



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

MBA PROFESSIONAL REPORT

**Improving the Small-Business Role
in Turkish Defense Acquisitions: Recommendations
from U.S. Best Practices**

**By: Mehmet Engin, and
Osman Koc
June 2010**

**Advisors: Max Kidalov,
E. Cory Yoder**

Approved for public release; distribution is unlimited

THIS PAGE INTENTIONALLY LEFT BLANK

REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE June 2010	3. REPORT TYPE AND DATES COVERED Master's Thesis	
4. TITLE AND SUBTITLE Improving the Small-Business Role in Turkish Defense Acquisitions: Recommendations From U.S. Best Practices			5. FUNDING NUMBERS	
6. AUTHOR(S) Capt. Mehmet Engin , 1 st Lt. Osman Koc				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. IRB Protocol Number: _____.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited			12b. DISTRIBUTION CODE	
13. ABSTRACT (maximum 200 words) Small businesses play very important roles in the U.S. and Turkish economies because they are a major source of entrepreneurship, innovation, and employment and promote competition. Because of their limited resources and the market imperfections, they often face difficulties getting capital and accessing new technologies. They also face unique barriers to accessing government contracts, especially defense procurement and R&D. Therefore, both governments have assisted small businesses to accelerate economic growth and job creation and to ensure economic and social cohesion. In the United States, the efforts to support small businesses date back to 1930s. The creation of the Small Business Administration in 1953 has accelerated these efforts. Turkey witnessed this support acceleration after 1980s. Despite intensive efforts, Turkish small businesses have many disadvantages in competition with large firms. The purpose of this study is to investigate the general differences of small businesses in both countries. This will include comparing their small-business challenges, support systems, and their public procurement share in both countries. This will also include recommending, based on U.S. best practices, possible policy solutions to the small-business support system of Turkey. The goal is to provide the Turkish Ministry of National Defense with a well-developed supplier base of competitive, innovative, and cost effective small firms.				
14. SUBJECT TERMS Small Businesses, Small Business share from federal procurements, Small and Medium-Sized small businesses (SME), Small business administration (SBA), History of small businesses			15. NUMBER OF PAGES 124	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU	

NSN 7540-01-280-5500

Standard Form 298 (Rev. 2-89)
Prescribed by ANSI Std. Z39-18

THIS PAGE INTENTIONALLY LEFT BLANK

Approved for public release; distribution is unlimited

**IMPROVING THE SMALL-BUSINESS ROLE IN TURKISH DEFENSE
ACQUISITIONS: RECOMMENDATIONS FROM U.S. BEST PRACTICES**

Mehmet Engin, Captain, Turkish Army
Osman Koc, First Lieutenant, Turkish Air Force

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

from the

**NAVAL POSTGRADUATE SCHOOL
June 2010**

Author: Mehmet Engin
Osman Koc

Approved by: Max Kidalov, JD
Thesis Advisor

E. Cory Yoder
Second Reader

William R. Gates, PhD
Dean Graduate School of Business and Public Policy

THIS PAGE INTENTIONALLY LEFT BLANK

IMPROVING THE SMALL-BUSINESS ROLE IN TURKISH DEFENSE ACQUISITIONS: RECOMMENDATIONS FROM U.S. BEST PRACTICES

ABSTRACT

Small businesses play very important roles in the U.S. and Turkish economies because they are a major source of entrepreneurship, innovation, and employment and promote competition. Because of their limited resources and the market imperfections, they often face difficulties getting capital and accessing new technologies. They also face unique barriers to accessing government contracts, especially defense procurement and R&D. Therefore, both governments have assisted small businesses to accelerate economic growth and job creation and to ensure economic and social cohesion. In the United States, the efforts to support small businesses date back to 1930s. The creation of the Small Business Administration in 1953 has accelerated these efforts. Turkey witnessed this support acceleration after 1980s. Despite intensive efforts, Turkish small businesses have many disadvantages in competition with large firms. The purpose of this study is to investigate the general differences of small businesses in both countries. This will include comparing their small-business challenges, support systems, and their public procurement share in both countries. This will also include recommending, based on U.S. best practices, possible policy solutions to the small-business support system of Turkey. The goal is to provide the Turkish Ministry of National Defense with a well-developed supplier base of competitive, innovative, and cost-effective small firms.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
A.	BACKGROUND	1
B.	PURPOSE OF THE STUDY	4
C.	RESEARCH QUESTIONS	4
D.	SCOPE, LIMITATIONS, ASSUMPTIONS.....	4
E.	METHODOLOGY	5
F.	ORGANIZATION OF THE STUDY	5
II.	SMALL BUSINESS IN THE UNITED STATES AND TURKEY	7
A.	THE DEFINITIONS OF THE SMALL BUSINESSES IN THE UNITED STATES AND TURKEY	7
B.	THE ROLE OF SMALL BUSINESSES IN THE UNITED STATES AND TURKISH ECONOMIES.....	10
1.	Small and Medium Sized Enterprises (SME) in the Turkish Economy.....	10
2.	Small Businesses in the U.S. Economy	11
a.	<i>Innovation</i>	11
b.	<i>Job Creation</i>	13
c.	<i>Entrepreneurship</i>	13
C.	SMALL BUSINESS ASSISTANCE AGENCIES IN THE UNITED STATES AND TURKEY	14
D.	COMPARISON.....	16
1.	Definitions.....	16
2.	The Role of Small Business in the Economy.....	16
3.	Small Business Assistance Agencies	17
E.	CHAPTER SUMMARY.....	18
III.	SMALL BUSINESS POLICIES IN THE UNITED STATES AND TURKEY ..	19
A.	SMALL BUSINESS POLICIES IN THE UNITED STATES	19
1.	1880–1920: Concerns with Monopolies, Lack of Financing for Small Defense Firms, and Share of Contracts.....	20
2.	1920–1953: Concerns with Monopolies, Effects of Great Depression, Small Business Share in Federal Procurements, World War II and Korean War Effects.....	23
3.	1953–1970: Post-War Economic Recovery, Creation of the SBA, Definition of Small Businesses, Discussion of the Federal Procurement Share for Small Businesses	29
4.	1970–1990: Small Business Revival, Creation of Federal Procurement Share Goals, Benefits of Small Business Flexibility, Assistance for Small Disadvantaged Businesses	33
5.	1990–2003: End of Cold War Developments, Negative Effects of Federal Acquisition Reforms, Socio-Economic Programs, Commercialization of Government Contracting Process	37

6.	2003–2010: Streamlining the Process, Transparency Issues.....	44
B.	SMALL BUSINESS POLICIES IN TURKEY	49
1.	Before the Foundation of Turkish Republic: Ahilik and Lonca System	49
2.	The First Years of Turkish Republic: Private Sector Versus State Economic Enterprises	49
3.	After 1970: Creation of Small Business Support Agencies	50
4.	After 1990: Creation of KOSGEB and the European Union Accession Efforts.....	51
5.	After 2000: Issuance of SME Strategy and Action Plan	51
6.	SME Policy of Turkey	53
C.	CHAPTER SUMMARY.....	58
IV.	DEFENSE PROCUREMENT AND SMALL BUSINESSES RELATIONSHIP IN THE UNITED STATES AND TURKEY	59
A.	SMALL BUSINESS AND DOD RELATIONSHIP IN THE UNITED STATES	59
B.	TURKISH DEFENSE INDUSTRY AND DEFENSE PROCUREMENT POLICY	74
1.	Defense Industry Executive Committee.....	77
2.	Undersecretariat for Defense Industries (SSM).....	78
3.	Defense Industry Support Fund	79
4.	The Role of SMEs.....	79
C.	CHAPTER SUMMARY.....	79
V.	APPLICATION.....	81
A.	SME SUPPORT BY UNDERSECRETARIAT FOR DEFENSE INDUSTRY (SSM).....	81
B.	CURRENT TURKISH DEFENSE PROCUREMENT PROGRAMS.....	82
C.	CHALLENGES AND CONCERNS.....	84
D.	RECOMMENDED POLICIES AND PROGRAMS TO TURKEY FROM U.S. BEST PRACTICES.....	87
	LIST OF REFERENCES	95
	INITIAL DISTRIBUTION LIST	107

LIST OF FIGURES

Figure 1.	DoD procurement dollars between FY1962–FY2002 (National Defense Budget Outlays) (After Grasso, 2002).....	38
Figure 2.	Small Business Share of Dollars in Contract Actions, FY 1995–FY 2003 (After FPDS, 2009).....	44
Figure 3.	Shares of Total Federal Prime Contract Dollars by Major Agency Source, in Contract Actions over \$25,000 for FY 1984–FY 2003, and in Total for FY 2004–FY 2007 (After FPDS, 2009).....	60
Figure 4.	Shares of Total Small Business Prime and Subcontracting Dollars (After DoD OSBP, 2009)	63
Figure 5.	Aggregate Employment and Revenue Gains for Protégé Participants (From Moore et al., 2008, p. 53).....	65
Figure 6.	Mentor-Protégé Agreements, by Type (From Moore et al., 2008, p. 54).....	66
Figure 7.	Shares of HUBZone Contracting Dollars (After DoD OSBP, 2009)	67
Figure 8.	Shares of Service Disabled Veteran Owned Small Business Business Contracting Dollars (After DoD OSBP, 2009).....	67
Figure 9.	Shares of Small Disadvantaged Businesses Contracting Dollars (After DoD OSBP, 2009)	68
Figure 10.	Shares of Women-Owned Small Businesses (WOSB) Contracting Dollars (After DoD OSBP, 2009).....	69
Figure 11.	Small Business Innovation Research (SBIR) set aside Dollars awarded to Small Businesses (After DoD OSBP, 2009).....	71
Figure 12.	Small Business Technology Transfer (STTR) Set-aside Dollars (After DoD OSBP, 2009)	72

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF TABLES

Table 1.	Small and Medium Sized Enterprise (SME) Definition of Turkey (After Official Gazette, 2005).....	8
Table 2.	Typical Small Business Size Standards by Industry in the United States. Prepared Based on the Information About the Summary of Size Standards by Industry in SBA Web site.	9
Table 3.	Smaller War Plants Corporation (November 1942-November 1945) (From Parris, 1968, p. 98).....	25
Table 4.	Small Defense Plants Administration (SDPA) (July 1951- July 1953) Comparison To Smaller War Plants Corporation (SWPC) (November 1942- November 1945) (After Small Business Plants Administration, 1953, p. 2)	27
Table 5.	Comparison of Small Business Administration Assisted Firms with Other Firms (From Kirwan, 1959, p. 112).....	32
Table 6.	Functions of the Small and Medium Sized-Enterprises (SMEs) Support Organizations (From YOIKK, 2010, p. 3).....	55
Table 7.	Support Amount Figures of KOSGEB (From Tezyetis, 2007, p. 40).....	57
Table 8.	Three Phased Program of Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) from (After DoD OSBP, 2009)	70
Table 9.	Legislation and Designated Goals of Small Business Program. Prepared Based on Identified Legislation and Associated Small Business Programs	73

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF ACRONYMS AND ABBREVIATIONS

DPT	Undersecretariat of State Planning Organization
EU	European Union
FAR	Federal Acquisition Regulation
FARA	Federal Acquisition Reform Act
FASA	Federal Acquisition Streamlining Act
FPDS	Federal Procurement Data System
GAO	Government Accountability Office
HUBZone	Historically Underutilized Business Zone
KOSGEB	Small and Medium Enterprises Development Organization
KÜSGET	Small Industry Development Organization
OECD	Organization for Economic Cooperation and Development
OSDBU	Office of Small and Disadvantaged Business Utilization
OSBP	Office of Small Business Program
RFC	Reconstruction Finance Corporation
R&D	Research and Development
SBA	Small Business Administration
SBIR	Small Business Innovation Research
SDPA	Small Defense Plants Administration
SDB	Small Disadvantaged Business
SDVOSB	Small-Disabled Veteran-Owned Small Business
SEGEM	Industrial Training and Development Center
SME	Small and Medium Sized-Enterprise
SSM	Undersecretariat for Defense Industry

STTR	Small Business Technical Transfer
SWPC	Smaller War Plants Corporation
VOSB	Veteran-Owned Small Business
WOSB	Woman-owned Small Businesses

ACKNOWLEDGEMENTS

First and foremost, we would like to express our sincerest gratitude to our advisors, Professor Max Kidalov and Senior Lecturer E. Cory Yoder, who encouraged us to work on this topic and supported us with their comments, vast knowledge, and deep experience. Their efforts have been greatly appreciated. One simply could not wish for better or friendlier advisors.

Additionally, we would like to thank our great nation and the Turkish Armed Forces for giving us this excellent academic opportunity. We will try to pay our debt to our country by serving with our best effort and knowledge.

Sincerely, Mehmet Engin and Osman Koc

I would like to express my gratitude to my wife, Sevgi, and my son, Kerem, who have supported me throughout this MBA project and continue to support me in my military career. Thanks to their unwavering support and encouragement, I was able to delve deeply into this topic to develop this MBA project. Furthermore, I would like to thank Osman Koc for his untiring commitment and continuous effort.

Sincerely, Mehmet Engin

Words fail me to express my appreciation to my beloved wife, Zeynep, whose dedication, love, and persistent confidence in me has taken the load off my shoulder. Her encouragement, support, and patient love enabled me to complete this MBA project. A special thanks to my beloved mother, who has started to live only through my dreams after passing away three years ago, for her selfless contributions and dedication to my career and humanity. I wish you could witness the love and longing of your family for you.

I would like to express my gratitude to Mehmet Engin because of his creative ideas and unwavering work to conclude this project. His genius made the work far easier.

Sincerely, Osman Koc

I. INTRODUCTION

Small businesses are the heart of the American economy. They're responsible for half of all private sector jobs—and they create roughly 70 percent of all new jobs in the past decade. So small businesses are not only job generators, they're also at the heart of the American Dream. After all, these are businesses born in family meetings around kitchen tables. They're born when a worker takes a chance on her desire to be her own boss. They're born when a part-time inventor becomes a full-time entrepreneur, or when somebody sees a product that could be better or a service that could be smarter, and they think, "Well, why not me? Let me try it. Let me take my shot." (President Barack Obama's Speech to Small Business Representatives, 2009).

The free enterprise system, from which we derive our strength and upon which depends our national security, has always been anchored and must always remain anchored to the welfare of the millions of small and independent companies which are the bedrock of our industrial democracy. (Saltonstall, 1957, p. 18).

A. BACKGROUND

Small businesses play a very important role both in the United States and the Turkish economies because they are a major source of entrepreneurship, innovation, employment, and promote competitiveness in the economy. They are often, however, faced with market imperfections. Especially in early phases, they often have difficulties in getting capital, credit, R&D grants or government contracts. Due to their limited resources, they are also faced with difficulties in accessing new technologies and innovation. Therefore, providing some sort of assistance to small businesses is one of the main priorities of the governments of both countries. The small-business support programs have been intended to accelerate the economic growth and the job creation and to ensure economic and social cohesion.

Perceived as the creator of the American Dream, small businesses served the U.S. economy and, more importantly, contributed to the entrepreneurial spirit of the American

people from colonial America to the present. The industrialization and transportation opportunities, along with economies of scale, caused large counterparts of small businesses to prosper in the twentieth century.

In the United States, world wars and the Korean War years caused the small businesses to lag behind their larger counterparts. They could not find enough sources to manufacture, since wartime resources were allocated to the war material manufacturers, mostly large businesses. Furthermore, procurement officers did not have enough courage and incentives to award to small businesses for the goods and services the armed forces demanded. Procurement officers either evaded awarding small firms due to their perception of higher risk, or they established unrealistic delivery schedules that pushed away small firms from competition (Saltonstall, 1957).

The first steps to increase the participation of the small businesses in the federal procurement market were taken by creating Reconstruction Finance Corporation (RFC) in 1932. During the 1930s, the Executive and Legislative branches were in search of new ideas for small business assistance programs aside from lending money. They seized the idea of government contract opportunities for socio-economic small business assistance programs. “The idea of using the government contract to assist the small businessman would also gain momentum” from this significant point (Chism, 1970, p. 16). Not until the start of World War II, however, were any serious actions taken. With the advent of World War II, the Smaller War Plants Corporation (SWPC) was established to help the small businesses to increase their share of the federal procurement market. The SWPC was the first federal agency specifically established to help small businesses to increase their share from the federal procurements. Created in 1951, the Small Defense Plants Administration (SDPA) took over identical responsibilities with the SWPC. This was, however, far less successful as explained later in the study.

Aside from the efforts of these agencies, the main problem was the lack of the legislation that characterizes and identifies “fair share” in terms of government goals as U.S. Senator Leverett Saltonstall (1957) emphasizes.

The SBA was established as an independent agency in the Executive Branch in 1953. With the 1978 amendment of Small Business Act of 1958, Congress required each

agency to establish small business goals and to forward reports annually to express whether the goals were achieved. Since this important point in 1978, Congress has accelerated its legislation efforts to set small business goals for socio economic purposes. Small business programs were created to increase the small businesses share of the federal procurement “pie.” Although the 1990s federal acquisition reforms created a slight downward movement of the goals, the last two decades showed an obvious upward trend in the percentage of small business shares.

Although small business programs mostly succeeded their intended targets, there are still improvements that should take place in the federal procurement market.

