of

additional rights and benefits to the workers lead to better labor outcomes than the market. The issues such as high employee turnover and unmet labor demand are not reported in this case.

A single company case might not be enough to make conclusions and could be misleading. However, involvement of trade unions would be assumed to provide better labor market outcomes in general, through an institutionalized setting for negotiations, support on management of labor affairs and provision of job security to some extent. Still, considering the employer characteristics discussed in this study[54], unionization might not work in a desired setting and some of these companies would not be able to survive considering their margins. This study is inconclusive on the role of trade unions as a factor affecting labor force participation, and further studies are required to understand their impact.

[54] See 3.1. Demand perspective: Failure of sector to differentiate from other sectors and attract labor

CHAPTER 4

DISCUSSION AND CONCLUSION

In the times of weakened link between output and employment, mostly through improving technology and increasing productivity; considering current discussions and developments on smart manufacturing by increasing automatization and decreasing involvement of workforce, it is important to address current challenges to light the road ahead. Therefore, this study which focused on causes of shrinking and fluctuating labor force participation in a rapidly growing economy of a province, will help in identifying areas that need to be addressed in future.

The study focused on a decade between 2008 and 2017 in Konya, where industrial growth was not reflected in employment market growth and labor force participation. This study focused on defining the problem and setting the agenda for disparity in labor market and industry growth through analyzing the case of Konya.

For the study, a field research has been carried out and used as the primary data source together with descriptive statistics. The study has focused on employer perspective; hence, 18 in-depth, semi structured interviews were carried out with local firms in selected sectors (employers), and experts from public and professional organizations relevant to labor market, such as chambers, development agencies, and trade unions. The employer perspective caused to a limitation in the study. However, to include employee perspective, views of trade unions, public agencies, and professional managers of interviewed firms utilized.

The study identified the problem and discussed possible causes in a structured way; demand side (employer), supply side (employees) and their interaction is handled separately in the analysis. The findings validated the hypothesis as well as elaborated the

discussion for examined sub-questions. The study reached three major findings corresponding to demand, supply and their interaction:

1. Inadequacy of job value in the industry in attracting and engaging workforce
2. Shortage of labor supply in both quantity and quality in meeting labor demand of industry
3. Existence of skill mismatch

The first main finding is the inadequacy of job value in the industry in attracting and engaging workforce. Not increasing labor force participation could be associated with this attraction problem. Despite low level of unemployment rates, job value does not encourage non-participants of labor force to enter market. Moreover, for participants of job market, the low-level attraction and engagement result in high employee turnover, as reported by most of the interviewed companies.

The value, marginal productivity resides in the job, not in the man, as Thurow argued in his famous job competition theory (Thurow, 1975). In industry, level of competition in the market, market price of the product, value add, and productivity of the company defines the value of the jobs in a specific company. In this definition, market price and competition are external factors, and value add, and productivity are internal factors. In Konya case, internal factors are characteristics of the products as commodities, and position of companies in low ends of value chains. The external factors consist of level of competition, and prices of products in global commodity markets that pressure companies in their gross margin and push the jobs in these firms to the low value zone. In this zone, companies struggle to invest in people by being unable to provide competitive wages, opportunities to learn and grow, and invest in the organization to establish structures for good governance and institutionalization. Moreover, with market shocks, fluctuations and other regulatory interventions, they are even unable to provide job security to some of their employees. In return, these issues reduce the attractiveness of jobs and restrain companies in attracting and engaging the workforce.

The second finding is the shortage of labor supply in meeting needs of industry. In fact, characteristics of this shortage are not only quantity, but also quality related. On quantity side, decrease in unemployment rates until 2013 and feedbacks from the field study, confirm the shortage of labor supply. Moreover, the recent trend observed in smaller firms in industry, in hiring new comers, refugees and asylum, could be interpreted as a response of sector to shortage of labor supply.

There are various reasons behind this shortage, but the primary factor is the value attribution of society to higher education and sectors other than industry, such as services. Considering the job value discussed in the previous finding and the motivation of individuals to maximize their lifelong earnings, they tend to pursue higher education, or select occupancies other than industry and manufacturing related ones. This is in line with Freeman's argument that, college enrolment is affected by job market, as economic forces affect career choice (Freeman R. B., 1975). Although number and capacity of vocational schools in Konya are denser than country's average and had an increasing trend in the examined period, they were unable to meet the labor demand of the industry primarily because direction of value attribution.

In fact, another finding related to the value attribution is the delayed entry of young people to the workforce which comes with increased availability of higher education opportunities. The number of universities and their enrollment capacities inflated in the examined period in Konya and in Turkey. In Konya case, job values in manufacturing sector and direction of value attribution of society, with increased enrollment capacities in universities is delaying significant number of young people's entry to the labor force and feeding quantity shortage of labor supply.

Moreover, industry sector has relatively smaller labor pool due to willingness of sector to employ women in addition to low LFPR for woman in Konya. In the examined companies, there were very few women employed in the core processes, where most of the workforce is utilized. The willingness of these sectors to employ women and attractiveness of working arrangements are main factors behind lack of women in those

dominant sectors, as well as women participation to labor force being lower in Konya than national average. Lack of women in industry, except more open sectors such as apparel and footwear, and sub-sectors of the food industry, diary and confectionary; is further escalating shortage of labor supply, and downsizing labor pool for companies in industry.

In addition to shortage in supply of labor in quantity, quality of supply is another dimension of the problem. One of the root causes of quality problems is direction of value attribution, since student profile selecting vocational education is reported to be low quality. However, other issues relevant to quality of vocational education should also be considered, such as level of up to date and applied knowledge provided, inadequate infrastructure of vocational schools, and mismatch between school departments and required fields in the market. These quantity and quality issues constitute a supply shortage in the labor market, especially a shortage in the labor pool for the industry considering the job value and society's value attribution to this job value.

The third finding is the existence of skill mismatch in Konya case, which is observed especially with inadequacy of supply side, in providing requested skills by the employers. Employers, unsatisfied with the quality of education provided to workforce, pursued their own initiatives to develop workforce via owning or sponsoring vocational education centers and schools. Furthermore, acceleration of automation investments is also associated with unmet labor demand, among other motivations such as increasing productivity.

It is also observed that, requested skills by employers are primarily soft skills and non-technical skills. Employers in Konya prioritized soft skills such as communication, openness to team work, sense of responsibility, sense of belonging and personal threads such as honesty, trustworthiness, morality, and industry discipline or culture as skills they seek in employees. These could be classified as non-technical skills. Moreover, employers also criticize lack of "quality awareness", sensitivity against the quality

requirements of the work product in workers. Quality awareness could also be associated with industry culture and considered a non-technical skill.

The prioritization of non-technical skills is in line with Thurow's discussion that, employers seek trainable candidates, to minimize the on-the-job training costs (Thurow, 1975). They seek loyal candidates, who will pay back these training costs in time with staying in the company and working throughout the years. However, with the job value and other associated problems, they are unable to engage and maintain workers, which in return increases their training costs.