While the United States has been experiencing these fluctuating trends for the small business sector, Turkey has a different past for small business concerns. As stated above, in the 1930s, the United States began using federal procurement opportunities to enhance and to give incentives to small businesses to help them compete with large businesses. These incentives and small business goals were legislated in 1970s by Congress. Turkey, however, did not have any legislation or agencies to assist small businesses in public procurements until the last decades. In Turkey, the efforts to support small businesses began with the creation of Small Industry Training & Development Center (KÜSGEM) and Industrial Training & Development Center (SEGEM) in 1970s. Since the services provided by KÜSGEM and SEGEM were not satisfactory, Small and Medium-sized Enterprises Development Organization (KOSGEB) was established in 1990, which composed these two organizations under one roof. KOSGEB has a wider scope and can provide periodic and widespread services (KOSGEB Web site). Its support system, however, does not include public procurement assistance. The recent efforts by Undersecretariat of Defense Industries (SSM) to increase small business participation in defense acquisition projects can be seen as some sort of public procurement assistance to small businesses. This effort, however, should be supported by law to ensure its permanency, and its scope should be widened to increase its effectiveness. The goal of this thesis is to review the roads that the U.S. small business practices, to take the

experience of the U.S. small business procurement opportunities, and to adapt the successful ones to the Turkish system to enhance the contribution of small businesses to the Turkish economy.

B. PURPOSE OF THE STUDY

The purpose of this study is to investigate the general differences of small business related policies and practices in the United States and Turkey. This will include comparing the small business challenges, support systems, and their public procurement share of both countries. This will also include recommending, based on U.S. best practices, possible policy solutions to the small business support system of Turkey. The goal is to provide the Turkish Ministry of National Defense with a well-developed supplier base of competitive, innovative, and cost-effective small firms.

C. RESEARCH QUESTIONS

- What are the general differences of small business definitions in the United States and Turkey? How can the definition of Turkey for small businesses be improved?
- How has the Federal procurement assistance programs helped the small businesses in the United States?
- What steps can be taken to give a fair share of public procurements to the small businesses in Turkey? Can creating laws or regulations help to increase the small business share of public procurements in Turkey?
- What small business programs can be adapted to the Turkish small business support system from the U.S. examples to enhance small business participation in public procurements in Turkey?
- How can Turkey improve the capabilities of its small business assistance agency?

D. SCOPE, LIMITATIONS, ASSUMPTIONS

This study focuses on the small business share from public procurements, particularly defense procurements.

While researching and analyzing the effects of small business policies, this study focuses on procurement assistance. Therefore, this thesis hardly mentions, or takes into account, the assistance policies related to lending and purely commercial markets.

This thesis also does not take into account the effects of the Global Crisis as it impacts the small business assistance programs.

Data related to Small and Medium Sized Enterprises (SMEs) in Turkey has been very poor due to lack of standard definition until 2005. Also, informality is widespread, especially amongst SMEs.

To be able to analyze the effects of small programs on the performances of small businesses, this study assumes that the policies and programs, other than the ones related to small businesses, have not affected the performance of small businesses.

E. METHODOLOGY

This research methodology is limited to the literature review of sources related to small business legislation; to policies, programs, and defense acquisition programs in Turkey and the United States, and to the comparison between small business policies and legislations of the United States and Turkey. The data concerning these programs and small businesses in general in Turkey are derived from Small and Medium Enterprises Development Organization (KOSGEB), Turkish Patent Institute (TPE), Turkish Statistical Institute (TUIK), Union of Chambers and Commodity Exchanges of Turkey (TOBB), and Undersecretariat for Defense Industry (SSM). The U.S. data concerning these programs, and small businesses in general, is retrieved from Small Business Administration (SBA), Federal Procurement Data System (FPDS), and the Department of Defense Office of Small Business Programs (DoD OSBP).

F. ORGANIZATION OF THE STUDY

The Introduction in Chapter I provides a basic overview of this MBA project, including the purpose, research questions, and the scope, limitations, assumptions, and research methods used. Chapter II compares the small business definitions in the United States and Turkey; discusses the roles of small businesses in both countries' economies, and introduces the agencies assisting them in both countries. Chapter III articulates the

problems and challenges, as well as legislative solutions, and small business policies in the U.S. and Turkey. Chapter IV explains the relationship between small businesses and defense buyers. Chapter V is an application of small business policies and programs that were discussed in previous chapters on the Turkish defense acquisition programs. This includes the analysis of defense procurement system in Turkey and recommendations, based on the best practices in the U.S, for the challenges and concerns faced by Turkey.

II. SMALL BUSINESS IN THE UNITED STATES AND TURKEY

This chapter provides the reader with an overview of small businesses in Turkey and in the United States. The purpose of this chapter is to establish background information to help readers understand the research objectives and to introduce the small business background in the United States and Turkey. The first section introduces the definitions of small business in Turkey and in the United States. The second section provides information on the importance of small businesses to the economies of both countries, and the last section reveals the small business assistance agencies in both countries.

A. THE DEFINITIONS OF THE SMALL BUSINESSES IN THE UNITED STATES AND TURKEY

To compare the two countries' small business procurement assistance policies, it is necessary to comprehend the small business definitions of the countries. Turkey, like other European countries, uses the term "small and medium-sized enterprises" or SME. According to *The New SME Definition: User Guide and Model Declaration* of European Union (EU), "the category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro" (2005, p. 5). Even so, the size of SMEs differs among countries according to the economy, level of industrialization, size of the market, and the industrial sector and production methods that are used (Karatas, 1991). In Turkey, before 2005, each government or private agency that was involved in the SME policies had its own definition of SME. This led to confusion and conflicts. The studies that had been conducted to achieve the definition unity and to align the SME definition with that of EU were completed in 2005. *The Directive about the Definition, Properties and Classification of the Small and Medium Sized Enterprises* was issued in Official Gazette on November 18, 2005, and came into effect on May 18, 2006. According to this

directive, three different categories were determined (micro, small, and medium enterprises) based on number of employees and financial ceilings.

Table 1 demonstrates these three categories based on number of employees, annual turnover, and annual balance sheet. Medium sized enterprises are made up of enterprises which employ between 50 and 249 people and which have an annual turnover and/or an annual balance sheet total not exceeding 25 million TL (\$ 16.7 million). Small enterprises are those that employ between 10 and 49 people with an annual turnover and/or balance sheet not exceeding 5 million TL (\$ 3.3 million). Microenterprises are those that employ less than 10 people with an annual turnover and/or balance sheet not exceeding 1 million TL (\$ 670 thousand). The SME definition of Turkey is very similar with that of European Union. The only difference is that financial ceilings are much lower in Turkey's definition of which effect is that Turkish SMEs will be less competitive.

	Micro	Small	Medium
Number of Employees	0–9	10–49	50–249
Annual Turnover	≤1 Million TL (\$0.67 Million)	≤5 Million TL (\$3.3 Million)	≤25 Million TL (\$16,7 Million)
Annual Balance Sheet	≤1 Million TL (\$0.67 Million)	≤5 Million TL (\$3.3 Million)	≤25 Million TL (\$16,7 Million)

Table 1. Small and Medium Sized Enterprise (SME) Definition of Turkey (After Official Gazette, 2005)

The United States, on the other hand, uses the term of “small business concern.” The Small Business Act of 1953 (15 U.S.C. § 632) defines “a small business concern” as “one which is independently owned and operated and which is not dominant in its field of operation” and which meets the size standards established by the SBA for its industry (defined by the North American Industrial Classification System [NAICS]). This law states that in determining what constitutes a small business, the definition will vary from industry to industry to reflect industry differences accurately. The law also states that “unless specifically authorized by statute, no Federal department or agency may prescribe a size standard for categorizing a business concern as a small business concern, unless

such proposed size standard [meets certain criteria] and is approved by the Administrator” of SBA. Size standards represent the largest size that a business, its subsidiaries and its affiliates together may be to remain classified as a “small business concern.” These size standards apply to SBA’s financial assistance and to its other programs, as well as to Federal government procurement programs, when there is a benefit available to qualifying as a “small business concern.” According to the SBA’s *Guide to Size Standards*, the SBA “has established two widely used size standards – 500 employees for most manufacturing and mining industries and \$7.0 million in average annual receipts for most nonmanufacturing industries. However, many exceptions exist” (SBA, *Guide to Size Standards*, p. 5).

Table 2 shows the primary size standards for small businesses by industry category. These are general definitions; therefore, they are not applied to all industries in the same category. For example, for about 75 percent of the manufacturing industries, size standards in number of employees are 500, but, for a small number of industries, those are 1500 employees and, for others, either 750 employees or 1000 employees. More complete information on size standards can be found on the “Table of Small Business Size Standards.”

Industry	Size Standards in Millions of Dollars	Size Standards in Number of Employees
Manufacturing	-	500
Mining	-	500
Wholesale trade	-	100
Retail trade	7	-
Services	7	-
Construction	33.5	-
Special trade	14	-
Agriculture	0.75	-

Table 2. Typical Small Business Size Standards by Industry in the United States. Prepared Based on the Information About the Summary of Size Standards by Industry in SBA Web site.

B. THE ROLE OF SMALL BUSINESSES IN THE UNITED STATES AND TURKISH ECONOMIES

1. Small and Medium Sized Enterprises (SME) in the Turkish Economy

Small and medium sized enterprises play a very important role in the Turkish economy. According to an Organization for Economic Cooperation and Development (OECD) report that reviewed the SME policies of Turkey (2004, p. 27), “SMEs constitute a major part of the Turkish economy, accounting for a large proportion of the country’s businesses and total employment.” The Turkish economy opened to the world in 1980s and embarked upon a reconstruction process. The reforms that have been carried out after 1980 have enhanced the dynamism of the private sector and have increased the capability of Turkish economy against internal and external impacts. Thus, the source of industrial growth in recent years is the dynamism and the investments of the private sector (Small and Medium Enterprises Development Organization [KOSGEB], 2008). SMEs have an important share in the private sector. The SME sector accounts for 99.8 percent of the total number of enterprises, 76.7 percent of total employment, 38 percent of capital investment, 26.5 percent of value added (Undersecretariat of State Planning Organization (DPT), 2004), 10 percent of exports (OECD, 2004), and approximately 25 percent of bank credit (Banking Regulation and Supervision Agency [BDDK], 2007).

Only a small number of SMEs are in the manufacturing sector, but SMEs dominate that sector. According to 2002 General Enumeration of Industry and Enterprises, there were 1.7 million enterprises and 14 percent of them (nearly 247,000) were manufacturing enterprises. The number of employees in manufacturing enterprises was 2,043,815 and constituted 32 percent of total private sector employees. According to the State Statistical Institution 2001 data, SMEs constitute 99.6 percent of the total number of manufacturing firms. Over 1 million people are employed by these SMEs (64.3 percent of the manufacturing total) and they account for 34.5 percent of the sector’s value added. SMEs in Turkey “are generally very small enterprises. The average number of people employed by SMEs in manufacturing is 4.8, but, for the 95 percent of SMEs with employment of between one and nine, the average is 3.1” (OECD, 2004, p. 28).

According to Cansiz (2008), although SMEs constitute a very important part of the Turkish economy, they only account for 26.5 percent of value added. That is because they have some serious problems that need to be solved. The problems, such as insufficiency in developing and using the modern technology, lack of qualitative labor force, limited capability of production of high value added goods, the difficulties of SMEs in accessing information, informality, and the exporter industrial enterprises in cost advantaged countries getting an important share in the market, continue to prevent SMEs from developing.

2. Small Businesses in the U.S. Economy

Small businesses play a very important role in the U.S. economy. According to Audretsch, contrary to serious concerns in the 1980s, the last two decades have witnessed a remarkable “reemergence of competitiveness, innovative activity, and job generation in the United States not seen in many years. Not only was this economic turnaround largely unanticipated by many scholars and members of the policy community, but what was even more surprising than the resurgence itself was the primary source of the resurgence; that is, small firms” (2000, p. 2). The small businesses account for 99.7 percent of the total number of enterprises, just over half of all private sector employment, 64 percent of the net new jobs over the past 15 years, more than half of the nonfarm private Gross Domestic Product (GDP), 30.2 percent of export value (SBA Office of Advocacy, FAQ). Small businesses are very important for the United States economy because they are the main source of innovation, job creation, and entrepreneurship. They also promote competitiveness in the economy (Acs & Audretsch, 1988, p. 2).

a. Innovation

Small firms, due to their specific features, are thought to be more innovative than large firms. They can be more innovative because of their responsiveness to “changing market demands,” flexible structures, and “efficient internal communication” (Mogee, 2003, p. 3). Their flexibility ensures that “the arrival of any major new technology should favor young, small firms—firms that tend to have a

nonhierarchical structure, fewer unionized workers, and fewer outdated management practices” (Jovanovic, 2001, p. 54). Patents are an important indicator of innovation. “Measures of technological change have typically involved one of the three major aspects of the innovative process: (1) a measure of inputs into the process, such as R&D expenditure, (2) an intermediate output, such as the number of inventions that have been patented; or (3) a direct measure of innovative output” (Audretsch, 2000, p. 22). According to CHI Research (2003) sponsored by the U.S. Small Business Administration’s Office of Advocacy, the small businesses “produce 13 times more patents per employee than large patenting firms,” and also “these patents are twice as likely as large firm patents to be among the one percent most cited,” which means that small business patents are more cutting-edge (as cited in SBA Office of Advocacy, FAQ, p. 1). Some other points from the same research are:

- One-third of the patenting companies that have 15 or more patents are constituted by small enterprises.
- Small firm patents cited averaged 1.53 compared to 1.19 for large firms, which means that their patents have higher value.
- Small firms tend to specialize in high tech, high growth industries, such as biotechnology, pharmaceuticals, and information technology.

CHI Research (2004) suggests that small businesses have also some contributions to large firms’ innovations in three different ways. Large firms have utilized small firms’ innovations by acquiring them, developing their innovations on existing small firm patents, or hiring small firm innovators. According to this study, the small firms with fewer than 25 employees are producing the greatest number of patents per employee.

One can claim that large firms have made some important innovations, too. One important aspect, however, of small firms’ innovation activities is that small firms have generally made revolutionary innovations. Small firms have a vital role in revolutionary innovations in the United States economy, while large firms tend to incremental innovations due to their bureaucratic structure (Baumol, 2005).

b. Job Creation

Small businesses have an important function of generating jobs for the American people. They employ “over half of all private sector employees, pay 44 percent of total U.S. private payroll, have generated 64 percent of net new jobs over the past 15 years, and hire 40 percent of high tech workers (such as scientists, engineers, and computer programmers)” (SBA Office of Advocacy, FAQ). For example, in 2000, small businesses generated “a net total of 2,505,712 employees and they represented 75 percent of net non-farm employment change in the United States” (SBA Office of Advocacy, 2003, p. 1). Audretsch states “80 to 85 percent of the new jobs the United States are created by small business” (2000, p. 3).

Small business is “especially crucial in determining the job opportunities for low-skill workers” (Fitzgerald and Ribar, 2001, p. 1). They are different due to their ability “to utilize secondary, or less attractive, resources in the marketplace.” These secondary resources are: “first time entrants into the job market, the long-term unemployed, individuals at low educational levels, part-time employees, women, certain minorities, immigrants, short-term workers, the previously self-employed and workers under the age of twenty” (Robbins et al., 2000, p. 295).

According to the 2009 State of Small Business Report to the President, “the smallest non employer firms often create the most jobs in recessionary times. Indeed, in 1991 and 2001, two recessionary years, while larger firms were shedding jobs, enterprises with fewer than 20 employees saw net job creation, largely through expansions of existing firms.”

c. Entrepreneurship

Small businesses are the main source of entrepreneurship. There are a lot of benefits of entrepreneurship. Entrepreneurship allocates resources for more competitive uses. It “introduces new knowledge or combines old knowledge in radically novel ways to improve economic performance” and, also, creates human capital, “the basic source of innovative activity. Entrepreneurship is the best instrument to secure that

resources that have become idle are put into productive work as soon as possible” (Karlsson & Karlsson, 2002, p. 179). “Creating an economic climate that promotes entrepreneurship is a key element in promoting both innovation and small business. Creating such an environment is vital to the federal government’s small business programs” (Pike, 2004, p. 10). “Innovation and entrepreneurship will be crucial to the nation’s economic revival and competitiveness in a global marketplace. A 2008 update by Zoltan Acs, William Parsons, and Spencer Tracy to David Birch’s seminal research of the 1980s and 1990s on ‘gazelles,’ or fast-growing, high-impact firms, found that these firms account for almost all of the growth in private sector employment and revenue in the economy” (Moutray & McGibbon, 2009, p. iii).

C. SMALL BUSINESS ASSISTANCE AGENCIES IN THE UNITED STATES AND TURKEY

Both Turkey and the United States have specialized government agencies to assist small firms and to support them to be able to compete with monopolistic large firms. They have some differences, however, in their policies and programs.

Turkey has created some government institutions to provide support to SMEs as part of its efforts to be a member of European Union. OECD reports (2004, p. 10) states that:

Through the choices Turkey has made in recent years to begin a process of international integration geared towards Europe, it has embarked upon a variety of economic policies and medium- and long-term economic strategies that affect SMEs either directly or indirectly because of their prominent position in the economy. This process began in the 1960s and was reinforced by the general opening of the Turkish economy in the 1980s. At the same time the Turkish government developed a specific SME policy and created SEGEM (Industrial Training and Development Center) and KÜSGET (Small Industry Development Organization), which, later on, were united under the umbrella of KOSGEB (Small and Medium Enterprises Development Organization) in 1990, as a major instrument for the execution of these policies.

According to KOSGEB Strategic Plan (2008-2012), its main functions are:

- to develop support mechanisms for Turkish SMEs,
- to encourage entrepreneurship,
- to foster R&D focused job creation,
- to disseminate relevant information to SMEs,
- to improve the capacity of SMEs.

After KOSGEB's foundation, in order to enhance SMEs' competitive capacity and their integration in industry, services centers were created throughout the country. According to Yarman (2004, p. 174):

They specialized in consultancy and quality improvement, sector specific development (machinery, electronics, computers, materials, chemical, medical, automation, etc.), market research, common facility workshops, training, technology development, investment guidance and information. Later, the government also initiated a series of actions for financial support and assistance (using resources from both national and international investment institutions) in SME's investment (e.g., investment credits, tax and duty exemptions, energy support, credit guarantees, land provisions) support to improve global competitiveness and R&D (on project basis, tax rebates, risk capital, institutional supports).

In the United States, SBA is the primary agency to assist small businesses in public procurement and to provide financial and technical support. SBA was established in 1953 to assist small firms with government contracts and related financial and technical development assistance (Saltonstall, 1957). According to Small Business Act of 1953, SBA is an independent agency providing oversight of small business programs. SBA is an agency that is "under the general direction and supervision of the President" and has no affiliation with other agencies (p. 16). "To protect, strengthen and effectively represent the small businesses within the federal government's legislative and rule-making processes," the U.S. Congress created a quasi-independent Office of Advocacy, under SBA, in 1976. "The Office of Advocacy works to reduce the burdens that federal policies impose on small firms and maximize the benefits small businesses receive from the government." Its mission "is to encourage policies that support the development and growth of the small businesses" in the United States (SBA, 2009).

D. COMPARISON

1. Definitions

According to Kidalo, the SME definition of EU is the same for all industries; therefore, it is easy to determine whether a business concern is SME or not, but it does not reflect the conditions of specific industries and it “does not sufficiently protect independence of ownership or operation of SMEs, and is highly vulnerable to fraud and manipulation by large businesses or investor government agencies” (2010, p. 42). On the other hand, the U.S. small business size standards are different for different industries to reflect industry differences, but the downside is that it is more complicated to distinguish whether or not a business concern is a small business. We think that his comparison of EU and U.S. definitions is relevant for the comparison of the U.S. and Turkish definitions because the SME definition of Turkey is very similar to that of EU except for financial ceilings. According to Kidalo, an important reason for the European definition being more vulnerable to fraud and manipulation is that the European affiliation rules allow firms “majority-owned by large businesses and government agencies to qualify as autonomous SMEs as long as each such investor owned less than 25 percent,” and “an SME is considered merely partnered if a large business owned under 50 percent.” Another reason is that, unlike the U.S. affiliation rules requiring “adding all employees of all affiliated firms,” the European rules “for partner enterprises exclude the majority of their employees from the count of the enterprise claiming SME status” (2010, p. 42). These rules of EU have been adopted by *The Directive about the Definition, Properties and Classification of the Small and Medium Sized Enterprises* of Turkey. Therefore, this study concludes that Turkey’s definition is more user-friendly, but it does not reflect industry differences. Further, it is more vulnerable to fraud and manipulation than the U.S. definition.

2. The Role of Small Business in the Economy

Small businesses play a very important role in the economies of both countries because they are a major source of entrepreneurial skills, innovation, employment, and

promote competitiveness in the economy. In the United States, small businesses account for 99.7 percent of the total number of enterprises, over half of all private sector employment, 64 percent of the net new jobs over the past 15 years, and more than half of the nonfarm private GDP, 30.2 percent of export value (SBA Office of Advocacy, FAQ). In Turkey, small businesses account for 99.8 percent of all enterprises in Turkey and 76.7 percent of total employment. Other indicators, however, such as “capital investment (38 percent of the total), value added (26.5 percent), exports (10 percent), and bank credit (5 percent), point out low labor productivity, insufficient access to finance, and barriers to entering foreign markets” (EC, 2008, p. 36).

In the United States, small businesses are argued to be more innovative than large businesses. According to CHI Research (2003), the small businesses “produce 13 times more patents per employee than large patenting firms,” and, also, “these patents are twice as likely as large firm patents to be among the one percent most cited,” which means that theirs are more cutting-edge (as cited in SBA Office of Advocacy, FAQ, p. 1). It is not the case in Turkey. According to a study conducted by TÜİK, covering the period between 2006 and 2008, 33.8 percent of small-sized enterprises and 43.7 percent of medium-sized enterprises, have made innovations, while 54.4 percent of large firms have made innovations. These results indicates that the percentage of innovation made by firms increases in direct proportion to the increase in firm size.

3. Small Business Assistance Agencies

In Turkey, there is no regulation that directly assists SMEs in public procurement. The supports provided by KOSGEB and some other national and international institutions are generally focused on financial, technical, and educational support. According to OECD Report (2004), KOSGEB’s present focus is industrial SMEs. Their policies are similar to successful programs of some other OECD countries. They have been successful at their programs and policies so far. Their scope, however, is narrow. They should enlarge their scope of policies by accessing more enterprises and adding service and distribution businesses to their support system.

The United States, on the other hand, has regulations that directly assist small businesses in public procurements. Small Business Act of 1953 requires that “fair share” of contracts and subcontracts go to small business and defines “fair share” at not less than 23 percent for small business, 5 percent for Small Disadvantaged Businesses (SDBs), and 3 percent for Historically Underutilized Business Zone (HUBZone), Woman-owned Small Businesses (WOSB), and Service-Disabled Veteran-Owned Small Businesses (SDVOSB) firms. According to the same act, the SBA is responsible to assist small businesses in getting federal government contracts. Also, different from the KOSGEB of Turkey, the SBA has the advocacy function aiming to protect, strengthen and represent the small businesses within the federal government's legislative and rule-making processes carried out by the Office of Advocacy.

E. CHAPTER SUMMARY

This chapter compares the small business definitions in the United States and Turkey, discusses the roles of small businesses in both countries’ economies, and introduces the agencies assisting them in both countries. The next chapter articulates the problems and challenges, as well as legislative solutions, and small business policies in the U.S. and Turkey.

III. SMALL BUSINESS POLICIES IN THE UNITED STATES AND TURKEY

A. SMALL BUSINESS POLICIES IN THE UNITED STATES

Small businesses have always been perceived as the locomotive of the U.S. enterprise system and the creator of the American Dream. After colonial America and the Civil War, the number of the small businesses increased drastically all across the United States. The time interval between 1607 (establishment of first permanent British colony) and 1861 (American Civil War) witnessed a huge economic growth in the U.S. economy (Blackford 2003). During this time, small businesses were the primary reason for the prosperity of the U.S. economy. Very few large businesses arose during these years (Blackford, 2003). Lewis Corey (1935, p. 113) dictates the importance of the small enterprise by stating:

Out of this society of small producers rose the American Dream. It was a dream of liberty and progress moving irresistibly onward to new and higher fulfillment. Most vital was the ideal, determining all other ideals, of the liberty and equality of men owning their independent means of livelihood.

In the *Small Business Program Guide for Government and Industry*, the Army Material Command (2001, p. 4) states that “Contracting with small firms strengthens the economy, generates competition, lowers overall costs, creates innovation, provides more jobs than any other sector, and enhances good business practices.” Since small businesses have always been recognized as a basic and indispensable element of the United States free enterprise system (Saltonstall, 1957), government has always sought ways to encourage and protect small businesses pursuant to conditions of each term by regulations and laws. A brief legislative and economic history of the small business assistance is provided below, starting from 1880s to the present time.

1. 1880–1920: Concerns with Monopolies, Lack of Financing for Small Defense Firms, and Share of Contracts

The American Civil War ended the domination of small-scale capitalism in American economic life (Kirwan, 1959). The corporations replaced the individual as the basic unit of production. During the last quarter of the nineteenth century and the first quarter of twentieth century, large businesses mushroomed and dominated the U.S. economy (Blackford, 2003). Monopolies and oligopolies started to threaten the small entrepreneur's market share with their lower prices due to technological, transportation and labor based improvements (Blackford, 2003). Although small businesses continued to improve their work, their importance was substantially less than in pre-Civil War times in the overall U.S. economy (Blackford, 2003). Small enterprises contributed employment at the first quarter of the twentieth century, which includes also World War I. "In 1914, one third of the America's industrial workforce found employment in firms with 100 or fewer laborers. If small businesses are defined as those with 250 or fewer workers, 54 percent of those employed by manufacturing concerns worked for small firms" (Blackford 2003, p. 52).

Because of the technological breakthroughs, market developments, and transportation improvements, industrialization prospered at the beginning of the twentieth century. "Between 1869 and 1921, the gross national product (GNP) of the United States increased from \$9 billion to \$72 billion (8 times as much), and per capita GNP tripled, from \$223 to \$683" (Blackford 2003, p.44).

By means of scale economies, technology enlarged the size of the average business. The large businesses were seen as the cornerstone of the American economy because of economies of scale. As a shield to protect small businesses from monopolies, Congress created the Sherman Act of 1890, the Clayton Act of 1914, and the Federal Trade Commission Act of 1914.

Sherman Antitrust Act of 1890 (15 U.S.C. § 1-7): As the "first and most significant of the U.S. antitrust laws," the act "outlawed trusts and prohibited illegal monopolies," which unfairly intend to destroy competition by "buying out competitors,

forcing customers to sign long-term agreements, or forcing customers to buy unwanted products in order to receive other goods” (“Understanding Antitrust Law,” 1999). It was an early example of small business concern that was established to protect competitive structure of the US small businesses against monopolies to promote competition (Saltonstall, 1957).

The Clayton Act of 1914 (Public Law 63-212): After the Sherman Antitrust Act of 1890, the firms were merging to evade legal restrictions. As an amendment to compensate for the ineffectiveness of the Sherman Antitrust Act, the Clayton Act “extended the anti-trust legislation to cover mergers capable of reducing competition” (Motta, 2004, p. 5). The act was created to protect small firms from unfair competition with larger companies (Blackford, 2003).

Further “tying contracts” were harming the small businesses. Tying contract is an arrangement that forces the buyers to purchase a product they don’t want. Namely, “sellers with more than one product may seek to tie the sale of one (which the customer presumably desires) with that of another (which it presumably does not want)” (Steuer, 1999, para. 37). The Clayton Act of 1914 “forbade the certain types of interlocking directorates and “tying contracts,” by which large firms prevented their suppliers and customers from doing business with their competitors” (Blackford 2003, p. 50).

The Federal Trade Commission Act of 1914 (15 U.S.C. §§ 41-51): The act “prohibits unfair methods, acts, and practices of competition in interstate commerce” (Bunn & Barfitt, 1999, p. 1). By creating the Federal Trade Commission, the act established an executive organization to fight against “deceptive acts and practices and anti-competitive behavior by businesses” (Bunn & Barfitt, 1999, p. 1).

The Clayton Act of 1914 and Federal Trade Commission Act of 1914 strengthened the fight against complete control of the market by one or a few corporations by strengthening small firms’ competitiveness (Cook, 1951). The major goal was to help the small businesses avoid being squeezed by large firms that have tremendous economic and political power. With the oversight of the Federal Trade

Commission and Antitrust Division at the U.S. Department of Justice, large businesses were “more cautious about swallowing up small, independent firms” (Kirwan, 1959, p. 21).

Tremendous success of large companies and determination of the small businesses created a double-edged economy at the beginning of the twentieth century (Blackford, 2003). Small businesses were not seen as an important part of the economy, “except as the suppliers of the large firms” (SBA, 1998, p. 6). “By 1904, half of the output in 78 different industries” were produced by a handful of large businesses (Blackford, 2003, p. 69). To survive, small enterprises generally concentrated on different segments of the industry that large businesses did not dominate: “in labor-intensive manufacturing, in farming, and in sales and services, sectors where economies of scale were fewer” (Blackford, 2003, p. 69).

During World War I, the urgency of the war supplies and the risk avoidance of the procurement officers precluded them from buying the war materials from small firms. With the acceleration of the industrialization, giant businesses swallowed up the small enterprises by “supplanting them in some lines of work” while small businesses remained to play a dominant role in agriculture, sales, and services (Blackford, 2003, p. 76).

The U.S. Federal procurement market is really a huge “pie” worth billions of dollars. All businesses wanted to have a piece of it to make continuous profits. Mostly, small businesses acted as subcontractors of their large counterparts. “As large contracts have become more prevalent, small businesses have become more reliant on subcontracting as a means of obtaining business in the Federal marketplace” (Cheifetz, 2004, p. 24). Successful small businesses survived by either becoming the “suppliers of intermediate parts for the large businesses or as independent producers” in less concentrated industries (Blackford 2003, p. 52). The niche markets and services were good opportunities for the survival of small businesses (Blackford, 2003).

In 1798, when Congress was letting out 27 contracts for the procurement of canon and small arms to private firms for \$800,000, “Eli Whitney obtained the largest government contract, 10,000 guns due in two years—indeed a challenge in an age when gun-making was the special craft of the gunsmith” (Gorman, 1979, para. 31).

When signing the contract as a small business, “Whitney had no factory, no workers and no experience in gun manufacturing” (Gorman, 1979, para. 31). His innovative ideas and engineering skills to create tools, build “machines powered by water, and coordinate materials and workers with machines” were breakthroughs for the manufacturing to produce large quantities of product in a short time (Gorman, 1979, para. 32). Whitney is an important “model of the development of American technology” and entrepreneurship (Gorman, 1979, para. 32).

In 1909, a small enterprise outbid 41 firms to get the contract for an army plane. These small businessmen were the Wright Brothers who invented the first successful flying machine (Kirwan, 1959). Innovation and entrepreneurship of these two brothers pioneered a new era for the aviation and transportation with a \$30,000 contract (Kirwan, 1959).

2. 1920–1953: Concerns with Monopolies, Effects of Great Depression, Small Business Share in Federal Procurements, World War II and Korean War Effects.

During the 1920s, 1930s, and 1940s the American economy was fluctuating and unstable due to the effects of the World War II, prosperity boom, and depression years (Blackford, 2003). Furthermore, the unprecedented rise of large businesses was a threat for small businesses.

By 1930s, small businesses started to be seen as an important part of the U.S. economy and as a key for the development of American business system and its recovery from the Great Depression years (Blackford, 2003). During 1930s, the Executive and Legislative branches were in search of new ideas for small business assistance programs, aside from lending money. They seized the idea of government contract opportunities for socio economic small business assistance programs (Chism, 1970). As stated before, “the idea of using the government contract to assist the small businessman would also gain momentum” from this significant point (Chism, 1970, p. 16).

Reconstruction Finance Corporation (RFC) Act of 1932 (15 U.S.C. 601 et seq.): Created by President Herbert Hoover in 1932 to alleviate the financial crisis of the

Great Depression, the RFC started to aid, encourage, and help the small businesses to gain economic stability and promote competition, employment, and production to the maximum extent possible (Kirwan, 1959). The RFC also assisted both large and small businesses in dealing with government contracts (SBA, 2009). With support of Congress, the RFC implemented many of the functions of today's SBA (Jones, 1957). Not until the advent of the World War II did Congress take any serious further action about government contract assistance to small businesses.

Robinson-Patman Act of 1936 (15 U.S.C. § 13): In the 1920s and 1930s, large chain stores dominated the sector with lower prices. To maintain a competitive system and protect small retailers, Congress enacted the Robinson-Patman Act of 1936 (Blackford, 2003). Called the "chain store act" at that time, the Robinson-Patman Act prohibited price discrimination of large firms to outsell small businesses (Garman, 1997).

Small Business Mobilization Act of 1942 (Public Law 77-603): Because World War II took place out of the U.S. homeland, the war economy contributed substantially to the U.S. economy. Small businesses, however, were not as lucky as their larger counterparts (Blackford, 2003). The main concern of the government officials was the immediate procurement and production of war materials. To lessen risk, procurement officers found it easier and faster to procure the necessary war materials from large businesses. Many small businesses were incurring damages during World War II and they didn't have the competency "to compete with large businesses in making products and providing services in support of war efforts" (Philip, 2009, p. 27). "A Senate committee reported in February 1942 that just 56 of the nation's 184,000 manufacturing establishments had received 75 percent of the value of the army and navy contracts awarded up to that time" (Blackford, 2003, p. 100). Because scarce wartime resources were allocated for the large businesses that were working with the government, small businesses were suffering to find necessary raw materials to work with civilian goods and services (Blackford, 2003). As a response to difficulties encountered by small firms, the Small Business Mobilization Act of 1942 "mobilized the productive facilities employed by small businesses to optimize wartime production" (Williams, 1991, p. 9).

In 1941, the establishment of Select Committee on Small Business was a breakthrough for small business. Once the committee was established the U.S. Congress started to deal effectively with small business concerns¹. Since then, Congress has been encouraging “fair treatment of small business” to protect and develop small businesses (Army Material Command, 2001, p. 4). Furthermore, the Certificate of Competency² (COC) Program started with this act.