The skill mismatch could also be linked to companies' institutional and management capacities. As Bloom et al. argues, productivity, competitiveness and higher worker skills are associated with good management (Bloom, Genakos, Sadun, & Reenen, 2012). The existence of adequate institutional structures such as a human resources unit, help companies to identify, attract and maintain employees with relevant skills through planning and sustaining policies as pay scales, career paths, and providing employees opportunities to learn and grow throughout their career. With non-existence or varying maturity level of such functions, as well as lack of qualified professional managers in the market to operate such units, it is difficult for companies to match with employees with desired skill sets.

Value attribution to the industry sector is another cause of skill mismatch in Konya. The requested non-technical skills are relevant for most of the service sector jobs too. Thus, competition with other sectors, primarily service sector, further shrinks their labor and skill pool and escalates skill mismatch in the sector.

For the second and third main findings suggested, the role of individual factors was also explored in the study. The individual factors are mainly relevant to the supply side. The individual worker's agricultural background, and ties with agricultural production or their families in rural were reported in the field study as another factor affecting their engagement. There are minor cases reported, such as taking time off or

quitting in harvest times to work in ones' own land, or family or relatives' land. Effects of safety net provided with additional income from agriculture is also demonstrated as a factor easing decision to quit. However, these cases are minor and could not be generalized to entire labor market, thus they have insignificant links with the findings.

In addition to these three main findings, there are other issues reported in the field study, and analysed in this thesis, but they are rather inconclusive due to insufficient evidence. These are related to other causes of the discussed market outcomes, such as efficiency of matching mechanism, effect of labor market policies, and level of unionization; or labor market outcomes such as education mismatch or field of study mismatch.

Matching mechanisms, the structures intermediately matching employee candidates with jobs, are reported to be ineffective in some of the interviews. Therefore, companies were finding other ways to reach employee candidates, such as networks of existing workers or local administrations in districts. Labor market policies became an area of debate in some of the interviews. Interventions to labor market are criticised by experts for being inefficient and not creating desired results. On the other hand, employers criticised labor market impacts of unemployment benefits for being alternative non-labor income source and easing decision to stay out of market for a while. The unionization on the other hand, might be relevant to both causes and results of the issues in labor market, as it is very low in industry sector, with exceptions of some sectors and specific companies. However, there is not enough evidence on these discussions to reach conclusions, neither their existence could not be denied, they were left inconclusive an it requires further research.

Regarding other types of mismatch, there had also been observations in the study, but these as well remain inconclusive. On educational mismatch, employers neither directly defined, nor they were asked to set a required level of degree for the jobs within the company. Nevertheless, they generally reported requirement levels of vocational and technical secondary school degree for production positions. Assuming this is valid and

considering number of companies that reported their employees are mainly graduates of primary school, incidences of undereducation might be existing. In addition, considering the rise of number of universities and their enrollment capacities, it could fair to expect overeducation mismatch in near future. In this case, assuming value of jobs will not show parallel development, the investments in education will not pay off, as it has been observed in various country cases, including Turkey, in the literature.

The three main findings, which are strongly linked to each other, validate the hypothesis of this study and further elaborate the role of structural-economic and individual factors in shrinking labor force participation, and unmet labor demand of industry sector. The hypothesis, existence labor market mismatch between expectations of the industry sector and characteristics of available workforce is validated through the finding of existence of skill mismatch. Other main findings, inadequacy of job value, and supply shortage in quantity and quality helps further explaining the answer to the research question and sub questions. These findings which are strongly interconnected, also correspond to demand and supply sides of the labor market as well as their interaction with each other. Labor market mismatch in Konya has characteristics of inadequate job value in attracting and engaging workforce in employer (demand) side and shortage of labor in both quantity and quality in employee (supply) side. These characteristics are primary causes of the mismatch between the two. Moreover, the skill mismatch in labor market, especially in the non-technical skills side, adds another dimension to the problem by increasing training costs of employees. Characteristics and capacities of employers in creating job value, value attribution by employees to the jobs in the industry and vocational education which is also associated by the industry, skills available in the labor pool are all affecting the mismatch in the labor market as demonstrated in the case of Konya examined.

In the light of these findings and conclusions, recommendations are presented in corresponding three areas to address findings in supply and demand sides as well as their interaction.

On the demand side, addressing the factors affecting job value, it is recommended for public policies to focus on initiatives to accelerate improvements in employers' management capacities, primarily in human resource planning and management, and following other areas of institutionalization and good governance. Considering the shortage of supply in the white-collar positions in this area, it is recommended to develop collaborations with local universities and leading firms to initiate development programmes in the most needed areas that will be identified. Moreover, considering most of the firms in the examined sectors were family firms, and transitions to next generations are either started or on its way, initiatives could be developed targeting new generations, who could be more open to transformation. Finally, communication activities promoting good practices from the local could also help setting transformation agenda for the companies in Konya.

On the supply shortage, it is recommended to focus initiatives the root causes of value attribution. Communication initiatives targeting younger students and their families, scholarship programmes for requested occupations in vocational and technical schools could be used as primary instruments. Moreover, other initiatives such as promoting "maker" movements, open labs and workshops on manufacturing could be considered to promote the industry sector to younger generations. On the other side, considering the number of universities and number of students enrolled, it is recommended to carry out specific research and needs assessment studies to understand current and future demand for occupations and skills, and review existing departments and enrollment capacities in universities.

Considering the skill mismatch, it is recommended for vocational and technical schools to review their curriculums in a way to deepen provision of non-technical skills along with occupation related technical ones. It is reported in the field over existing initiatives that, they have positive impact on increasing attractiveness of the collaborating school. Thus, it is also recommended to increase applied trainings in collaboration between the sector representatives (chambers and other professional organizations) and

players (firms), with the vocational and technical schools, and relevant departments of universities, through medium- and long-term internship programmes.

In addition to the recommendations addressing each dimension, I would like to suggest further research especially on economically rising and declining provinces and related labor market outcomes. The case of Konya, an emerging city with growing economy and industry, helps to understand challenges of the demand and supply sides of labor market in Turkey, which I believe could be generalized to other emerging cities in Turkey, and maybe to other cities with similar challenges in developing countries. Further studies, especially comparative studies, would help to understand similarities and differences of labor-output relation with labor market matching.

In this study, mismatch in labor market is discussed over Konya case, where growing economy and industry did not end up increasing labor participation. The study, which was primarily carried out from employer perspective, but included credible sources to reflect employee perspective, has categorized issues in demand and supply ends as well as how demand and supply interacts with each other. Thus, findings and recommendations addressed all these three areas by highlighting the links between them. In the age of escalated discussions on economic growth and employment relation and future of work, it is important to address the current challenges over a recent case, in which the findings could be relevant beyond the case, to Turkey and developing countries in general. Considering structural causes that are dominant in most of the findings, interventions could only succeed in long term. However, short term gains are also possible especially with setting transformation agenda targeting capacities of enterprises, initiating communication to restore reputation of manufacturing, and focusing on collaborations for skill development.