“The act created the Smaller War Plants Corporation (SWPC) with a capital stock of \$150,000,000, to ensure that small business concerns will be most efficiently and effectively utilized in the production of articles, equipment, supplies, and material for both war and essential civilian purposes” (Office of War Information, 1945, p. 115). “SWPC was the first agency specifically created to assist the small businessman and out of it evolved many of today’s small business procurement policies and programs” (Chism, 1970, p. 16). The SWPC assisted small firms to increase their prime and sub-contract share from government procurements. Government agencies and prime contractors used small business production inventory of the SWPC “in locating small business sources for products they needed” (Chism, 1970, p. 16). Congress also gave SWPC the power to make subcontracts with small firms. The SWPC contributed to small businesses by lending and by creating incentives for federal agencies and large businesses to work with small businesses. During its existence, the SWPC had a successful performance as reflected in Table 3.

Contracts Awarded to Small Business	Number	Amount (in millions)
Prime Contracts	58,385	\$5,700
Subcontracts from Prime Contractors	52,000	\$30.6
Subcontracts from the SWPC	12	\$35.5

Table 3. Smaller War Plants Corporation (November 1942-November 1945) (From Parris, 1968, p. 98)

¹ Congress made the committee permanent in 1950.

² The program was transferred to the SBA by the Small Business Act of 1953.

In spite of these unprecedented wartime small business shares of government contract dollars, the SWPC could not achieve its intended goal. This was due to inadequate funds and lack of support from small businesses (Blackford, 2003). “Big businesses received the lion’s share of governmental wartime spending. Of the \$175 billion worth of prime defense contracts awarded between June 1940 and September 1944, over one half went to just 33 companies” (Blackford, 2003, p. 101). The picture for subcontracts was not different for small businesses. In 1943, a SWPC survey showed that, “while a group of 252 of the largest prime contracting companies did subcontract about one-third of the value of their prime contracts, three-fourths of the subcontracts went to businesses with over 500 employees, not to smaller firms” (Blackford, 2003, p. 101). Most of defense contract dollars continued to flow to large businesses. The greatest effort ever in history for increasing the government procurement share of small businesses could not achieve its intended goal. At the end of World War II, contracting powers and loan incentives were given to the RFC. This abolished the SWPC.

After World War II, large businesses benefited more than small businesses from the conversion of military production to civilian production (Blackford, 2003). “Two-thirds of government plants and equipment sold at the end of the war went to only 87 big businesses” (Blackford, 2003, p. 101).

Armed Services Procurement Act of 1947 (Public Law 80-413): By the creation of the Armed Services Procurement Act of 1947, Congress declared the policy that mandates “a fair proportion of federal contracts should be placed with small business concerns” (10 U.S.C. § 2301). When “pulling the DoD into the discussion of small business participation in federal contracts,” Congress intended to continue the policy in peacetime which prompted the enactment of the Small Business Mobilization Act in 1942 (Philip, 2009, p. 27).

Defense Production Act of 1950 (50 U.S.C. App. 2061): As the Korean War started, Congress adopted the Defense Production Act that provided emphasis for small businesses. The general purpose of the Act was “to ensure the availability of the nation’s industrial resources to meet the national security needs of the United States by granting the President power to ensure the supply and timely delivery of products, materials, and

services to military and civilian agencies” (Else, 2009, p. 2). Congress decided to preserve the mobilization capability of small businesses by making concessions about awarding higher than lowest possible price (Blackford, 2003).

With the Defense Production Act of 1950, Congress started a wartime organization in 1951, named Small Defense Plants Administration (SDPA), whose role and work was identical to the SWPC (Philip, 2009). The goal of the SDPA was to help small firms to win defense contracts during the Korean War. As seen in Table 4, performance of the SDPA was not even close to the SWPC (Chism, 1970). Because the SDPA had no authorization to award contracts, “it acted only as an advisor to the contracting officer and had no route of appeal if the contracting officer decided not to follow its advice” (Chism, 1970, p. 19).

	Number		Amount (in millions)	
	SDPA	SWPC	SDPA	SWPC
Prime Contracts	2,197	58,385	\$591	\$5,700
Subcontracts from Prime Contractors	759	52,000	\$19	\$30.6
Subcontracts from SDPA and SWPC	7	12	\$2	\$35.5

Table 4. Small Defense Plants Administration (SDPA) (July 1951- July 1953) Comparison To Smaller War Plants Corporation (SWPC) (November 1942- November 1945) (After Small Business Plants Administration, 1953, p. 2)

Congress worked on the welfare of small businesses in every procurement statute enacted during World War II and the Korean War. U.S. Senator (1945–1967) Leverett Saltonstall (1957, p. 11) emphasizes the lack of legislation that characterizes and identifies “fair share” in terms of government goals by stating that:

The Armed Services Procurement Act of 1947, the Selective Service Act of 1948, the Federal Property and Administrative Services Act of 1949, the Defense Production Act of 1950, and others have all provided that small business must receive a fair share of Government contracts. Congress has not legislated ... what is to be considered a fair share of

Government contracts yet. The percentage of military net procurement going to small firms has fluctuated annually between 32 and 16 percent from the end of World War II to 1957.

During World Wars I and II and the Korean War, small businesses faced serious difficulties and challenges:

- “The full mobilization of productive facilities, with emphasis only on implements of war as the end product, meant hardships for small business” and they could not keep up (Saltonstall, 1957, p. 3).
- Since competition capability of small firms is less for scarce materials and for “skilled labor or to expand plant facilities,” larger firms had an advantage due to the ability to “convert from civilian to military production” (Saltonstall, 1957, p. 4).
- Good financial and engineering capabilities and competencies of large businesses led the contracting officers “to award the vast majority of prime contracts to larger firms” (Saltonstall, 1957, p. 4).
- Small business faced difficulties in securing adequate information on proposed procurements and in securing specifications and bid sets (Saltonstall, 1957).
- At that time, because of the national emergencies, “unrealistic delivery schedules were precluding small firms from participating” in the competition of procurements (Saltonstall, 1957, p. 6).
- The risk-averse behavior and the unwillingness of the contracting officers³ to do the job with arguably inexperienced and less capable small businesses caused challenges (Saltonstall, 1957).

Because of these issues and challenges, the small business sector incurred huge damages during World Wars and the Korean War. This massive damage showed its effects in reduction of jobs, patents, and innovations. Therefore, Congress created the Certificate of Competency process:

During war times, shortsighted military procurement practices devastated America’s defense industrial base. Small business has been unable to obtain a fair share of defense contracts. 'This is a problem of business life or death to thousands of small manufacturing concerns which have been

³ The Small Business Act tried to solve this problem by giving a right to small businesses (who are found ‘nonresponsible’ by contracting officer) “to have an adverse decision referred to the Small Business Administration for view” (H. R. Rep. No. 104-14, 1995, p. 155).

unable to obtain materials to continue in civilian production. Of course, the path of least resistance is that of loading defense contracts on to large corporations and allowing small business to fall by the wayside. This is the path which was followed in the early years of World War II, when 100 large corporations received 67 percent of prime contracts. During this same period, one-sixth of the small businesses in the Nation closed their doors. This mistake must not be repeated. Our mobilization program must extend down into the small plants, since they are a major source of our productive strength. The proposed amendment [subsequently enacted] would accomplish this by creating a Small Defense Plants Corporation with authority to certify qualified small businesses for prime contracts. Procurement officers would be directed to accept this authorization as conclusive. This provision would give small businesses definite assurance of a fair share of prime contracts (*Siller Bros. v. United States*, 655 F.2d 1039, Court of Claims, 1981).

“Between 1921 through 1946 period, small businesses fell behind large firms in their participation in the nation’s economic development” (Blackford, 2003, p. 101). “Establishments with more than 250 workers employed 46 percent of the wage earners in American industry in 1914 and that proportion rose to 56 percent in 1937” (Blackford, 2003, p. 101). Wartime production of the World War II accelerated the movement through large business domination. After both World War II and the Korean War, the reaction time for the particular needs of small business was too late to prevent massive damages to their positions in the economy (Saltonstall, 1957).

3. 1953–1970: Post-War Economic Recovery, Creation of the SBA, Definition of Small Businesses, Discussion of the Federal Procurement Share for Small Businesses

Especially in the Cold War atmosphere of the 1950s and 1960s, small businesses came to be seen as the “cornerstone of American democracy” (Blackford, 2003, p. 132). After the end of the the Korean War in 1953, the United States moved through to the peacetime economic environment (Chism, 1970). The first few years after the Korean War witnessed an unprecedented prosperity in the U.S. economy (Kirwan, 1959). American people started to see the small businesses as the defender of the “independence from the concentrated economic power” (Blackford, 2003, p. 132).

The small businesses were in need of a government agency that, for the first time, would represent their voice at the national level (Gourlie, 1960). The RFC was abolished in 1952. With all of these facts before the Congress, Congress had to establish an administration instead of RFC to enable the “fair share” of the government procurements for small businesses.

Small Business Act of 1953 (Public Law 85-536): “Believing that financial, procurement, technical, and managerial assistance was necessary in peacetime as well as during emergencies,” Congress created the Small Business Administration with the Small Business Act of 1953 as an independent agency in the Executive Branch (Saltonstall, 1957, p. 12). The act reads:

The essence of the American economic system of private enterprise is free competition. Only through full and free competition can free markets, free entry into business, and opportunities for the expression and growth of personal initiative and individual judgment be assured. The preservation and expansion of such competition is basic not only to the economic well-being but to the security of this Nation. Such security and well-being cannot be realized unless the actual and potential capacity of small business is encouraged and developed. It is the declared policy of the Congress that the Government should aid, counsel, assist, and protect, insofar as is possible, the interests of small business concerns in order to preserve free competitive enterprise, to insure that a fair proportion of the total purchases and contracts or subcontracts for property and services for the Government...be placed with small business enterprises. (U.S. Congress, 2010, Sec 2 [a])

The act gave to the SBA the responsibility of establishing small business standards for each industry (Philip, 2009). The act brought a stipulation that a business can qualify as a small business only if the company is “independently owned and operated and not dominant in its field of operation”, and meet the SBA size standards (Philip, 2009, p. 28).

The government was in market virtually for any commodity or service produced or offered by small businesses (Kirwan, 1959). It was decided to publish the “all procurements over small business threshold” in the Commerce Business Daily (CBD) “to inform small business of subcontracting opportunities” (Cheifetz, 2004, p. 7). Thus, small

businesses were informed by the SBA about government agencies' needs and the SBA kept the agencies cognizant about products and services that the small businesses supplied. The SBA, for the first time, achieved the gathering of government agencies and small businesses on the same platform.

After the abolition of the RFC in 1952 and the SDPA in 1953, Congress established the SBA to secure "fair share" of the government procurements for small businesses by transferring their functions to the SBA. To assist the small business sector, Congress charged the SBA with four basic responsibilities (Kirwan, 1959):

- Helping small businesses to be able to get loan more easily.
- Assisting the small firms get a fair share from government procurements.
- Aiding in solving managerial and productivity problems.
- Assisting financially the small firms in cases of natural disasters.

Small Business Investment Act of 1958 (Public Law 85-536): Congress enhanced the Federal Government's commitment to small businesses by passing the Small Business Investment Act of 1958 and provided necessary money for the small businesses to compete in the Federal market (Philip, 2009). "Public Law 85-536 authorized SBA to enter into contracts with federal agencies for the procurement of equipment, supplies, and/or services for the government" and subcontract them to small minority-owned businesses (Army Material Command, 2001, p. 5). Section 102 of this act reads:

It is declared to be the policy of the Congress and the purpose of this act to improve and stimulate the national economy in general and the small business segment thereof in particular by establishing a program to stimulate and supplement the flow of private equity capital and long-term loan funds which small business concerns need for the sound financing of their business operation. (U.S. Congress, 1958, Title VII)

The United States experienced a great economic upsurge during the first quarter century after World War II (Blackford, 2003). "Between 1945 and 1960, the nation's real

GDP rose by 52 percent, with per capita GNP increasing 19 percent; in the 1960s, real GNP climbed an additional 46 percent and per capita GNP rose by 29 percent” (Blackford, 2003, p. 132).

The Cold War years caused defense spending to boost approximately “4 and 8 percent of the nation’s GNP in 1950s and 1960s” (Blackford, 2003, p. 133). “Small firms did not benefit as much as their larger counterparts from defense spending. In 1964, for example, just ten big businesses accounted for \$3 billion of the \$5.1 billion the Department of Defense awarded in research and development funds” (Blackford, 2003, p. 133).

Although there is not an accurate way of fully capturing the benefits of the SBA to small businesses, there is no “doubt that the rate of the business failures would be higher, the rate of the small business growth smaller, and the level of employment significantly less without the help of SBA” (SBA, 1967a, p. 31). Between 1958 and 1967, “a total of 1,556 loans” by SBA created a total of “64,631 employment opportunities” (Kirwan, 1959, p. 114). “Profit of an SBA assisted firm grew at an average rate of 14.3 percent a year,” whereas other firms had an average rate of 6.5 percent (Kirwan, 1959, p. 115). Table 5 proves the better performance of SBA-assisted firms.

	SBA Assisted Firms (on average)	Firms with less than \$1 M in assets
Profit Increase	45.9 %	15 %
Sales Increase	7.6 %	7.1 %
Assets Increase	6.8 %	5.2 %
Net Worth Increase	5.0 %	3.4 %

Table 5. Comparison of Small Business Administration Assisted Firms with Other Firms
(From Kirwan, 1959, p. 112)

Even though SBA assisted small businesses to boost their share in government contracts, DoD’s data (between July 1969 and June 1970) showed that 80 percent of defense procurement dollars went to large businesses (DoD, 1970a, p. 13). In 1970, the

five top contractors of DoD received a share more than all small businesses working with DoD (DoD, 1970b). While the number of small businesses was increasing over this time period, “the relative importance of the small business in the overall economy declined” since “firms were getting bigger and, therefore, the share of small firms was being reduced” (SBA, 1998, p. 7).

4. 1970–1990: Small Business Revival, Creation of Federal Procurement Share Goals, Benefits of Small Business Flexibility, Assistance for Small Disadvantaged Businesses

“Reversing their earlier long-term decline relative to big businesses, small firms increased in importance in the 1970s and into the 1980s” because of their involvement in information technology sector (Blackford, 2003, p. 166). Writing in 1987, the head of the Small Business Administration noted, “Employment growth in industries dominated by small firms continued to outpace the growth in those dominated by large firms” and observed, further, that in the 1980s “job creation in the economy has been largely an outcome of small business activity, especially activity by firms with fewer than twenty employees” (Blackford, 2003, p. 165).

The worldwide recession triggered by the 1970s energy crisis and the overseas large businesses capable of competing with American counterparts caused employment in Fortune 500 companies decline by 1.5 million between 1974 and 1984 (Blackford, 2003). Small firms were the hope for economic renewal. “Seen as nimble, able to respond quickly to opportunities in the unstable global economy, small business won widespread admiration” (Blackford, 2003, p. 166). Because large firms are more dependent on the world trade, the 1970s crisis harmed large businesses more heavily than small businesses (Blackford, 2003). Furthermore, Piore and Sabel (1984, p. 255) explains the cause of the 1970s economic crisis as the “inability of firms and policymakers to maintain the conditions necessary to preserve mass production—that is, the stability of markets.”

Many people, laid off from large firms, mostly tried their chance with their own small enterprises. Enabled more competitive for markets abroad by transportation and communication breakthroughs, small businesses increased their portion of the export

output in the late 1980s and early 1990s (Blackford, 2003). “Of the 243,000 American companies that exported directly through their own sales offices in 1989, 88 percent had fewer than 500 employees; and one-half of the businesses exporting through third parties such as brokers and trading companies were small businesses” (Blackford, 2003, p. 167).

The increasing utilization of computers enabled small businesses to carry out “tasks that once only larger businesses could accomplish” (Blackford, 2003, p. 169). The technology revolution in the Silicon Valley in 1950s and 1960s proved the importance of flexibility and fast-movement for small firm success (Blackford, 2003). Large businesses found a way to be more flexible by subcontracting with small businesses. In his book *A History of Small Business in America*, Blackford (2003, p. 169) states:

The flexibility that smaller companies and plants had in meeting the challenges of the rapidly changing business environment of the 1970s and 1980s accounted for much of their growing importance. As in earlier times, small firms proved adept at exploiting niche markets with specialized products based upon short production runs. The ability of small businesses to react quickly to alterations in markets and fluctuating exchange rates in an increasingly economic world helped explain their growing significance.

The Small Business Investment Act of 1958 (Public Law 85-536) authorized “SBA to enter into contract with federal agencies for the procurement of equipment, supplies, and/or services for the government” (Army Material Command, 2001, p. 5). This authority was the predecessor to the 8(a) program. These changes, however, did not make the intended contributions to acquire a fair share for small businesses from the federal procurements. “Nearly 20 years later, the Comptroller General issued a report stating that these early attempts to bring small businesses into the Federal business environment had not been successful” (Philip, 2009, p. 28). Furthermore, the report of Committee on Small Business (1980, p. 52) states:

Small Businesses, and in particular, small businesses owned by the disadvantaged, have not been considered fairly as subcontractors and suppliers to prime contractors performing work for the government. For example, military procurements comprise the largest single portion of the Federal purchase budget, yet in fiscal 1976, minority owned firms received only nine-tenths of 1 percent of military subcontracts.

These failures required new changes for small business to be able to compete for federal contracts. The reply came in 1978.