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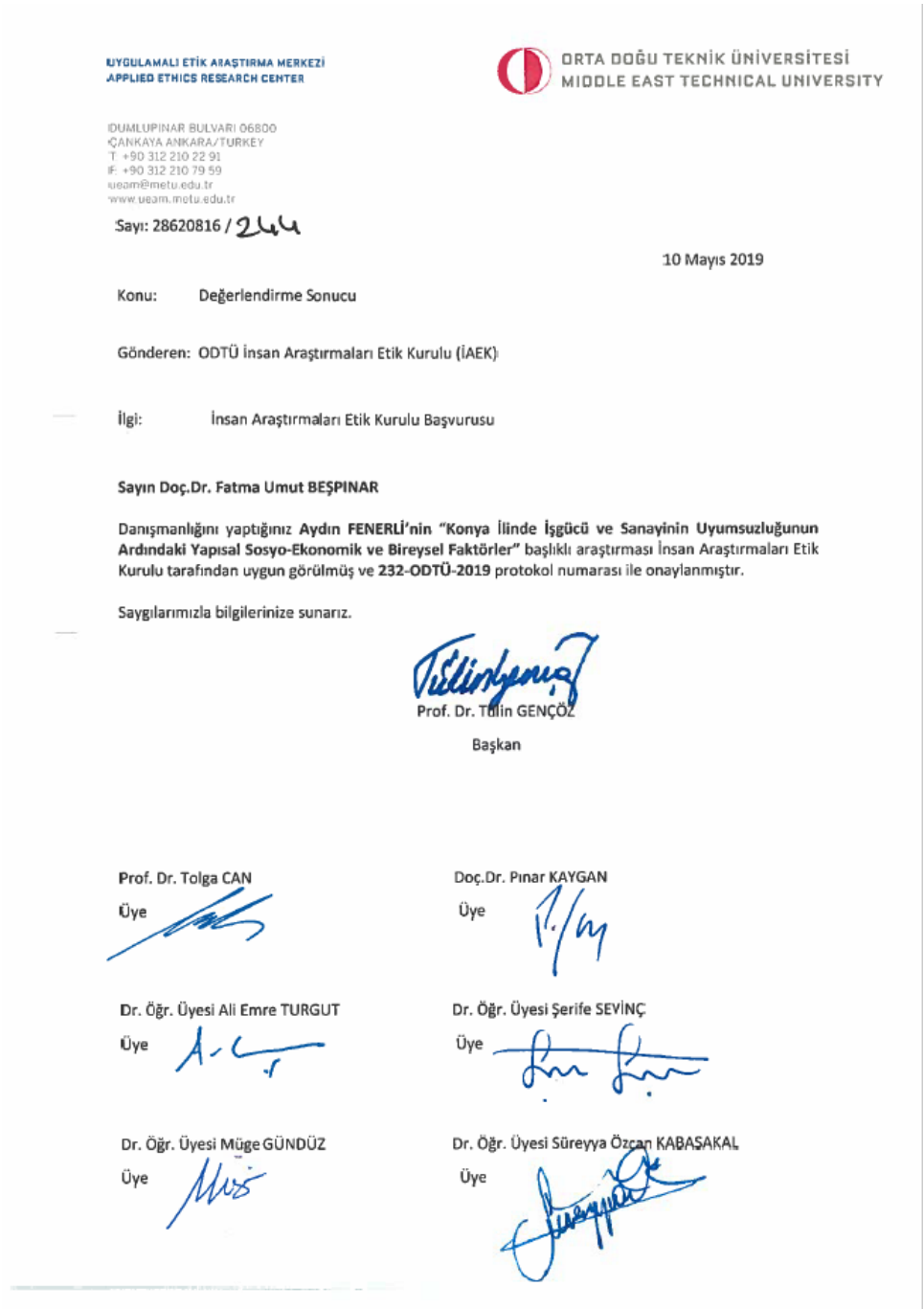
APPENDICES

APPENDIX A: APPROVAL OF THE METU HUMAN SUBJECTS ETHICS COMMITTEE



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10 Mayıs 2019

Konu: Değerlendirme Sonucu

Gönderen: ODTÜ İnsan Araştırmaları Etik Kurulu (İAEK)

İlgi: İnsan Araştırmaları Etik Kurulu Başvurusu

Sayın Doç.Dr. Fatma Umut BEŞPINAR

Danışmanlığını yaptığınız **Aydın FENERLİ'nin "Konya İlinde İşgücü ve Sanayinin Uyumsuzluğunun Ardındaki Yapısal Sosyo-Ekonomik ve Bireysel Faktörler"** başlıklı araştırması İnsan Araştırmaları Etik Kurulu tarafından uygun görülmüş ve **232-ODTÜ-2019** protokol numarası ile onaylanmıştır.

Saygılarımızla bilgilerinize sunarız.

Prof. Dr. Tülin GENÇÖZ
Başkan

Prof. Dr. Tolga CAN
Üye

Doç.Dr. Pınar KAYGAN
Üye

Dr. Öğr. Üyesi Ali Emre TURGUT
Üye

Dr. Öğr. Üyesi Şerife SEVİNÇ
Üye

Dr. Öğr. Üyesi Müge GÜNDÜZ
Üye

Dr. Öğr. Üyesi Süreyya Özcan KABAŞAKAL
Üye

APPENDIX B: IN DEPTH INTERWIEW QUESTIONS (EMPLOYER)

Subject	Questions
Profile of the firm, operations and employment	• Could you describe your company, operations and employment structure? Can you talk about your company's trends in recent years? (Company size, products and production structure, employment size, blue-white collar staff numbers, personnel turnover rate and change in recent years) • What is the level of automation in your production? What kind of work do you do labor intensively?
Employee profile and skills	• Could you describe your company's employee profile? What is the male-female, vocational or technical education distribution of employees for blue and white collars? • How are your employees' previous work experiences? (Industry, agriculture, small business, etc.) • Do you provide trainings for your employees in your company? If so, what kind of training is given? • Which districts of Konya do your employees mainly come from? Do you have employees from outside of Konya?
Workforce profile and skills needed in the firm and industry	• Do you able to find the workforce you need in quality and quantity? How has this been in recent years? • What are the technical and non-technical qualifications you are looking for in your employees? What features do you want your employees to have? • When you want to hire, at which points do the candidate profiles meet or does not meet your expectations?
Recommendations	• What do you think should be done in Konya in order to improve this situation and to have access to the workforce profile and competencies you need? • What are your recommendations for improving other problem areas related to the workforce you're talking about?

APPENDIX C: IN DEPTH INTERWIEW QUESTIONS (EXPERT)

Subject	Questions
Trends in labor market of Konya	• How has Konya's economic growth affected the development of the labor market? • How would you evaluate the employment market in Konya today?
Structure and trends of workforce in manufacturing industry of Konya	• How did the transition from agriculture and industry take place? How do you observe the effects of this today? • Have there been any problems brought about by this transition? (e.g. business culture, etc.)
Labor market participation and barriers	• Looking at the statistics, the labor force participation declined between 2008-2014, and then there was fluctuation. How do you evaluate this situation, what are the consequences and effects? • What do you think are the obstacles to increased labor participation in Konya? • We see in the statistics that Konya's rate of women's labor force participation and this rate of growth is below the Turkish average. How do you assess women's labour force participation, the state and trends of women's employment? • Which sectors do you think are more open to women's employment? • How sectoral requirements in the leading sectors of Konya affect male or female employment (especially in the automotive, food, machinery and agricultural machinery sectors)
Skills of workforce and matching with expectations of manufacturing industry	• Is there a harmony between labor demand and supply in industry sector in Konya? Why does it exist or not? • How do you evaluate the relationship between the demands and expectations of the automotive, food, machinery and agricultural machinery sectors for the workforce and the current competencies of the workforce? What feedback and demands do your stakeholders in the industrial sector have for the workforce?
Recommendations	• What do you think should be done in Konya in order to improve this situation and increase the participation of the workforce?

APPENDIX D: TURKISH SUMMARY / TÜRKÇE ÖZET

KONYA'DA İŞ GÜCÜ VE SANAYİ UYUŞMAZLIĞI: YAPISAL VE BİREYSEL FAKTÖRLERİN İŞVEREN BAKIŞ AÇISINDAN ANALİZİ

İlerleyen teknoloji ve artan verimlilik ile ekonomik çıktı ve işgücünün arasındaki bağlantının zayıfladığı çağımızda, akıllı üretim ve artan otomasyon iş gücüne ihtiyacı azaltmaktadır. Mevcut işler, iş verenlerin beklentileri ve iş gücünün yetkinlikleri arasındaki farklılıklardan kaynaklanan arz-talep uyuşmazlıkları ile ekonomik büyüme istihdam ilişkisinin beraber ele alındığı bu çalışma, iş gücü piyasasının sorunlarına dikkat çekerek, yapısal ve bireysel problemleri analiz edip müdahale alanlarını ortaya çıkarmayı amaçlamıştır. Bunun için büyümekte olan bir ilin ekonomisi ve iş gücü piyasası bir vaka olarak ele alınmıştır.

Gelişmekte olan bir ülke olan Türkiye, 2002 yılı sonrasında önemli bir ekonomik büyüme yaşamış, Gayrisafi Milli Hasıla büyüyen sektörler ve artan gelir ile birlikte büyümüştür. Ekonomik büyüme, nüfusun daha yoğun olduğu, sanayi ve hizmetler sektörlerinin daha büyük ve işletmelerin daha yüksek sayıda olduğu, ülkenin büyükşehirlerinde daha belirgin olarak gerçekleşmiştir. Bu dönemde gerçekleşen büyümenin bir karakteristiği de ağırlıklı olarak Marmara ve Batı Ege bölgelerinde bulunan, sanayinin yoğun olduğu ekonomik merkezlere ek olarak yeni ekonomik merkezler ortaya çıkmıştır. Ancak ekonomik büyüme, iş gücü piyasasına ancak sınırlı olarak yansımıştır.

Bir yönetim danışmanı olarak ben de yeni büyüyen ekonomik merkezler olarak değerlendirilebilecek, çoğunluğu orta Anadolu ve güneyinde bulunan bu illerde son beş yıldır yoğun olarak çalıştım ve şirketlere danışmanlık hizmeti sundum. Bu çalışmalar

esnasında önemli bir gözlemim işverenlerin iş gücünü çekmekte ve elde tutmakta yaşadıkları zorluklar oldu. Hızlı büyümenin ardından bu şehirlerde önemli bir yetenek açığı ortaya çıkmıştı, ancak bu anlaşılabilir bir durumdu. Ancak gözlemim beyaz yaka pozisyonlarda yaşanan sıkıntıların yanında mavi yakada da şirketlerin önemli zorluklar yaşadığı yönünde oldu. Bu durumun sebeplerini hep merak etmiştim, ancak bu çalışma ile bunları detaylı olarak ele alma imkanı buldum.

Bu çalışmada iş gücü ve sanayi sektörü arasındaki uyuşmazlıklar yükselen bir ekonomi merkezi olarak ortaya çıkan iller arasından Konya seçilerek araştırılmıştır. Gözlemlenen yüksek oranda ekonomik büyüme ve sanayi sektörü büyümesine rağmen artmayan iş gücü katılımı oranları Konya'yı dikkate değer bir vaka yapmıştır. Konya'nın seçilmesinin arka planında, Türkiye'de GSYH açısından en büyük 10 il, 2008-2017 periyodundaki büyüme performansları ve bunun karşısında iş gücü katılımı oranlarındaki değişim karşılaştırılarak incelenmiştir. Bu 10 il arasında GSYH açısından en yüksek büyümeyi gösteren iller arasında üçüncü, sanayi sektörü en yüksek büyümeyi gösteren iller arasında ikinci olan Konya, iş gücü katılımı oranındaki artışta aynı performansı gösterememiştir. Konya'nın iş gücü katılım oranı 2013 yılına kadar azalmış, ardından dalgalanarak 2017 yılında 2008 yılı seviyesine çıkmıştır.

Büyümenin sonuçlarının iş gücü piyasasına yansımamış olmasının nedenlerini araştırmak araştırmanın öncelikli amacı olmuştur. Bu doğrultuda, araştırma sorusu, "2008 yılından bu yana büyüyen ekonomi ve sanayi sektörüne rağmen artmayan iş gücü katılım oranı işverenler tarafından nasıl açıklanmaktadır?" şeklinde tasarlanmıştır. Bu sorunun ardındaki temel varsayım büyüyen ekonomi ve sanayi sektörünün iş imkanlarını artıracağı ve daha fazla sayıda insanı iş gücü piyasasına katılma yönünde teşvik edeceği olmuştur. Ayrıca, araştırma sorusuna yanıt verecek hipotez, sanayi sektörü beklentileri ile iş gücünün karakteristikleri arasındaki farklılıklardan kaynaklı bir iş gücü piyasası uyuşmazlığı bulunduğu şeklindedir. Yapısal bir sorun olan bu uyuşmazlığa ilave olarak diğer bazı sosyo-ekonomik ve bireysel faktörlerin de rol oynayabileceği ihtimali de göz önünde bulundurulmuştur. Araştırma esnasında da yürütülen saha çalışması bu soruyu daha da detaylandırabilmeyi sağlamış ve bazı alt soruları ortaya çıkarmıştır. Bu sorular

“Yapısal sosyo-ekonomik ve bireysel faktörler daralan iş gücü katılımında nasıl bir rol oynamaktadır?” ve “Konya ilinde sanayi sektörünün karşılanamamış iş gücü talebinin karakteristikleri nelerdir?” şeklindedir.

Araştırma sorularına yanıt vermek için literatürdeki tartışmamaların gözden geçirilerek değerlendirilmesinin yanında tanımlayıcı istatistiklerden faydalanılmış ve daha da önemlisi yarı yapılandırılmış derinlemesine mülakatlar tekniği ile bir saha araştırması yapılmıştır. Çalışma işveren perspektifini temel alarak yürütüldüğü için saha araştırmasında Konya’da en yoğun istihdam sağlayıcı sektörler olarak öne çıkan üç sektörden (Otomotiv, Gıda ve Makine ve Tarım Makineleri) toplam dokuz firmanın sahipleri ve profesyonel yöneticileri ile mülakat yapılmıştır. Ayrıca profesyonel örgütler, kamu kurumları ve sendikalar ile de dokuz mülakat gerçekleştirilerek konunun uzmanlarının perspektifi ve kısmen çalışan perspektifi de çalışmaya yansıtılmıştır.