Amendment to the Small Business Investment Act of 1958 and the Small Business Act of 1953 (Public Law 95-507): Enacted in 1978, the amendment changed the Small Business Act of 1953 and 1958 to provide “maximum practicable opportunity for small business concerns owned and controlled by socially and economically disadvantaged individuals” (U.S. Congress, 1978, Title II). The Act made some important changes:

- “The Act required Federal agencies to establish small business goals and explain to the Congress when goals were not met” (Philip, 2009, p. 30). The goals were forwarded to the Small Business Administration on an annual fiscal year basis for approval or negotiation” (Army Material Command, 2001, p. 6).
- The act made “the participation of large businesses in some type of small business program mandatory instead of voluntary” (Philip, 2009, p. 30).
- “To promote maximum possible use of small businesses, the act required other than small businesses that are awarded prime federal contracts to submit a subcontracting plan if the contract 1) exceeds \$500,000 (‘now \$550,000’ and \$1 million for construction of a public facility) and 2) offers further subcontracting opportunities” (Clark et al., 2006, 43-44). Section 211 of the act requires that “no contract shall be awarded to any offeror unless the procurement authority determines that the plan of the proposed prime contractor offers such maximum practicable opportunity” (U.S. Congress, 1978, Title VI).
- “The act required reserving solicitations under \$25,000 for small businesses” (Philip, 2009, p. 30).
- The act made an important vocabulary revision in the previous act of 1958. “[It] is the policy of the United States that small business concerns have the maximum practicable opportunity” (was ‘best efforts’ before)” to participate in the performance of contracts let by any federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems” (U.S. Congress, 1978: Title VI and Philip, 2009).

- The act established the Office of Small and Disadvantaged Business Utilization (SADBU) “to review all subcontractor plans submitted by prime contractors to ensure compliance” (U.S. Department of Housing and Urban Development Web site).

With the amendment to Public Law 85-536 in 1978, the destiny of small businesses in government procurements have started to change. This amendment required mandatory goals for “small business participation in federal procurement and subcontracting commitments, and these targets still remain at the heart of policy today” (Richard, 2008, p. 51).

Small Business Innovation Development Act of 1982 (Public Law 97-219):

The Act created the Small Business Innovation Research (SBIR) Program “requiring federal agency’s to set goals for reaching research and development agreements with small businesses” (Pike, 2004, p. 14). The SBIR Program set-asides 2.5 percent of extramural R&D funds.

The law amended the Small Business Act to strengthen the role of the small, innovative firms in federally funded research and development, and to utilize Federal research and development as a base for technological innovation to meet agency needs and to contribute to the growth and strength of the Nation's economy (DoD's SBIR and STTR Programs, 2009, August).

National Defense Authorization Act of 1987 (Public Law 99-661, Section

1207): The Act mandated “a 5% goal for contract awards to the Small Disadvantaged Business (SDB) including higher educational institutions contract dollars to Historically Black Colleges and Universities/Minority Institutions (HBCU/MI) throughout DoD” (Army Material Command, 2001, p. 6).

Business Opportunity Development Reform Act of 1988 (Public Law 100-

656): The Act reformed the 8(a) Business Development Program⁴ and assigned 20 percent goal for the federal agency prime contracts (Philip, 2009). Additionally, the act

⁴ “The program was to end September 1997, but was reauthorized in Section 401 of the SBA’s Reauthorization Act of 1997, making the program permanent” (Army Material Command, 2001, p. 7).

required federal agencies to report small business participation quarterly “to implement a program to increase small business participation in agency acquisition of selected products and services in industry categories historically low in participation” (United States, 1988, Title VII, Part B).

To deter large businesses’ fraudulent qualification for small business contracts, Section 16(d) of the Business Opportunity Development Reform Act of 1988 declared it a criminal offense to “misrepresent in writing the status of any concern as a small business concern” to “benefit unfairly from the advantages of the legislation and regulations to obtain prime or subcontracts” (15 USC § 645(d)). Violators of Section 16 (d) “shall be punished a fine of not more than \$500,000 or by imprisonment for not more than ten years or both,” or be subject to “certain administrative remedies,” including “suspension and debarment” (15 USC § 645(d)).

5. 1990–2003: End of Cold War Developments, Negative Effects of Federal Acquisition Reforms, Socio-Economic Programs, Commercialization of Government Contracting Process

During the 1980s, the government focused its efforts on reducing “waste, fraud, and abuse” in the procurement system (Hanks, Axelband, Lindsay, Malik, & Steele, 2005, p. 31). After the Cold War ended, DoD spending has started to decline significantly (as seen in Figure 1).

DoD acquisition spending decreased “59% in real terms from fiscal year FY1987 to FY1997” (Grasso, 2002, p. 6). Since DoD makes up two-thirds of the overall federal procurement spending, the overall spending also declined sharply. The impact of radical decrease in DoD procurement dollars induced a requirement for DoD acquisition reform. DoD had to reduce costs to afford its buys (Grasso, 2002). Thus, the government tried to change the DoD procurement system to become “more (1) cost effective; (2) interactive with commercial industries; and (3) committed to procuring state-of-the-art technology for DOD weapon systems on a timely basis” (Grasso, 2002, p. 4).

While reducing the procurement spending, the government increased research and development (R&D) spending by implementing the policy of “upgrading existing

systems rather than initiating new ones” (as seen in Figure 1) (Grasso, 2002, p. 6). The rationale was giving incentives to innovation, changing business relationships with the defense industry, and seeking ways to reduce costs (Grasso, 2002).

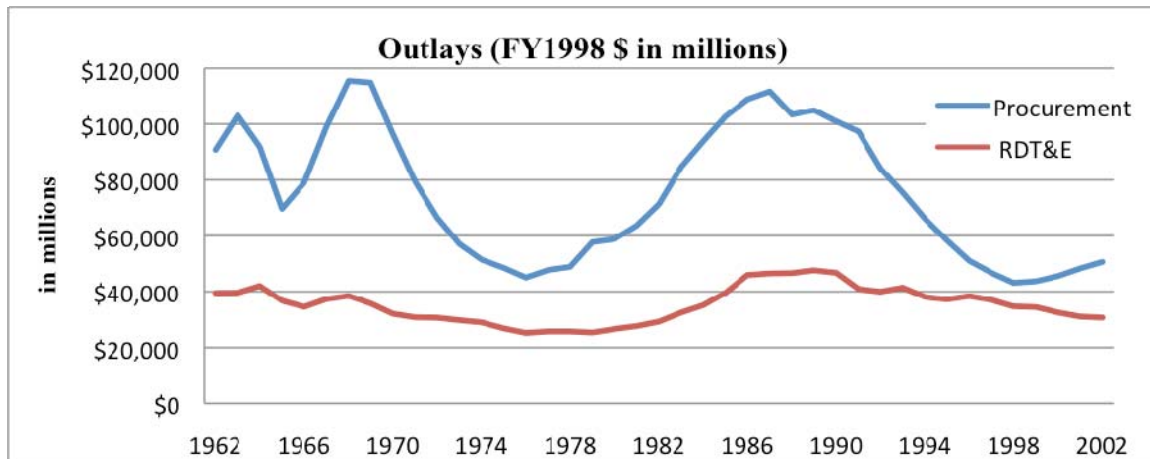


Figure 1. DoD procurement dollars between FY1962–FY2002 (National Defense Budget Outlays) (After Grasso, 2002)

The government implemented legislative policies “for more streamlined procurements, reductions in internal paperwork and required reviews, greater use of commercial practices, and expanded attempts to use the private sector to do more of the jobs traditionally done by government” (Hanks et al., 2005, p. 31). DoD also tried to find ways to make the military procurements more attractive and easier to access for small businesses that had, previously, never worked with DoD (Hanks et al., 2005). Government shifted its focus on making “the acquisition process more responsive, effective, and efficient—i.e., ‘faster, better, cheaper⁵’ ” (Hanks et al., 2005, p. 31).

National Defense Authorization Act of 1991 (Public Law 101-510, Section 831): The act created a process where the large firms from the private sector could help small businesses. The act established the DoD Mentor-Protégé Program “to provide

⁵ “Faster” is about getting needed equipment into the hands of users more quickly than has been the case in the past. “Better” is about increasing the likelihood that delivered equipment fully meets all of its performance specifications. “Cheaper” is about doing a better job of controlling and reducing the costs of new systems as much as possible, taking into account not only the initial purchase price for the system but also what it is likely to cost to operate, maintain, and support it over its entire “life cycle” (Hanks et al., 2005, p. 31)

incentives to major DoD contractors (mentors) to help disadvantaged small businesses (protégé) perform as subcontractors and suppliers under DoD and other government contracts” (United States Congress, 1990: Title VIII, Part D).

Small Business Technology Transfer Act of 1992 (Public Law 102-564, Title II): The act established the Small Business Technical Transfer (STTR) Pilot Program. The program set specific percentage goals for federal agencies to abide by research and development efforts for small businesses (United States Congress, 1992, Title II). “STTR is similar in structure to SBIR but funds cooperative R&D projects involving a small business and a research institution (i.e., university, federally-funded R&D center, or nonprofit research institution)” (DoD's SBIR and STTR Programs, 2009, August).

“The purpose of DoD SBIR and STTR programs is to harness the innovative talents of nation's small technology companies for U.S. military and economic strength” (DoD's SBIR and STTR Programs, 2009, August). The STTR Program set-asides 0.3 percent of extramural R&D funds.

Federal Acquisition Streamlining Act (FASA) of 1994 (Public Law 103-355): “FASA contained more than 200 sections changing the laws that govern how agencies acquire almost \$200 billion of goods and services annually” (GAO, 1996, October, 1).

FASA introduced broader and more encompassing changes to the acquisition process than had any other acquisition reform legislation in the 10 preceding years (Tolan, 1998). In accordance with the Federal Acquisition Regulation (FAR), purchases between \$2,500 and \$100,000 are reserved for small businesses (FAR Part 19). “FASA replaced the term “small purchases” and established “micro-purchases” for acquisitions from \$2,500 and less and established the “simplified acquisition” threshold for small purchases from \$25,000 to \$100,000, setting the automatic Small Business Reservation at \$2,500 to \$100,000” (Army Material Command, 2001, p. 7).

The act added a 5 percent goal for women-owned small business. “It authorized agency heads to restrict competition on some contracts to small businesses owned by socially and economically disadvantaged individuals” (Pike, 2004, p. 16).

FASA introduced the Federal Acquisition Computer Network (FACNET) that gave opportunity to small businesses easier and more efficient access to government contracts and eliminated military standards and specifications (Pike, 2004). The network, however, soon became obsolete due to the internet.

Federal Acquisition Reform Act (FARA) of 1996 or Clinger-Cohen Act⁶ (Public Law 104-106): Enacted in 1996, FARA conveyed the reforms of FASA to the next level as a complimentary. The act provided “greater flexibility to agencies in determining who may make purchases of \$2,500 or less without competition” (Hecker, 2001, p. 39)

“FASA and FARA have had an unprecedented impact on the federal procurement process” (O’Connor, 1998, p. 175). FASA and FARA contributed to the acquisition system by saving money, reducing paperwork of federal contractors, “facilitating the acquisition of commercial products, enhancing the use of simplified procedures for small purchases, transforming the acquisition process to electronic commerce, and improving the efficiency of the laws governing the procurement of goods and services” (O’Connor, 1998, p. 175). Shortly, FASA and FARA acts made “the government operate more like a commercial buyer and make it easier and more appealing for businesses to participate in government markets” (O’Connor, 1998, p. 175).

Small Business Reauthorization Act of 1997 (Public Law 105-135): The act introduced Historically Underutilized Business Zones (HUBZone) and the Service Disabled Veteran-Owned Small Business Program. “The Act increased the overall government-wide procurement goal for small business from 20% to 23%” (Army Material Command, 2001, p. 8). The Act also defined Contract Bundling. The act revised the Small Business act by:

Requiring each federal agency to (1) foster the participation of small businesses as prime contractors, subcontractors, and suppliers; (2) structure its contracting requirements to facilitate competition by and among small businesses; and (3) avoid the unnecessary and unjustified

⁶ The Clinger-Cohen Act refers to two acts passed under the DoD Authorization Act of 1996, the Federal Acquisition Reform Act (FARA) of 1996, and the Information Technology Management Reform Act (ITMRA) of 1996 (United States Congress, 1996, Division D).

bundling of contracts that precludes small business participation as prime contractors (United States Congress, 1997, Title IV, Subtitle B).

In spite of the reform actions to enhance usage of latest technology with e-commerce, streamlining of the procurement process to reduce the federal workforce and increasing small business goal from 20 percent to 23 percent, new barriers to small businesses were born in procurement procedures (SBA Office of Advocacy, 2004 June). Contrary to their intended goal, acquisition reforms caused the share of small business to decrease from approximately 24-25 percent (between 1993 and 1997) to about 23 percent (between 1998 and 2002) (SBA Office of Advocacy, 2004 June).

Campbell (1997, p. 40) describes the reforms such as ensuring the use of best value evaluation instead of the lowest price in awarding government contracts as a “Trojan horse” that work “against the entrepreneurial instincts and innovative drives of many small- to medium-sized firms; a set of reforms that arbitrarily excludes many of these firms from the opportunity to compete for federal dollars.” Welch (2000, p. 107) conveys the problem on a new aspect by stating “many of these wonderfully effective and efficient acquisition reforms are seldom applied with the intent of benefiting small businesses.”

Acquisition reforms caused the DoD to cut its “acquisition workforce by 42 percent” (Cohen, 1998, p. 21). Yoder (2007, p. 152) explains this decrease in workforce by stating “While the Defense Contract Audit Agency (DCAA) and Defense Contract Management Agency (DCMA) workforce is capable and well-managed, drastic cuts initiated in the early and mid-1990s have gutted the capacity for DCAA and DCMA to perform their missions and functions.” The Office of the Inspector General (2000) report contended that oversight and management shortfalls due to lack of adequate personnel endangers the dollars of the taxpayers to high levels of risk. “Under pressure to do more with less, it is conceivable that achieving small business goals became less focused during the acquisition reform of the 1990s” (Clark & Moutray, 2004, p. 14). Created by P. L. 105-135 in 1997, 23 percent goal of small business share couldn’t be achieved until 2003.

One of the problems acquisition reforms created was contract bundling. Burman (2002, p. 61) explains the reason of the contract bundling, created by the Small Business Reauthorization Act of 1997, by stating “contracts are bundled because it makes contract oversight easier for agencies, but it frequently makes new awards so big that small businesses can’t compete for the work.”

The study of Eagle Eye Publishers, a major study that searched for impact of contract bundling on small businesses by using federal data from FY1992 to FY1999, found that “for every increase of 100 bundled contracts there was a decrease of 106 contracts to small business; and for every additional \$100 awarded on bundled contracts there was a decrease of \$33 to small business” (Eagle Eye Publishers, 2000: v). The conclusion of the study claimed that contract bundling impacted the small businesses negatively.

With due respect to all claims and studies, the acquisition reforms of 1990s did not include negative effects in their intent and nature. Nonetheless, “the uneven implementation of these reforms across federal agencies has created results that are not in the best interests of small businesses” (Clark & Moutray, 2004, p. 7).

Veterans Entrepreneurship and Small Business Development Act of 1999 (Public Law 106-50): The act “established a government-wide goal of 3% for service-disabled veterans for prime contracts and requires separate subcontracting goals of 3% for Veteran-Owned Small Business (VOSB) and Service-Disabled Veteran-Owned Small Businesses (SDVOSB)” (Army Material Command, 2001, p. 8).

National Defense Authorization Act of 2001(Public Law 106-398, Section 807): “The act expands the DoD Mentor-Protégé program participation to include Women-Owned Small Businesses” (Army Material Command, 2001, p. 8).

Veteran Benefits Act of 2003 (Public Law 108-183): This act enacted on December 16, 2003, primary objective of the act was to improve maximum business opportunities for the SDVOSB entities. The act enables SDVOSB entities “to receive sole source and restricted competition contracts for goods and services used by the U.S. government” (Department of The Army, Office of Small Business Programs Web site). It

requires federal agencies and prime contractors to allocate 3 percent of all federal procurement dollars for SDVOSB firms. “The anticipated award of sole source contracts will not exceed \$5M for manufacturing and \$3M for other contract opportunities” (Department of The Army, Office of Small Business Programs Web site).

Legislative efforts have given their results on minority owned and women-owned small businesses. Boden, Ou, Berney, and Headd (2001, p. 20) states:

Small business continued to be an important means by which women, minorities, and immigrants entered the American economic mainstream and managed to increase their share in the economy. Women-owned sole proprietorships increased their share of average net income as well as their share of the number of businesses overall. Excluding C corporations, the number of African-American-owned businesses increased by 26 percent over the 1992–1997 period, compared with an increase of 7 percent in the number of all businesses. The number of Hispanic-owned businesses, excluding C corporations, rose by 30 percent from 1992 to 1997 and their receipts rose by 49 percent, exceeding the 40 percent increase in all comparable U.S. businesses.

Over the FY 1990–1995 time interval, since small businesses are better at competing for small dollar contracts, they have been awarded 50–52 percent of contracts under \$25,000, while receiving 17–18 percent of the contracts over \$25,000 (Clark & Tobias 2004, p. 57). As the impacts of the acquisition reforms started to be seen in the business world in FY 1996, the percentage of the smaller contracts awarded small businesses started to decrease steadily (Figure 2). As seen in Figure 2, by FY 2001, the percentage dropped to 36.9 percent, which is the lowest point since the \$25,000 threshold was established in FY 1984 (Clark & Tobias, 2004).