Araştırma, işveren perspektifinden yürütülmüş, ancak analiz çerçevesi olarak talep, arz ve arz talep arasındaki etkileşim üç farklı perspektif olarak kullanılmış, dokümanda ilgili bölümlerdeki analiz ve değerlendirmeler konuyu bu üç açıdan ele alacak şekilde yürütülmüştür. Bu açılardan talep, işveren tarafını, arz iş gücünü, etkileşim ise işveren ve işgücünün uyuşma seviyesini ve birbirleri ile olan etkileşimin karakteristiklerini açıklamakta kullanılmıştır.

Konu ile ilgili literatürde bulunan tartışmalar bu üç açıdan ele alınmıştır. Talep tarafındaki tartışmalara bakıldığında, ekonomik çıktı ve işgücü ilişkisi üzerine tartışmalar dikkat çekmektedir. Erken dönem, ikinci dünya savaşı sonrası dönem olarak da tanımlanan 1960 ve 70’lerde, ekonomik çıktıdaki değişimin iş gücü piyasası çıktıları ile arasındaki bağıntı ABD işgücü piyasası üzerinden Okun Kanunu ile tespit edilmiş, ardından gelişmiş ve gelişmekte olan diğer ülkeler üzerinde yapılan benzer çalışmalar bu bağıntıyı farklı seviyelerde doğrulamıştır. Buna göre, ekonomik büyümenin istihdam esnekliği hesaplanmış ve ekonomideki birim puan büyümenin istihdam piyasası üzerindeki büyüme etkilerini anlatan çok sayıda çalışma ortaya çıkmıştır. Ancak sonraki dönemde, 1980’ler sonrasında bu bağıntıda önemli bir zayıflama görülmüştür. “İstihdamsız Büyüme” pek çok araştırmacı tarafından kullanılan bir terim olmuştur.

Teknolojik gelişme ve üretkenlik artışı ile tetiklenen ve ağırlıklı olarak imalat sektörlerinde ortaya çıkan bu durum gitgide daha görünür hale gelmiştir.

Arz tarafındaki literatüre bakıldığında ise, beşeri sermaye üzerindeki tartışmalar dikkat çekmektedir. Beşeri sermayeye yapılan yatırımlar, bu yatırımların türleri, bu yatırımların maliyetini kimin karşıladığı ve yatırımın geri dönüşünün ne şekilde alındığı literatürde derinlemesine ele alınmıştır. Beşeri sermayeye yapılan yatırımlar arasında eğitime yapılan yatırımlar ve eğitim süresince işte elde edilebilecek gelirlerin ertelenmesi başı çekmektedir. Ancak bunlarla beraber, sağlık, çocuk bakımı, iş için yer değiştirme, iş-başı eğitim maliyetleri gibi tüketimler de beşeri sermaye yatırımları arasında gösterilmektedir. Ancak yatırımın geri dönüşünde en etkili faktör olan gelir seviyeleri öncelikli olarak eğitimden etkilenmektedir. Eğitimin beraberinde, iş başı eğitim ile edinilen yetkinlikler de geliri etkileyebilmektedir. Gelir seviyesine ilişkin tartışmada, neoklasik teori marjinal üretkenlik seviyesini gelirin belirleyicisi olarak gösterirken Thurow'un karşı tartışması ise gelir seviyesinin belirleyicisi olarak işin karakteristiğini, işçi yetkinlikleri ve marjinal üretkenliğinin önüne koymaktadır. Bu tartışmada işgücü piyasası bir eğitim piyasası olarak tasvir edilmekte, daha iyi eğitim ve yetkinliklere sahip olup daha az iş başı eğitim maliyeti oluşturacak adayların tercih edildiği; işverenlerin en önemli motivasyonlarından birinin eğitim maliyetlerini düşürmek olduğu argümanı savunulmaktadır.

İş gücü piyasasında arz ve talebin etkileşiminde ise baskın olan tartışma eşleşme ve eşleşememe, yani iş gücü piyasası "uyuşmazlığı" tartışmasıdır. Eşleşme tartışması derinleşerek eğitim uyuşmazlığı, beceri uyuşmazlığı, çalışma alanı uyuşmazlığı gibi alt konulara ayrılmaktadır. Bunlar arasından en yoğun tartışılan alan olan eğitim uyuşmazlığı, eğitim süresi ve bitirilen okul ile yapılan işin gerekliliklerinin uyuşma seviyesi üzerine olan tartışmalardır. Bu tartışma, eğitim yatırımlarının geri dönüşlerinin ne ölçüde geri alınabildiği üzerine odaklanmış olup, 1960'lardan bu yana süregelmektedir. Eksik eğitim ve fazla eğitimin yatırım geri dönüşlerine ilişkin yapılan çalışmaların çoğunluğu, yatırımların tam olarak geri alınamadığı sonucuna ulaşmaktadır. Buna göre, analiz edilen işler için uygun seviyede eğitim alanlar referans olarak kabul

edildiğinde, maaş ve yaşam boyu gelir açısından, eksik eğitim sahibi olanların tabi olduğu cezalandırmanın boyutu fazla iken, fazla eğitim alanların elde ettiği fayda ise eğitim yatırımlarına denk değildir. Ancak fazla eğitimin, bu analizlerde olduğu gibi sayısallaştırılamayan başka avantajlarının da olduğu, örneğin adayları iş bulmada öne geçirebildiği de değerlendirilmektedir. Diğer yandan beceri uyuşmazlığı, nitel olarak değerlendirilen bir olgu olup, çalışma hayatı boyunca edinilen ve kaybedilen yetenekleri de göz önüne aldığı için daha etkin ancak veri uygunluğu açısından analizler yürütülmesi zor bir alan olarak tanımlanmaktadır. Eğitim uyuşmazlığına göre daha yeni bir çalışma alanı olan beceri uyuşmazlığı, ağırlıklı olarak bireylerin sahip oldukları yetkinlikler ve işin gereklilikleri karşılaştırmasıyla ele alınmaktadır. Beceri uyuşmazlığı ayrıca şirketlerin yönetsel kabiliyetleri ile ilişkilendirilmiş, firma sahipliği ve yönetişim yapısı ile beceri uyuşmazlığının yaygınlığı arasında ilişki tespit edilmiştir. Buna göre, profesyonel yönetime veya iyi yönetişim uygulamalarına sahip firmalarda beceri uyuşmazlığı daha az görülmektedir. Beceri uyuşmazlığının etkilerine bakıldığında ise, yaygın olduğu durumda toplam üretkenliği düşürdüğü yönünde bulgular bulunmaktadır. Uyuşmazlığa ilişkin diğer bir alan ise aralarında en yeni alan olarak değerlendirilebilecek, çalışma alanı uyuşmazlığıdır. Eğitim gördüğü alanın dışında iş sahibi olanların girdiği bu alan, piyasa taleplerinden yoğun olarak etkilenmektedir. Eğer eğitim uyuşmazlığı söz konusu değil ise, çalışma alanı uyuşmazlığı gelir kaybı ile ilişkilendirilmemektedir. Bu tartışmalara ek olarak iş arama, işten ayrılma ve personel sirkülasyonu da uyuşmazlık literatürünün bir parçası olarak gösterilmektedir. İşten ayrılma ağırlıklı olarak gelir seviyesi ve daha iyi gelir fırsatları ile ilişkilendirilse de işten işe ayrılmaların yanında işten işsizliğe ayrılmaların da olabileceği değerlendirilmektedir. Ayrılma kararı, bireyin pazar şartlarını ve pazardaki kendi değerini algılayışından etkilenmektedir. Fazla eğitim gibi iş piyasası uyuşmazlıklarının varlığı da bireylerin daha iyi işler buldukça iş değiştirmelerine neden olmakta ve personel devir hızını artırabilmektedir. Personel devir hızı ise işletmeler açısından işe alım ve yeni alınan personelin eğitimi gibi ilave maliyetler çıkarabilmektedir.