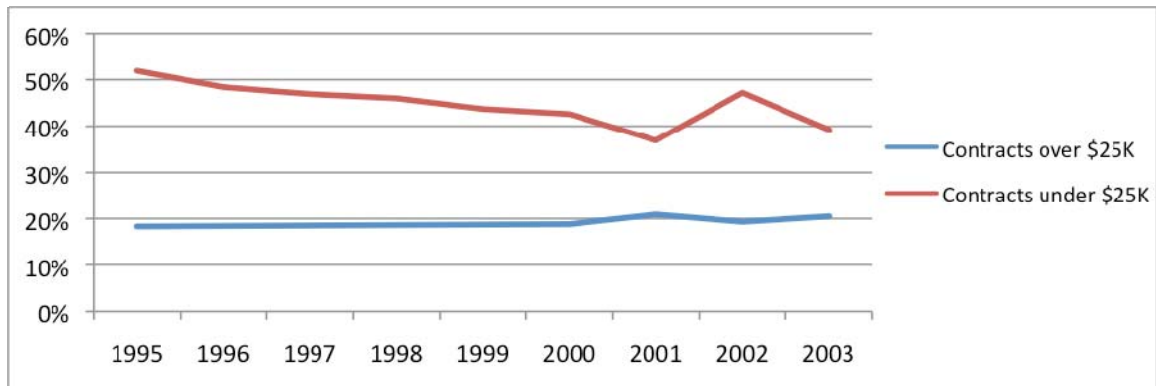


Figure 2. Small Business Share of Dollars in Contract Actions, FY 1995–FY 2003
(After FPDS, 2009)

6. 2003–2010: Streamlining the Process, Transparency Issues

Upon entering office, President George W. Bush expressed the following goals for small businesses on his Small Business Agenda: “(i) Ensuring that government contracts are open to all small businesses that can supply the government’s needs, (ii) avoiding unnecessary contract bundling, and (iii) streamlining the appeals process for small businesses that contract with the federal government” (Clark, 2004, p. 82).

Since FASA encouraged and enabled more micro-purchases with purchase card, credit card purchases grew from “\$5 billion in FY 1997 to more than \$14 billion in FY 2002,” while credit card actions rose from 11 to 25 million (Clark, 2004, p. 83). Because credit card purchase data is not collected properly, increases in credit card usage in micro-purchases affected small businesses negatively.

“Small businesses have played an important role in leading the U.S. economy out of the recession of 2001” (Headd, Ou, & Clark, 2004, p. 12). “By the end of 2003, the stage was set for companies, both large and small, to expand, and for new companies to fill new market niches” (Headd et al., 2004, p. 12).

President’s report (2005) articulated the steps taken by the Bush administration. The steps taken conveyed the government acquisition market further along that path,

Including improvements in guidance for large businesses subcontracting to small firms, efforts to improve the small business size standards,

clarification of the “novation” regulations that apply to small businesses acquired by larger ones, moves toward greater transparency in federal procurement data, and initiatives to reduce the bundling of contracts that can leave small firms out of the competition (Clark, 2005, p. 41).

Veterans Benefits, Health Care, and Information Technology Act of 2006 (Public Law 109-461): By creating Veterans First Contracting Program, the act gives to the Veterans Administration (VA) the authority to deal with set-aside and sole-source procurements with veteran owned and operated small businesses (38 U.S.C. § 8127). “Veterans First approach changes the priorities for contracting preferences within VA, placing SDVOSBs and VOSBs first and second, respectively, in satisfying VA’s acquisition requirements” (Department of Veterans Affairs, 2007, p. 2).

Other Initiatives: To provide more transparency in federal procurement data, a new version of the Federal Procurement Data System (FPDS-NG) was introduced in 2004, which was “designed to reduce the potential for human error in transferring data to the FPDS” (Clark & Saade, 2007, p. 50). By acquiring accurate and real time data, the stakeholders can “make policy and marketing decisions more quickly and accurately” (Clark & Saade, 2007, p. 50). “In April 2005, the SBA introduced changes to the Central Contractor Registration (CCR) process” “to improve accuracy and transparency, and to reduce previously required data input” (Clark & Saade, 2007, p. 51). “These and other regulatory changes in proposal stages are significant initiatives to improve the process of providing more transparency in counting small business contract awards” (Clark, 2006, p. 41).

Small businesses took their share from the economic expansion that began early in the decade and continued until the last quarter of 2007. They faced growing challenges in recent few years. By the last quarter of 2007, the U.S. economy started to experience a downturn. The fall of housing starts, increase in gas prices, and their “ripple effects throughout the economy” were primary reasons for the economic downturn (Moutray, 2009, p. 8).

Rapid increases of home building starts since 1990, with a summit of “2.3 million homes on an annualized basis at the beginning of 2006” dropped steeply to “1 million

homes by December 2007—a 56.4 percent decline” (Moutray, 2009, p. 8). Changing between \$19 and \$35 at the beginning of the decade, petroleum prices saw over \$100 a barrel toward the end of 2007, and then dropped down⁷ (Moutray, 2009). Rising pessimism because of falling house starts and increasing gas prices were reflected in fewer purchases by consumers (Moutray, 2009). As a result, small businessmen were more cautious to make investments and take risks due to the unbalanced and fluctuating economy. “The result was an economic slowdown in which many key players” limited their spending while waiting to see the big picture (Moutray, 2009, p. 25).

Exporting contributed significantly to the U.S. economy during 2006 and 2007. As the dollar got weaker against other currencies, American products and services got cheaper for people abroad. As a result, “the export sector experienced solid growth each year from 2004 to 2007, and was up nearly 38 percent over the period” (Moutray, 2009, p. 25). The economic progress created good opportunities for small businesses to undertake international trade and find new overseas markets (Moutray, 2009).

Not only the U.S. economy, but also the whole world experienced a deepening recession during 2008 and 2009. To fight against plummeting demand in the private sector, the Obama administration decided on a huge stimulus package in 2009.

American Recovery and Reinvestment Act (ARRA) of 2009 (Public Law 111-5): The main objective of the act is to provide a stimulus remedy package for the US economy to get rid of the effects of the economic depression. SBA took over important responsibilities for providing “program tools that offer new economic incentives to small businesses and lenders alike, all aimed at growing the economy through job creation, re-starting lending, and investing in small businesses and the entrepreneurial spirit of Americans” (U.S. Small Business Administration, 2009, p. 1)

By amending the Small Business Investment Act of 1958, Section 508 of the American Recovery and Reinvestment Act of 2009 increases the maximum surety bond guarantee amount to \$5,000,000, authorizes “the Administrator to guarantee a surety for a

⁷ The rise continued into 2008, surpassing \$145 per barrel by July before falling 60 percent (Moutray, 2009, p. 8).

total work order or contract amount that does not exceed \$10 million, if a federal agency contracting officer certifies that such a guarantee is necessary” (Section 508 (a, b) of P. L. 111-5). Furthermore, 508 (d, e) of P.L. 111-5 orders the Administrator to study and report to Congress on the current funding structure of the surety bond program.

By establishing the ARRA of 2009, the Obama administration “invested \$787 billion in infrastructure development, educational facility improvements, broadband access, scientific research, and tax incentives. It also increased funding for the SBA by \$730 million” (Moutray et al., 2009, p. 5)

Small businessmen have fought to survive over the past few years, while the recession was forcing them “to scale back their businesses, to sit on the sidelines and wait for the economy to improve, or unfortunately for some of them, to close their doors” (Moutray, Lichtenstein, & Clark, 2009, p. 41). Economic downturns, however, can be used as a massive opportunity for small businessmen to initiate their own business, to create a new business direction, “to jump into markets their larger counterparts might have exited, or by creating an innovative response to an unmet need, even to start entire new markets” (Moutray et al. 2009, p. 41). “In economic downturns such as the Great Depression of the 1930s and the recessions of 1973-1975 and 1980-1982, many people who lost their jobs in larger companies formed their own small businesses to stay afloat through the hard times” (Conte, 2006). Entrepreneurship will be a crucial means of moving out of the current recession. Schramm and Litan (2009) observed:

Time and again, entrepreneurs have led the way out of past economic downturns. Current business legends like Microsoft, Federal Express, Intel, Charles Schwab, and Southwest Airlines started in recessions or down markets. Indeed, 18 of the 30 companies that make up the Dow Jones Industrial Average were launched in recessions or in bear stock markets. As Vivek Wadhwa of Duke University and Harvard Law School has pointed out, the pioneers who launched these firms (and others) during the darkest of times realized the following advantages of starting a business in a recession: less competition, lower costs, ease of recruiting employees, and less pressure to expand.⁸

⁸ The authors reference an article by Wadhwa (2008).

“Such a message is inspiring in that it provides hope to Americans” who got used to the worst economic news every day (Moutray et al., 2009, p. 41). The economy will rebound at some point. If history tells the truth, small businesses will be pioneers to convey the economy out of the cloudy economic recession by using technology, innovation, entrepreneurship, and international trade (Moutray et al., 2009). “Business opportunities are especially compelling and high-impact results especially needed in economic hard times” (Moutray et al., 2009, p. 42).

Some major acts concerning Small Businesses in the 1990s completely reshaped the Small Business aspect of government acquisition. Presently, small business programs provide many opportunities for small businesses to compete for federal contract awards (Philip, 2009).

“Large businesses now had to divide their vendor base into several more categories. Moreover, contracting officers expected to see goals and goal achievement at the levels identified by Congress, such as 5% for women-owned small businesses, even if make-or-buy analyses for a particular solicitation didn’t support such goals” (Philip, 2009, p. 30).

“In the last five decades, Congress has modified almost annually the rules of federal small business program. Although specific acts have changed the focus of the program, the basic intent of protecting small businesses and encouraging their growth has remained constant” (Pike, 2004, p. 17).

Government assistance to small businesses for maximum practicable opportunity and share from the federal contracting dollars helps not only small business owners, but also the government itself. Competition brings about innovation, better goods and “services at lower prices, and fosters job growth in the small business sector, which in turn leads to increased government revenue through more taxes and lower expenditures on programs for the unemployed, uninsured, etc.” (House of Representatives Report, 1995, p. 46).

B. SMALL BUSINESS POLICIES IN TURKEY

1. Before the Foundation of Turkish Republic: Ahilik and Lonca System

The origin of Turkish SMEs goes back to the thirteenth century. The system of “Ahilik” provided tradesmen with some services, such as social security and job training, and also represented the moral unity amongst tradesmen. In time, it gave way to the system of “Lonca,” which means a guild of artisans and merchants. It had a structure similar to today’s Chambers of Commerce. Its main function was to maintain the quality of goods and to standardize production. In the eighteenth century, after the industrial revolution, the Ottoman Empire lost its superiority in small businesses. This affected the “Lonca System” negatively. In the last period of the Ottoman Empire, some reforms were made to slow down the negative effects of the factors that had accelerated the collapse of small businesses. These reforms, however, could not prevent this collapse (KOSGEB, 2003).

2. The First Years of Turkish Republic: Private Sector Versus State Economic Enterprises

After the foundation of the Turkish Republic, the first step in the development of the Turkish Economy was Izmir Economic Congress. The purpose of this congress, which was held in 1923, was to determine the main principles for developing the economy with the contribution of the private entrepreneurs, especially Turkish ones. The first approaches regarding small businesses began to be formed in this Congress. The Industry Encouragement Law, which was effective until 1942, was enacted in 1927. The first description of the small enterprise was made by this law. According to this description, a small business must have had no more than 5 employees and 9 horses.

After the great depression, the interventionist approach to the economy was adopted by the government and Turkey switched to the planned economy. In 1930s, in terms of the government’s intervention to the economy, the active government approach was adopted instead of 1923’s passive government approach. While the main focus was

the development of the private sector in the first industrial plan (1933), it switched to an economy-based on the state economic enterprises in the second plan (1938).

In 1933, with law number 2284, Halk Bank was established to provide financial assistance to the SMEs. In 1943, Tradesmen Chambers were established with law number 4355. In 1964, with law number 507, structural organization was formed as chambers, unions, federations, and confederations (KOSGEB, 2003).

3. After 1970: Creation of Small Business Support Agencies

In 1973, the Small Industry Training & Development Center (KÜSGEM) was established in Gaziantep as a pilot project with the support of United Nations Industrial Development Organization (UNIDO). In 1983, it was replaced by a nation-wide organization, Small Industry Development Organization (KÜSGET), by an agreement with UNIDO. In 1978, according to the international agreement of “Providing Industrial Education Services,” which is approved with the decree of the Council of Ministers, Industrial Training & Development Center (SEGEM) was activated.

KÜSGET tried to:

- Give technical consultancy services to the small and medium scale enterprises by “Development Centers,”
- Apply the principles of modern business administration,
- Create awareness of world standard quality and make its usage widespread,
- Increase the level of technical manufacturing,
- Study the increase of the capacity of employment,
- Support the technical substructure for the modern business administration skills.

On the other hand, the SEGEM:

- Organized many programs for meeting the education requirements of the technical staff and managers in the Small and Medium Enterprises,
- Became a service organization promoting lifelong education mentality (KOSGEB Web site).

4. After 1990: Creation of KOSGEB and the European Union Accession Efforts

Since the services provided by KÜSGET and SEGEM were not satisfactory, there appeared “a need for making a legal arrangement and composing these two organizations under one roof which has a wider scope and can provide periodic and widespread services.” Additionally, Turkey was aiming to increase “the competitiveness, effectiveness and scale of Turkish SMEs and integrating the industry with the economical developments.” Accordingly, Small and Medium-sized Enterprises Development Organization (KOSGEB) was established in 1990 (KOSGEB Web site).

To emphasize the importance given the SMEs, 1996 was announced to be the year of SMEs (KOSGEB, 2003).

Turkey accessed the Customs Union to the European Union in 1996, which “intensified the influence of international competition on Turkish industry, especially SMEs. The first SME Action Plan was introduced at that time, but it was not implemented owing to lack of funding.” After “the acceptance of Turkey’s application for membership in the European Union, the policy of support for SMEs was coordinated with that of the EU in order to enable Turkish SMEs” to compete “with their counterparts in the EU” (OECD, 2004, p. 10).

5. After 2000: Issuance of SME Strategy and Action Plan

The Turkish government signed the European Charter for Small Enterprises in 2002 and agreed to take necessary steps to develop policies and programs for SMEs. Turkey participated in the Multi-annual Program for Enterprise and Entrepreneurship and the Business Environment Simplification Taskforce (BEST) Program. The Turkish

government also adopted the Bologna Charter on SME policies in 2000 (OECD, 2004). In the Bologna Charter on SME Policies, it is recommended that in developing SME policies, it should be considered that the SME access to national and global innovation networks should be facilitated and their participation in public R&D programs and procurement contracts should be encouraged.

In the eighth Five-year Development Plan (2001-05), the development of SMEs was discussed under a different title. The SME policy stated in this plan aimed “to improve the productivity of Turkish SMEs and enhance their international competitiveness. Based on international best practices, the plan call[ed] for raising product quality and enhancing the innovation and technology capacity of small business through collaboration with universities, introduction of new financing instruments, such as risk capital, and modern management techniques.” To develop the export capabilities of SMEs, partnerships with foreign companies was also encouraged. Also, it was decided to create joint centers at local level and synergy focal points between KOSGEB and Union of Chambers and Commodity Exchanges of Turkey (TOBB) to improve and expand service delivery to SMEs (OECD, 2004, p. 11).

As for the SME policy making, SME Strategy and Action Plan (2004–2006) was prepared by “SME Study Group,” which was composed of representatives from many government and private institutions that support SMEs, such as KOSGEB, Ministry of Industry and Trade, TOBB, Undersecretariat of Treasury, Confederation of Tradesmen and Artisans of Turkey (TESK), TÜİK, DPT, and Undersecretariat of Foreign Trade (DTM). In November 2003, it was approved by the High Planning Council and activated. The main purpose of this plan was to develop and implement a national SME strategy compatible with the principals stated in European Charter for Small Enterprises and the purposes stated in Multiannual Program for Enterprise and Entrepreneurship, particularly for SMEs (DPT, 2007).

The SME Strategy and Action Plan aimed “to determine the scope of existing policies, programs and the activities within this scope in detailed way; to express clearly the responsibilities of public and private organizations for achieving desired the objectives, and to formulate all of the required actions and projects” (DPT, 2004, p. 7). In

2007, some revisions were made on this plan as part of the works carried out to make Turkish legislation compatible with the European Union Legislation. The revised SME Strategy and Action Plan covering the period 2007–2009 was approved by the High Planning Council in May 2007 and activated (DPT, 2007).

6. SME Policy of Turkey

The main objective of Turkey’s SME policy is “to improve the productivity of the SMEs, to increase their share within total value added and to enhance their international competitiveness.” SME support programs aim “to develop the SMEs, which have positive impacts on creating a competitive market, increasing employment, development of the entrepreneurship, and improvement of income distribution (The Coordination Council for the Improvement of the Investment Environment (YOİKK), 2010, p. 1).

The first policy instrument is the SME Strategy and Action Plan, as was mentioned above, which was developed in 2003, and then revised in 2007. Regarding the activities to be put into effect within the scope of the SME Strategy and Action Plan, five “Strategy Fields” were determined for the purpose of promoting and supporting the SMEs. For each strategy field, the main problematic fields, the issues that need improvement, the targets, priorities, and the policies were specified. The strategy fields stated in this document are:

- Improvement of entrepreneurship,
- Enterprise development,
- Integration of SMEs into international markets,
- Improvement of business environment,
- Developing technological and innovative capacity.

Another policy instrument is the creation of the SME Technical Committee under the Coordination Council for the Improvement of the Investment Environment (YOİKK). YOİKK “has become a key structure where private sector makes contributions in the process of improving investment climate. It conducts its agenda with the help of 12 Technical Committees working on specific issues with participation of both public and

private institutions,” one of which is the SME Technical Committee (YOİKK, 2010, p. 2). The Action Plan of the SME Technical Committee has the following activities:

- Improving the systems for credit guarantee and venture capital companies,
- Making necessary amendments in the current legislation to enlarge the scope of KOSGEB supports to cover sectors beside manufacturing,
- Improving cluster policy for SMEs,
- Preparing a development strategy for service sectors,
- Encouraging SMEs to conform to environmental laws and regulations.

SME Support Organizations: In Turkey, there are several institutions that “have been involved in the formulation and implementation of SME policies” (YOİKK, 2010, p. 3). Table 6 indicates the functions of these institutions. Among those, KOSGEB has an important place. Therefore, this thesis suggests that it could be helpful if some information about its functions, organizational structure, and support system is provided.

Actors	Functions
Public	
Ministry of Industry and Trade (MIT)	Facilitates determination of industrial policies, provides and encourages rapid and sustainable development of industry, promotes competitiveness of SMEs, holds records of the industrial enterprises.
Undersecretariat of State Planning Organization (SPO)	Prepares long-term development plans and annual programs, develops future-oriented strategies and policies in cooperation with related institutions.
Small and Medium Industry Development Organization (KOSGEB)	Support mechanisms for increasing competitiveness of SMEs, encouraging entrepreneurship and innovative start-ups.
The Undersecretariat of Treasury	State aid for investments, financial transfers to public enterprises.
The Undersecretariat of Foreign Trade	Support mechanisms for improving export capacity.
Ministry of Labor and Social Security	Rules for employment, registration.
Ministry of Finance	Taxation, finance matters for enterprises.
The Scientific and Technological Research Council of Turkey (TUBITAK)	Support and policy making for R&D, scientific research, innovation activities
NGOs	
The Union of Chambers and Commodity Exchanges of TURKEY (TOBB)	Represents private sector, ensures unity and solidarity between chambers and commodity exchanges, facilitates professional work of members, and promotes confidence in the relations of members with the public.
The Confederation of Tradesmen and Artisans of Turkey (TESK)	Coordinates and represents tradesmen, craftsmen chambers and the federations, takes vocational measures for its members according to national and global economic development, provides vocational training.
Vocational Training and Small Industry Supporting Foundation (MEKSA)	Aims to promote quality of workers for SMEs through vocational training at national level.
Turkish Technology Development Foundation (TTGV)	Supports technology development projects.
Turkish Foundation for Small and Medium Business (TOSYOY)	Feedback for consultation mechanisms.
Major Financial Institutions	
Banks	Credits
ISRISK, VAKIFRISK, KOBİ A.Ş.	Venture Capital
KGF, TESKOMB	Guarantees

Table 6. Functions of the Small and Medium Sized-Enterprises (SMEs) Support Organizations (From YOİKK, 2010, p. 3)

The Functions and Organizational Structure of KOSGEB: KOSGEB, which was established to support SMEs operating in the manufacturing industry, is a governmental institution tied to the Ministry of Industry and Trade. Its main functions are “to increase the share and effectiveness of small and medium sized manufacturing

industry, raise their competitiveness, and realize integration within industry in line with economic developments and national policies” (YOİKK, 2010, p. 4). Under KOSGEB’s organizational structure, there are departments responsible for developing policies and models, such as Economic and Strategic Research Center, Entrepreneurship Development Center, Regional and Local Development Center, Market Research and Export Promotion Center, Finance Center, and Training and Consultancy Center. Departments are responsible for supplying services to SMEs around the country, such as Technology Development Centers (TEKMER), Enterprise Development Centers (IGEM), Regional Industry Development Centers (BSGM), and Synergy Centers. This also includes departments responsible for monitoring, evaluation, coordination, and audit, such as Foreign Relations Coordination Department, Strategy Development Department, and SME Loan Management and Monitoring Center (Tezyetis, 2007).

The SME Supports Provided by KOSGEB: Until 2009, KOSGEB were supporting SMEs only operating in the manufacturing industry. “KOSGEB’s mandate was extended to all enterprises, including the services sector, by an amendment to the law establishing the organization,” however, in May 2009 (European Commission (EC), 2009, p. 66). Therefore, according to State Statistical Institution (TÜİK) 2005 data, the number of beneficiaries of KOSGEB increased from 301,291 enterprises to 2,391,229 enterprises,” but the sectors to be supported by KOSGEB are being selected annually by the Council of Ministers (YOİKK, 2010, p. 11). KOSGEB supports are classified into two groups:

- Supports under KOSGEB Support Regulation,
- SME Credit Support Mechanism.

(1) As for supports under KOSGEB Support Regulation, SMEs “have been directed to strategic objectives depending on their capacity and competitiveness power after being registered in KOSGEB database. Additionally, enterprises identify the route to get to their destinations with Strategic Road Map (SRM) and type of support is determined according to objectives in the SRM” (YOİKK, 2010, p. 5).

(2) Application steps of support mechanism are:

- Screening,
- Strategic Road Map,
- Support Implementation,
- Monitoring.

Supports provided within the framework of KOSGEB Support Regulation include:

- Training and Consultancy Support,
- Technology Development & Innovation Support,
- Informatics Support,
- Quality Development Support,
- Market Research & Export Promotion Support,
- International Cooperation Support,
- Regional Development Support,
- Entrepreneurship Development Support (Tezyetis, 2007).

As shown in Table 7, the dollar amount of supports provided within the framework of KOSGEB Support Regulation has had an upward trend since 2000 and reached 240 million dollars level in 2006.

Year	Amount of Support (Million Dollar)
2000	2,8
2001	3
2002	4,9
2003	82,6
2004	101,1
2005	47
2006	240

Table 7. Support Amount Figures of KOSGEB (From Tezyetis, 2007, p. 40)

(3) As for the SME Credit Support, “by starting 2003, some amount of KOSGEB budget has been allocated to SMEs in low or zero interest rates by the intermediary banks.” In other words, SME Credit Support is an interest rate support on bank loans (YOİKK, 2010, p. 10). KOSGEB offers a number of credit programs on various areas such as:

- Export Promotion,
- New Employment,
- IT Infrastructures of SMEs,
- Moving the Leather Sector to Industrial Zones,
- Machinery and Equipment for Food Sector.

Between 2003 and 2007, 16,209 SMEs have benefited from financial support credits valued at 1.9 billion TLs (\$1.27 billion) (Tezyetis, 2007).

C. CHAPTER SUMMARY

This chapter articulates the problems and challenges, as well as legislative solutions, and small business policies in the U.S. and Turkey. The next chapter explains the relationship between small businesses and defense buyers.

IV. DEFENSE PROCUREMENT AND SMALL BUSINESSES RELATIONSHIP IN THE UNITED STATES AND TURKEY

A. SMALL BUSINESS AND DOD RELATIONSHIP IN THE UNITED STATES

This chapter provides some detailed information about the DoD and Small business relationship. Congress has attempted to maximize the small businesses acquisition opportunities in the federal procurements for more than a century. The Small Business Reauthorization Act of 1997 established a government-wide procurement goal by increasing the minimum share of small business services and goods from 20 percent to 23 percent (Army Material Command, 2001). Amongst all of the government buys, DoD plays an important role for small businesses.

As shown in Figure 3, DoD purchases have comprised approximately 60-80 percent of overall government procurements for the last 25 years. As a result, the purchasing power of DoD greatly affects the overall federal procurement goals (Table 9 depicts summary of Small Business Programs' Legislation and Designated Goals). Because DoD makes the largest purchases in the federal government, it plays a key role in achieving the small business goals (Moore, Clifford, & Monica, 2007).

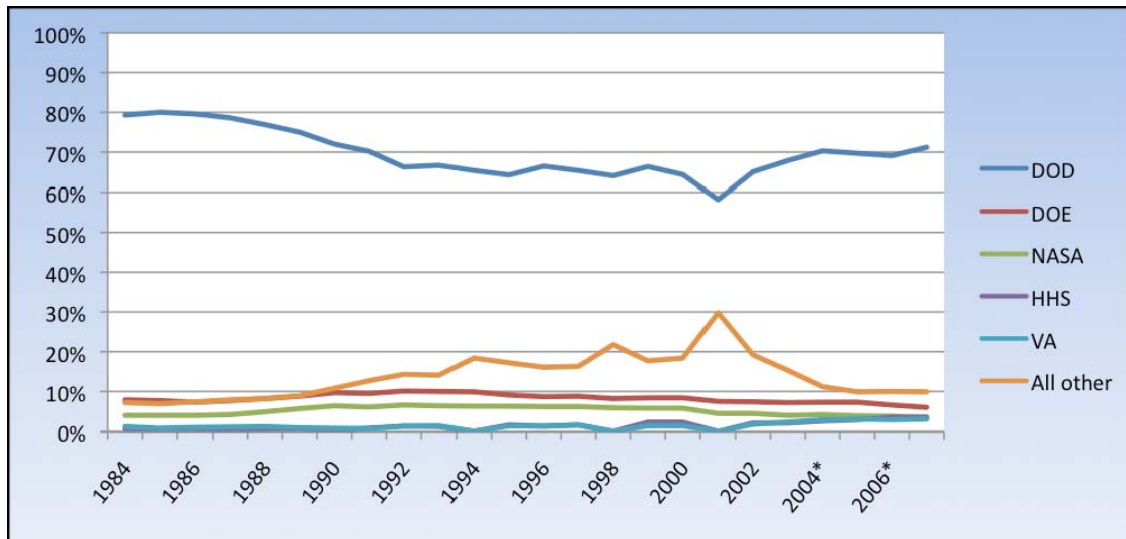


Figure 3. Shares of Total Federal Prime Contract Dollars by Major Agency Source, in Contract Actions over \$25,000 for FY 1984–FY 2003, and in Total for FY 2004–FY 2007 (After FPDS, 2009)

* In 2004, the General Services Administration and the Office of Federal Procurement Policy (OFPP) introduced the fourth generation of the FPDS. The FPDS-NG data shown here for FY 2004–FY 2007 reflects all contract actions available for small business competition (excluding some categories), not just those over \$25,000. The figures are not strictly comparable with those shown for previous years. DoD = Department of Defense; DOE = Department of Energy; NASA = National Aeronautics and Space Administration; VA = Department of Veterans Affairs. Note: Percentages shown are the agencies' percentages of total contract dollars, not just small business contract dollars.

Major Small Business Programs in DoD

The basic goal of the Small Business Programs is “to foster free competition which is basic to the economic well-being and security of the Nation” (Army Material Command, 2001, p. 4). Because small businesses lack necessary clout and resources that large businesses have, these federal contracting programs aid and assist small businesses (H. R. Rep. No. 104-14, 1995). Basically, small business programs deal with the “natural tendency of contracting officers” to award government contracts to less risky and familiar large businesses (H. R. Rep. No. 104-14, 1995, p. 21). That natural tendency exists in the nature of every individual when choosing goods and services to buy from different sources. People tend to pick from well-known sources instead of new, untried sources,

even though the new sources are generally cheaper. That said, these new, untried sources introduce innovations and their delivery times can be shorter (H. R. Rep. No. 104-14, 1995).

In 1994, the government programs saved approximately “\$220 million of government and taxpayers by helping the low bidder to receive contracts through the COC process and by fostering competition through our Prime Contracts program” (H. R. Rep. No. 104-14, 1995, p. 21).

Goaling Program: Since the establishment of the Select Committee on Small Business in 1941, the Small Business Program has tried to make small businesses thrive in a difficult economy. Congress tried to give the necessary economic stimulus and fair proportion of government contracts to small businesses via acts and executive orders. This program achieved the best contribution with the passing of the Small Business Act in 1953. With this act, Congress was able to establish the SBA, “whose function was to aid, counsel, assist and protect, insofar as is possible, the interests of small business concerns” (United States Congress, 1953: Sec 2 (a)). The act has given the SBA the responsibility to decide and create small business size standards for each industry. The Small Business Reauthorization Act of 1997 established a government-wide procurement goal by increasing the minimum share of small business services and goods from 20 percent⁹ to 23 percent (Army Material Command, 2001). The Federal Acquisition Regulation (FAR) established a common regulation which all agencies use for government contracts:

It is the policy of the government to provide “maximum practicable opportunities” in its acquisitions to small business, veteran-owned small business, service-disabled veteran owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. Such concerns must also have the “maximum practicable opportunity” to participate as subcontractors in the contracts awarded by any executive agency, consistent with efficient contract performance. The Small Business Administration (SBA) counsels and assists small business

⁹ Business Opportunity Development Reform Act of 1988 (Public Law 100-656) created the 8(a) program and assigned a 20 percent goal for the federal agency prime contracts (Philip, 2009).

concerns and assists contracting personnel to ensure that a fair proportion of contracts for supplies and services are placed with small business (FAR 19.201).

Small Business Subcontracting Program: The purpose of the Subcontracting Program is “to highlight the importance of small business participation as subcontractors to program managers and executives in industry and DoD” (DoD Office of Small Business Program, 2008, p. 5).

FAR Part 19.702 requires any contractor who is awarded above the statutory threshold to give the maximum practicable opportunity to small business concerns (small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business) as subcontractors consistent with efficient performance. FAR Part 17.702(a) states:

(1) In negotiated acquisitions, each solicitation of offers to perform a contract or contract modification, that individually is expected to exceed \$550,000 (\$1,000,000 for construction) and that has subcontracting possibilities, shall require the apparently successful offeror to submit an acceptable subcontracting plan. If the apparently successful offeror fails to negotiate a subcontracting plan acceptable to the contracting officer within the time limit prescribed by the contracting officer, the offeror will be ineligible for award.

(2) In sealed bidding acquisitions, each invitation for bids to perform a contract or contract modification, that individually is expected to exceed \$550,000 (\$1,000,000 for construction) and that has subcontracting possibilities, shall require the bidder selected for award to submit a subcontracting plan. If the selected bidder fails to submit a plan within the time limit prescribed by the contracting officer, the bidder will be ineligible for award.

Figure 4 depicts how much share small businesses have been awarded from prime and subcontracting dollars. While prime contract share of small businesses changes between 20–25 percent, share of subcontracting dollars floated at 30–45 percent.

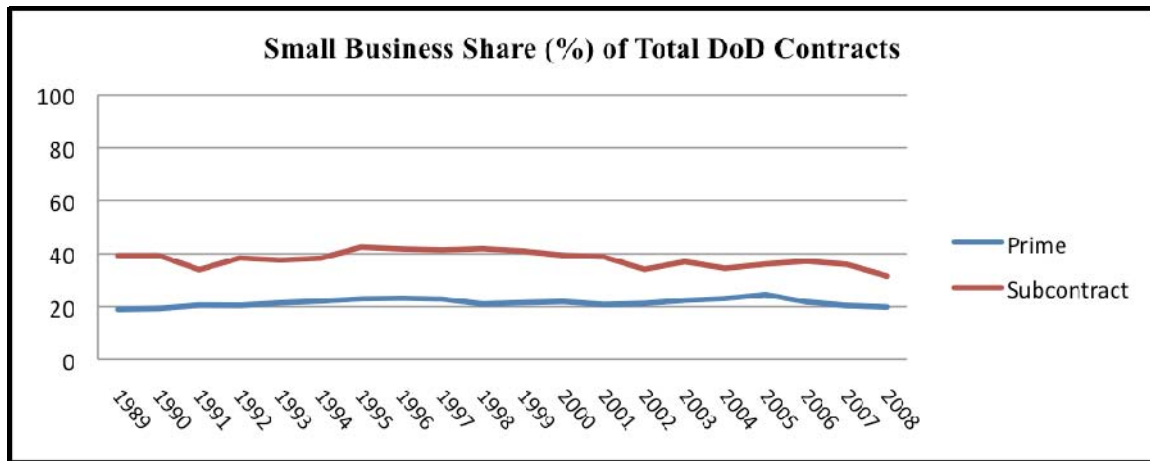


Figure 4. Shares of Total Small Business Prime and Subcontracting Dollars (After DoD OSBP, 2009)

DoD Mentor Protégé Program¹⁰: “The purpose of the program is to provide incentives for DoD contractors to assist small disadvantaged businesses, and other types of small businesses, in enhancing their capabilities and to increase participation of such firms in government and commercial contracts” (Defense Federal Acquisition Regulation Supplement (DFARS) Subpart 219.71).

The program helps large DoD contractors (mentors), “performing under at least one active approved subcontracting plan negotiated with DoD,” to assist small firms (protégés) “in enhancing their capabilities to satisfy DoD and other contract and subcontract requirements; increase the overall participation of small firms as subcontractors and suppliers under DoD contracts” (Army Material Command, 2001, p. 20). The program implements financial helps through mentors with “cash reimbursement and credit toward subcontracting goals for small disadvantaged businesses” (Moore, et al., 2009, p. 51).