Talep, arz ve eşleşme açısından incelenen literatüre ek olarak Türkiye üzerinde yapılan ilgili çalışmalar incelendiğinde özellikle ekonomik çıktı ve iş gücü piyasası sonuçları arasında zayıflayan bağlantı ve fazla eğitim üzerine yapılan tartışmaların ağırlığı göze çarpmaktadır. Ekonomik büyüme ve istihdam piyasası sonuçları arasında zayıflayan bağlantı Türkiye'de de görülmekte olup, "istihdamsız büyüme" Türkiye için de geçerli olmuştur. Ancak bu tartışma Türkiye'nin ilgili dönemlerde içinde bulunduğu bağlamda değerlendirilmelidir. 1980'lerde başlayan ticaret serbestisi ve 1990'larda takip edilen yapısal uyum politikaları dahilindeki istihdam piyasasının esnekliğinin artırılmasına yönelik adımlar ve özelleştirmeler önemli istihdam piyasası sonuçları ortaya çıkarmıştır. Yavaşlayan istihdam büyümesi, özelleştirmeler ile beraber yapılan iş gücü tasarrufları, azalan gelirler ve zayıflayan iş güvencesi ile ilişkilendirilmiştir.

Türkiye üzerindeki diğer önemli tartışma ise eğitim yatırımlarının geri dönüşü ve istihdam piyasası uyuşmazlığı dahilinde ağırlıklı olarak eğitim uyuşmazlığı hakkındadır. Türkiye'de de uluslararası literatüre paralel olarak, eğitim uyuşmazlığı durumunda eğitimin getirisi düşmekte, ancak fazla eğitim vakalarının farklı şekillerde bireylere avantajlar da sağlayabildiği görülmektedir. Ancak beceri veya çalışma alanı uyuşmazlığı gibi diğer alanlar, Türkiye üzerine olan literatürde aynı yoğunlukta tartışılmamaktadır. Bu iki konunun da Türkiye'de bulunduğu ve yaygın olduğuna belirli çalışmalarda atıf yapılmakta ancak veri yetersizliği nedeniyle tartışmalar sonuçsuz kalabilmektedir. Bu tez ile yürütülen çalışma da iş gücü piyasasında ekonomik çıktı ve işgücü piyasası sonuçları ile uyuşmazlık konusu beraber ele alınarak, Konya vakası üzerinden incelenmekte verinin yetersiz olduğu bu alana saha araştırması ile katkı sağlamaktadır.

Saha araştırması ve incelenen betimleyici istatistikler ışığında, çalışmanın araştırma sorularına yanıt verirken, üç ana bulgu ortaya çıkmaktadır. Bu üç bulgu, (i) sanayideki işlerin değerinin iş gücünü çekmekte ve elde tutmakta yetersiz kalması, (ii) iş gücü arzının nitelik ve nicelik olarak yetersizliği, (iii) beceri uyuşmazlığının mevcudiyeti şeklindedir. Çalışmadaki diğer bulgular ise bu üç ana bulgunun birer parçaları veya kök nedenlerini oluşturmaktadır.

İlk ana bulgu, sanayideki işlerin değerinin iş gücünü çekmekte ve elde tutmakta yetersiz kalmasıdır. Çalışmada dikkat çekilen, iş gücü katılımının artmaması sorunu da bu bulgu ile ilişkilendirilebilir. İşsizlik oranlarının Konya'da düşüklüğüne rağmen, işlerin değeri, iş gücü piyasasının katılımcısı olmayanları pazara girmeye teşvik edememektedir. Görüşülen şirketlerin çoğunun belirttiği üzere, iş gücü piyasasının katılımcıları için ise işlerin düşük çekiciliği iş bağlılığını düşürmekte, bu da yüksek personel devir hızına sebep olmaktadır.

Çalışmanın literatür taraması kısmında da detaylı ele alındığı üzere, Thurow'un iş rekabeti kuramı marjinal üretkenliğin insanda değil de işte olduğunu, yani işin niteliklerinin marjinal üretkenliği belirlemekte insanın bireysel katkısından fazla olduğunu söylemektedir. Sanayi sektöründe, piyasadaki rekabet düzeyi, ürünün piyasa fiyatı, katma değer ve şirketin verimliliği belirli bir şirketteki işlerin değerini tanımlar. Bu tanımda, piyasa fiyatı ve rekabet dış faktörlerdir ve katma değer ve verimlilik iç faktörlerdir. Konya'da iç faktörler, ürünlerin meta olmaları ve şirketlerin değer zincirlerindeki düşük konumlarıdır. Rekabet seviyesi, ürünlerin küresel meta piyasalarındaki fiyatları şirketlerin brüt kar marjını baskılamakta ve bu şirketlerdeki işleri düşük değerli bir konuma itmektedir. Düşük brüt kar marjına sahip şirketler, iyi yönetişim ve kurumsallaşma için şirketlerine yatırım yapamamakta ve çalışanlarına rekabetçi ücretler, öğrenme ve büyüme fırsatları sağlayamamaktadır. Ayrıca piyasa şokları, dalgalanmalar ve diğer düzenleyici müdahaleler nedeniyle, bu şirketler bazı çalışanlarına iş güvenliği sağlamakta dahi zorlanmaktadır. Sonuç olarak bu sorunlar sarmalı işlerin çekiciliğini azaltmakta ve şirketlerin işgücünü çekme ve elde tutmasını zorlaştırmaktadır.

İkinci bulgu ise sanayinin ihtiyaçlarının karşılanmasında işgücü arzının nicelik ve nitelik olarak yetersizliğidir. 2008-2013 yılları arasında işsizlik oranlarındaki düşüş ve saha çalışmasından elde edilen geri bildirimler, işgücü arzı sıkıntısını doğrulamaktadır. Ayrıca özellikle son dönemde, sanayideki küçük firmalar tarafından mülteciler ve sığınmacıların işe alınması eğilimi, sektörün işgücü arzındaki sıkıntıya bir tepkisi, olarak yorumlanabilir. Bu yetersizliğin ardında çeşitli nedenler sayılabilir. Ancak ilk sıradaki neden toplumun sanayi ile ilişkilendirilen mesleki eğitim ve sanayi sektörü yerine, yüksek

öğretime ve hizmetler gibi sanayi dışındaki diğer sektörlere değer atfetmesidir. Önceki bulguda tartışılan iş değeri ve bireylerin yaşam boyu kazançlarını en üst düzeye çıkarma motivasyonu göz önünde bulundurulduğunda, bireyler yüksek öğrenime devam etmeyi veya sanayi ve imalat harici sektörleri seçmeye eğilim gösterebilmektedirler. Bu durum, Freeman'ın ekonomik güçlerin kariyer seçimini etkilemesi ve üniversite kayıtlarının iş piyasasından etkilenmesi argümanı ile de uyumludur. Konya'daki meslek okullarının sayısı ve kapasitesi ülke ortalamasından daha yüksek olmasına ve incelenen dönemde artan bir eğilime sahip olmasına rağmen, öncelikle değer atfetmenin farklı bir yön izlemesi nedeniyle sektörün işgücü talebini karşılayamamaktadır.

Değer atfı ile yakından ilişkili olan diğer bir konu da artan yüksek öğrenim imkanları nedeniyle, gençlerin iş gücü piyasasına girmelerinin gecikmesidir. Konya ve Türkiye'de incelenen dönemde üniversite sayısı ve kayıt kapasiteleri önemli oranda artmıştır. Konya'da, imalat sektöründeki iş değerleri ve toplumun değer atfının yönü, üniversitelere kayıt kapasitelerinin artması, gençlerin işgücüne girişini geciktirmekte ve işgücü arzındaki sıkıntıları derinleştirmektedir.

Sanayi sektörünün iş gücü niceliğine ilişkin yaşadığı diğer bir sıkıntı da, sektörün kadınları istihdam etmedeki isteksizliği ve kadınların ildeki düşük iş gücü katılım oranları nedeniyle daha görece küçük bir arz havuzundan beslenmesidir. Konya'nın kadınların iş gücüne katılımında ülke ortalamasının epey altında seyreden istatistikleri de arzı daraltan bir unsurdur. Ayrıca incelenen şirketlerde, işgücünün çoğunun istihdam edildiği üretim süreçlerinde çalışan kadın sayısı epey az olmakla beraber, bazı şirketlerde hiç bulunmamaktadır. Bu sorunun kök nedeni, incelenen sektörlerin kadın istihdam etme yönünde istekliliği kadar çalışma düzeninin (örn. vardiya sisteminin) kadınlar açısından çekici görülmemesidir. Hazır giyim, ayakkabı imalatı ve gıda endüstrisinin bazı alt sektörleri olan et ve süt ürünleri ve atıştırmalık ürünler gibi kadın istihdamına daha açık olan sektörler haricinde, sanayide kadınların eksikliği iş gücü arzı problemini derinleştirmekte ve sanayi sektöründeki şirketler için iş gücü havuzunu daraltmaktadır.

İş gücü arzında nicelik açısından yaşanan sorunlara ek olarak, arzın niteliği de ayrı bir sorundur. Nitelik, yani kalite probleminde de kök neden olarak değer atfı ve getirdiği etkiler öne çıkmaktadır. Örneğin, mesleki eğitimi seçen öğrenci profilinin düşük kaliteli olduğu mülakatlarda da iletilmiştir. Ancak daha yüksek kaliteli öğrencilerin mesleki eğitimi seçmemesinin nedeni de toplumun ekonomik ve sosyal değeri yüksek öğretime atfetmesidir. Bunlara ek olarak, nitelik ile ilgili diğer hususlar, sunulan güncel ve uygulamalı bilgi, meslek okullarının yetersiz altyapısı ve okul bölümleri ile sanayide talep edilen alanlar arasındaki uyuşmazlık gösterilmektedir.

Tartışılan nicelik ve nitelik sorunları, önceki bulguda değinilen iş değeri ve iş değerine toplumun atfettiği değer göz önüne alındığında işgücü piyasasında bir arz eksiliği oluşturmaktadır. Arz eksikliği ise nicelik yönünden iş gücü katılımının artmasının önündeki engellerden biri olmasının yanı sıra nitelik yönünden iş gücü piyasası uyuşmazlıklarını derinleştiren bir faktör olarak öne çıkmaktadır.

Üçüncü bulgu ise, Konya vakasında beceri uyuşmazlığının gözlemlenmesidir. İşverenlerin talep ettiği yetkinlikler, iş gücü arzı tarafından sunulamamaktadır. İşgücüne sağlanan eğitim kalitesinden memnun olmayan işverenler çeşitli inisiyatifler geliştirmişler; mesleki eğitim merkezleri açarak ve teknik ve mesleki okullara sponsorluk yaparak ihtiyaç duydukları iş gücünü yetiştirmeye çalışmaktadırlar. Ayrıca, otomasyon yatırımlarının hızlanması, verimliliğin artırılması gibi diğer motivasyonların yanı sıra, karşılanmayan işgücü talebiyle de ilişkilendirilmektedir.

İşverenlerin talep ettikleri beceri ve yetkinlikler ağırlıklı olarak teknik olmayan becerilere ve sosyal becerilere odaklanmaktadır. Konya'daki işverenler, çalışanlarda aradıkları özellikler arasında, iletişim, ekip çalışmasına yatkınlık, sorumluluk bilinci, aidiyet gibi sosyal beceriler ve dürüstlük, güvenilirlik, ahlaklılık gibi kişisel özelliklerin yanında sanayi disiplini veya sanayi kültürü gibi özellikleri önceliklendirmişlerdir. Bu özellikleri teknik olmayan yetkinlikler olarak sınıflamak mümkündür. Ayrıca, işverenler kalite bilincinin eksikliğinden, işçilerin üretilen ürünün kalite gerekliliklerine yeterince

hassasiyet göstermemesinden şikayet etmişlerdir. Kalite bilinci de sanayi kültürü ile ilişkilendirildiğinden teklik olmayan bir özellik olarak değerlendirilmiştir.

Teknik olmayan becerilerin önceliklendirilmesi, Thurow'un da belirttiği, işverenlerin iş başı eğitim maliyetlerini en aza indirmek için eğitilebilir adaylar aradığı tartışmasına uygundur. İşverenler, şirkette yıllarca çalışarak işverenin katlandığı eğitim masraflarını geri ödeyecek, sadık adaylar aramaktadırlar. Ancak, iş değeri ve değer atfı tartışmasında değinildiği üzere çalışanlarının bağlılığını sağlayıp elde tutamadıkları için eğitim maliyetleri yükselmektedir.

Beceri uyuşmazlığı, şirketlerin kurumsal ve yönetim kapasiteleri ile de bağlantılıdır. Bloom ve ark.'nın da savunduğu gibi, verimlilik, rekabet gücü ve daha yüksek işçi becerileri iyi yönetişim ile yakından ilişkilidir. İnsan kaynakları birimi gibi kurumsal yapıların varlığı, şirketlerin, maaş skalası, kariyer yolları gibi politikaları planlama ve sürdürmelerine, çalışanlarına kariyerleri boyunca öğrenme ve büyüme fırsatları sağlamalarına ve bu yolla uygun becerilere sahip çalışanları belirlemeleri, çekmeleri ve elde tutmalarına yardımcı olmaktadır. Bu tür fonksiyonların olmaması veya farklı olgunluk düzeylerine sahip olması; ayrıca bu birimleri yönetecek pazardaki kalifiye profesyonel yöneticilerin eksikliği, şirketlerin istenilen beceri setlerine sahip çalışanlarla eşleşmesini zorlaştırmaktadır.

Diğer bulgularda da değinildiği üzere, sanayi sektörüne atfedilen değere ilişkin sorunlar, beceri uyuşmazlığının temel nedenlerinden birini oluşturmaktadır. Sanayi sektöründeki işverenlerin aradığı teknik olmayan özellikler hizmet sektöründeki işlerin çoğu için de geçerlidir. Böylece başta hizmet sektörü olmak üzere diğer sektörlerle rekabet, işgücü ve beceri havuzunu daha da küçültmekte, sektördeki beceri uyuşmazlığını artmaktadır.

Önerilen ikinci ve üçüncü ana bulgular için, bireysel faktörlerin rolü de çalışmada araştırılmıştır. Bireysel faktörler esas olarak arz tarafı ile ilgilidir. Bireysel işçinin tarımsal geçmişi ve tarımsal üretim veya kırsal kesimdeki aileleri ile olan bağları, işe ve

işyerine bağlılıklarını etkileyen bir diğer faktör olarak saha çalışmasında öne çıkmıştır. Hasat zamanlarında kendi veya aile ve yakınlarına ait topraklarda çalışmak için izin almak veya işten ayrılmak gibi bazı vakalara mülakatlar esnasında değinilmiştir. Tarımdan elde edilen ek gelirle sağlanan güvenlik ağının etkileri de bırakma kararını kolaylaştıran bir faktör olarak gösterilmiştir. Ancak, bu bireysel faktörlerin etkisi küçüktür ve tüm işgücü piyasasına genelleştirilemedikleri için bulgularla olan bağlantıları görece zayıf kalmaktadır.

Bu bulgular ve sonuçlar ışığında, ne gibi tedbirler alınabileceğine ilişkin öneriler sunulmuştur. Öneriler, talep tarafı, arz tarafı ve ikisinin etkileşimi göz önünde bulundurularak üç kategoride ele alınmıştır.

Talep tarafında, iş değerini etkileyen faktörlere değinilmiş ve bu alandaki tedbirler önceliklendirilmiştir. Kamu politikalarının, öncelikle insan kaynakları planlaması ve yönetiminde, işverenlerin yönetim kapasitelerinde iyileştirmelerine yönelik girişimlere odaklanması önerilmektedir. Bununla beraber kurumsallaşma ve iyi yönetişim uygulamalarının yaygınlaştırılması gibi diğer alanlarda müdahaleler geliştirilebilir. Bu alandaki beyaz yaka pozisyonlardaki arz sıkıntısı göz önüne alındığında, yerel üniversiteler ve önde gelen firmalarla iş birliği geliştirerek, tespit edilecek ihtiyaç alanlarında gelişim programları başlatmaları tavsiye edilmektedir. Ayrıca, incelenen sektörlerdeki firmaların çoğunun aile şirketi olduğu ve gelecek nesillere geçişlerin başladığı ya da yolda olduğu düşünülürse, dönüşüme daha açık olabilecek yeni nesilleri hedef alan girişimler geliştirilebilir. Son olarak, yerel iyi uygulamaların görünürlüğünü sağlayacak iletişim faaliyetleri de şirketlerin dönüşüm gündemlerini belirlenmesine yardımcı olabilir.

Arz sıkıntısı konusunda, kök neden olarak değerlendirilen değer atfı konusuna odaklanılması önerilmektedir. Genç öğrencileri ve ailelerini hedef alan iletişim faaliyetleri, mesleki ve teknik okullarda önceliklendirilen mesleklere yönelik burs programları birincil araçlar olarak kullanılabilir. Ayrıca, "maker" hareketlerinin teşvik edilmesi, açık laboratuvarlar ve üretim atölyeleri gibi diğer girişimler de sanayi sektörünü

genç nesillere tanıtmak ve sevdirmek için değerlendirilebilir. Diğer taraftan, üniversite sayısı ve kayıtlı öğrenci sayısı göz önüne alındığında, mevcut ve gelecekteki meslek ve becerilere yönelik talebi anlamak ve üniversitelerdeki mevcut bölümleri ve kayıt kapasitelerini gözden geçirmek için özel araştırma ve ihtiyaç analizi çalışmaları yapılması tavsiye edilmektedir.

Beceri uyumsuzluğu göz önünde bulundurulduğunda, mesleki ve teknik okulların müfredatlarını, mesleki teknik becerilerle birlikte teknik olmayan becerilerin sunumunu derinleştirecek şekilde gözden geçirmeleri tavsiye edilmektedir. Mevcut inisiyatifler değerlendirildiğinde, saha çalışmasında işbirliği yapılan okulun öğrenciler açısından çekiciliğini artırdığı bildirilmiştir. Bu nedenle, orta ve uzun vadeli staj programları ile mesleki ve teknik okullar ve üniversitelerin ilgili bölümleri ile sektör temsilcileri (odalar ve diğer meslek kuruluşları) ve oyuncuların (firmalar) işbirliği içinde uygulamalı eğitimlerin artırılması önerilmektedir.

Bu çalışmada, büyüyen ekonominin ve sanayinin, işgücüne katılımı artmamasının nedenleri Konya vakası üzerinden tartışılmıştır. Türkiye'nin aynı dönemde yükselen diğer ekonomi merkezleri göz önüne alındığında, Konya vakasının sonuçlarının genelleştirilebileceği değerlendirilmektedir. İşveren perspektifinden yürütülen, ancak çalışan bakış açısını yansıtan güvenilir kaynaklar içeren çalışma, talep ve arz perspektiflerinin yanı sıra talep ve arzın birbiriyle nasıl etkileştiğini de analiz etmiştir. Ekonomik büyüme ve istihdam ilişkisi ve işin geleceği ile ilgili tartışmaların arttığı çağda, bu çalışmada ortaya çıkan bulguların, Türkiye geneli ve gelişmekte olan ülkeler için de geçerli olabileceği değerlendirilmektedir. Bulguların çoğunda baskın olan yapısal nedenler göz önüne alındığında, müdahaleler ancak uzun vadede başarılı olabilir. Ancak, özellikle işletmelerin kapasitelerini hedefleyen dönüşüm gündeminin belirlenmesi, üretimin itibarını geri getirmek için iletişimin başlatılması ve beceri geliştirme için işbirliklerine odaklanarak kısa vadeli kazanımlar elde etmek de mümkündür.

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TEZİN ADI / TITLE OF THE THESIS (**İngilizce** / English) :
MISMATCH OF LABOR FORCE AND INDUSTRY IN KONYA:
ANALYSIS OF STRUCTURAL AND INDIVIDUAL FACTORS FROM EMPLOYER'S PERSPECTIVE

TEZİN TÜRÜ / DEGREE: **Yüksek Lisans** / Master ■ **Doktora** / PhD ☐

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