The DoD sponsors the Pilot Mentor-Protégé Program as a way to seek and encourage major DoD prime contractors to develop strong business relationships with small businesses. This helps promote the technical and business capabilities of small

¹⁰ The Program established under Section 831 of the National Defense Authorization Act for Fiscal Year 1991 (P. L. 101-510; 10 U.S.C. 2302 note).

disadvantaged businesses and other eligible protégés (DoD OSBP, 2008). With this in mind, the program enabled the large businesses (mentors) to behave as a team with small enterprises (protégés) when “developing new technologies on which the mentors could capitalize” (Moore et al., 2009, p. 51). As a result, small businesses in the program would improve their experience and they would be exposed to the DoD marketplace and, at the end, they would be competent enough to supply goods and services to DoD and other federal agencies as subcontractors or even prime contractors (Moore et al., 2009).

As seen in Figure 7, small disadvantaged businesses passed the 5 percent goal of DoD subcontract awards in 1990s. The share of the small disadvantaged businesses for the DoD subcontracting dollars, however, have fallen from that 5 percent goal as the last decade (as seen in Figure 7).

GAO (1998) report states there is a lack of sufficient and reliable program information which would enable performance assessment. Because “DoD was not measuring the impact of the program on participating and former protégé firms, neither DoD nor Congress had the information needed to oversee the program” (Government Accountability Office, 2007, p. 12).

Between the 1998 and 2006, “for which data are available, protégés have reported aggregate annual net employment gains roughly between 1,400 and 4,000 workers and aggregate annual net revenue gains (as measured in FY 2009 constant dollars) between \$190 million and \$1.1 billion” (Moore et al., 2009, p. 53). As seen in Figure 5, the figures of employees and revenues moved parallel.

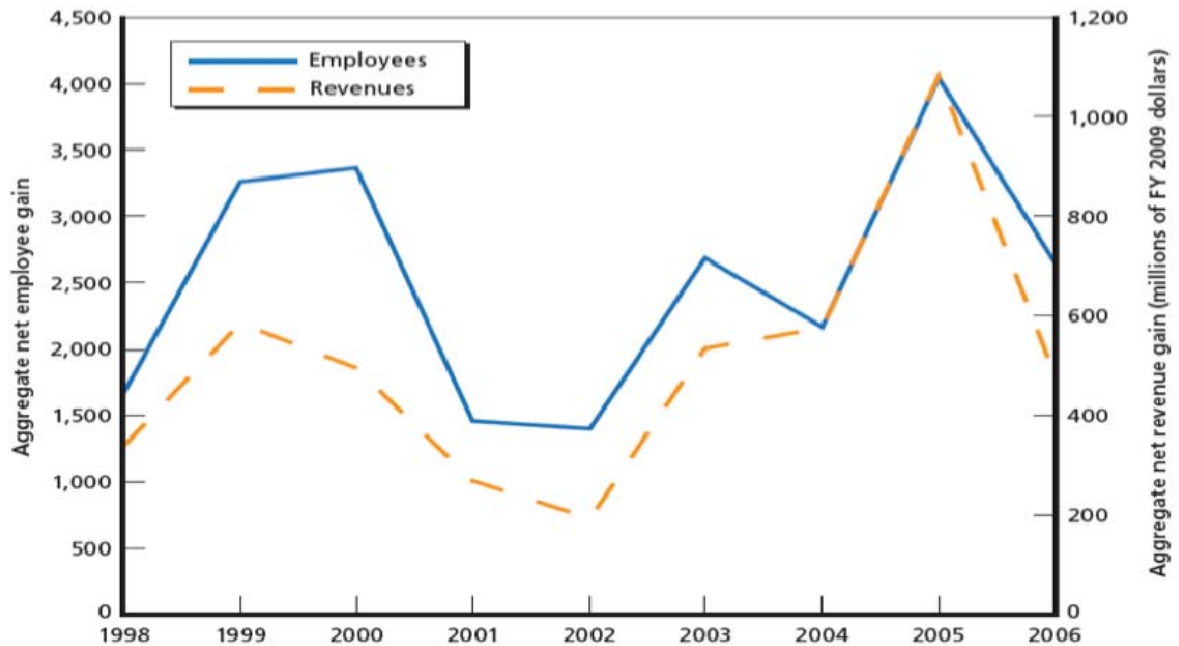


Figure 5. Aggregate Employment and Revenue Gains for Protégé Participants (From Moore et al., 2008, p. 53)

As seen in Figure 6, between 2000 and 2006 mentor and protégés preferred direct reimbursement from mentors rather than to receive subcontracting goal credit. Reimbursements play a key role in attracting mentors for the program. There are two important surveys that prove the fact that the program would have fewer participants if the reimbursement opportunity would not exist.

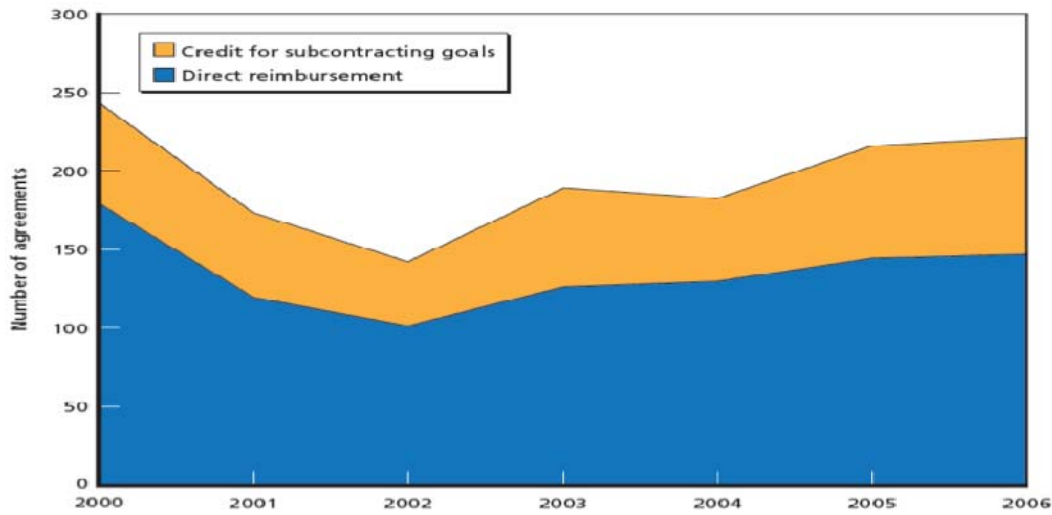


Figure 6. Mentor-Protégé Agreements, by Type (From Moore et al., 2008, p. 54)

According to surveys of Jennings et al. (2000) and Jennings, Koch, and Mercer (2006), more than two-thirds of the mentors mentioned they would not participate in the program if there was not direct reimbursement of their mentor costs. Others stated that they would participate less if there was no direct reimbursement opportunity.

The program made important contributions by helping in “developing and transferring new technologies to the DoD in rapidly evolving industries such as robotics and global positioning system software” (Moore et al., 2009, p. 56).

Historically Underutilized Business Zones (HUBZone) Program: The objective of the program is to assist “small business concerns located in historically underutilized business zones” with federal contracting opportunities (FAR Part 19.1301). This assistance program will contribute to job creation, new investments, and economic progression in these areas (FAR Part 19.1301). Figure 7 shows the share of DoD contract dollars awarded to the HUBZone.

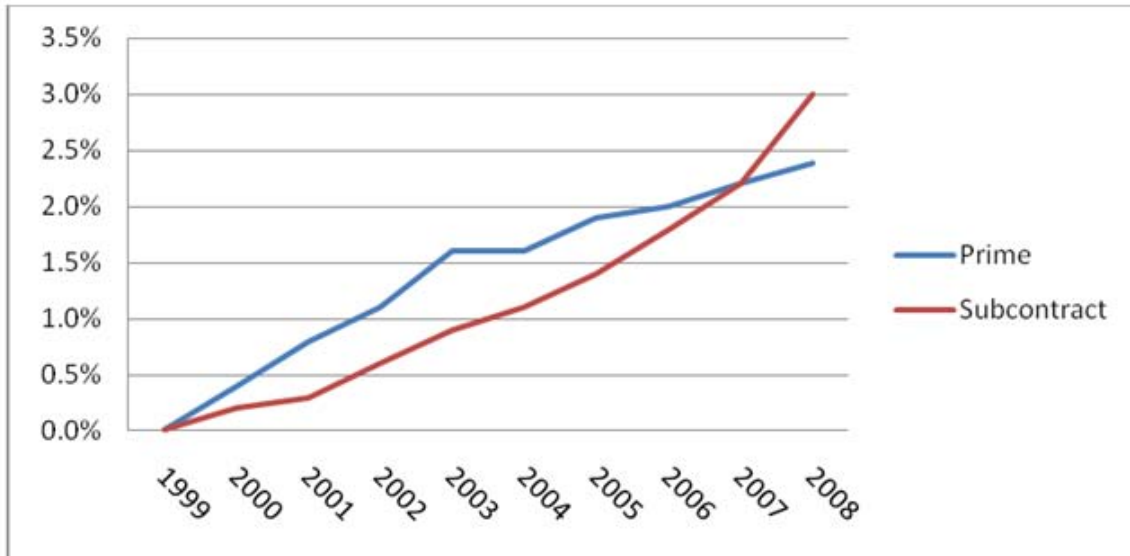


Figure 7. Shares of HUBZone Contracting Dollars (After DoD OSBP, 2009)

Service Disabled Veteran Owned Small Business (SDVOSB): The purpose of the program is to improve prime and subcontracting assistance and opportunities for veteran and service-disabled veteran-owned small business concerns (FAR Subpart 19.14). The DoD tries to prove its commitment to the veterans by “making the maximum practicable prime and subcontracting opportunities available to such firms” (DoD OSBP, 2008, p. 3). Figure 8 shows the share of DoD contract dollars awarded to the SDVOSB.

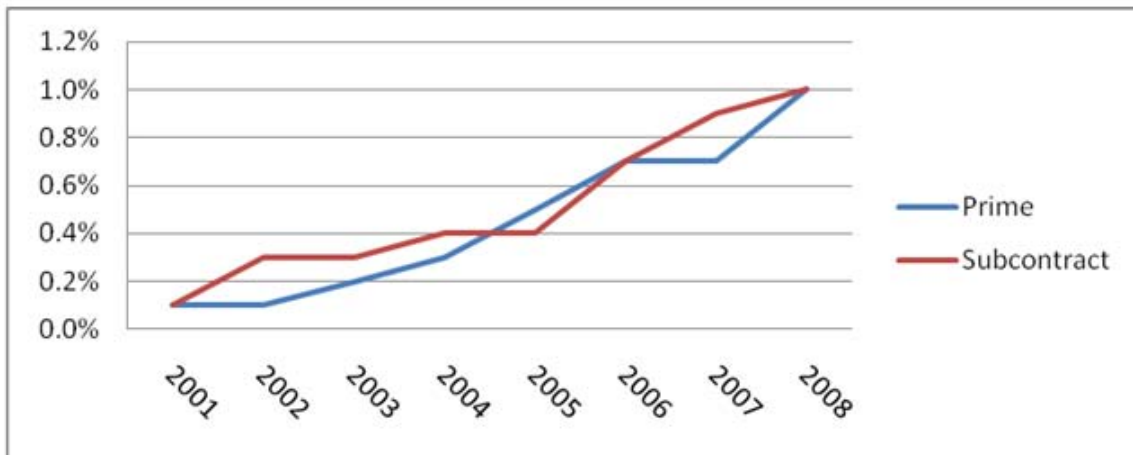


Figure 8. Shares of Service Disabled Veteran Owned Small Business Business Contracting Dollars (After DoD OSBP, 2009)

Minority Business Enterprise Program and Small Disadvantaged Business (SDB) Program: Initial factor of the program was to eliminate gender and race discrimination in business. By establishing a Minority Business Development Agency on March 5, 1969, “President Nixon recognized the impact of minority businesses on the nation’s economy and on the general welfare of the country” (Minority Business Development Agency, 2009, para. 1).

Public Law of 1978 changed the term “minority business” to “disadvantaged business.” National Defense Authorization Act of 1987 “established a 5% goal for contract awards to Small Disadvantaged Businesses throughout DoD and provided for a 10% evaluation preference to these firms competing in full and open solicitations” (Army Material Command, 2001, p. 6). Figure 9 shows the share of DoD contract dollars awarded to the SDB.

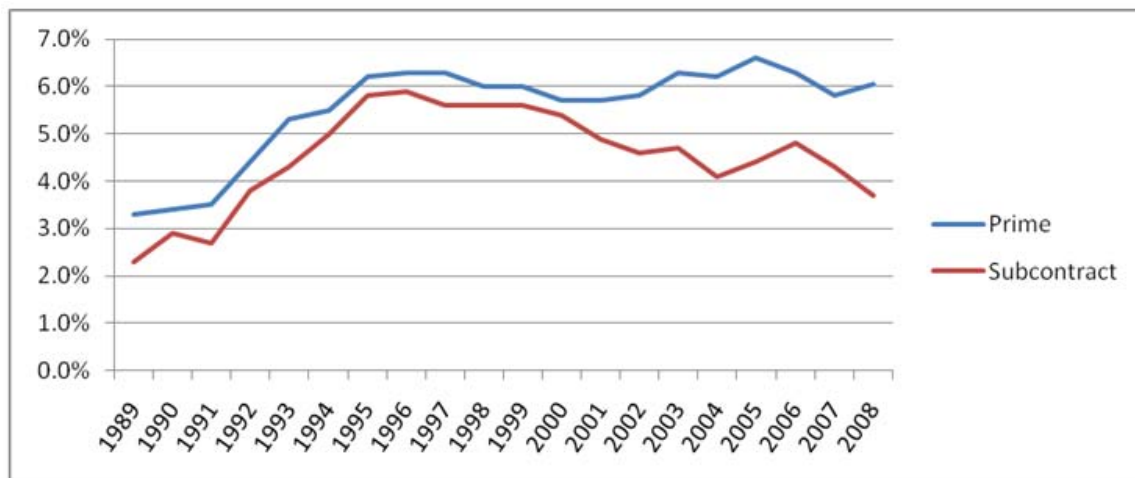


Figure 9. Shares of Small Disadvantaged Businesses Contracting Dollars (After DoD OSBP, 2009)

Certificates of Competency Program: “The COC program empowers the SBA to certify to government contracting officers as to all elements of responsibility of any small business concern to receive and perform a specific government contract” (FAR 19.601). DoD is a user of this program.

Indian Incentive Program¹¹: The purpose of the program is to encourage prime contractors “to use Indian organizations and Indian-owned economic enterprises as subcontractors” by providing a 5 percent rebate to the prime contractors on the subcontracted dollars (FAR Subpart 26.1).

Women-Owned Small Businesses (WOSB) Program: The WOSB program objective of DoD is to provide “effective outreach, training and technical assistance in order to increase the accessibility of WOSB concerns to DoD procurement opportunities” (DoD Office of Small Business Program, 2007, para.3). DoD tries to succeed in its 5 percent goal for prime and subcontract awards to WOSB. “Annually, the DoD awards nearly \$2 billion in prime contracts and \$2.4 billion in subcontracts to WOSB concerns” (DoD Office of Small Business Program, 2007, para. 2). Section 807 of the National Defense Authorization Act of 2001 (P.L. 106-398) expanded the DoD mentor-protégé program to include WOSB (Army Material Command, 2001). Figure 10 shows the share of DoD contract dollars awarded to the WOSB.

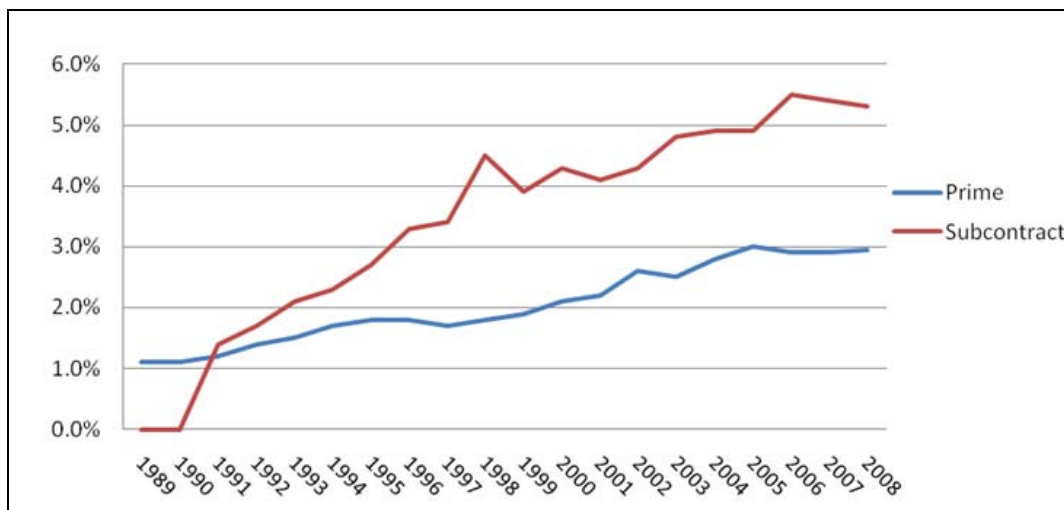


Figure 10. Shares of Women-Owned Small Businesses (WOSB) Contracting Dollars (After DoD OSBP, 2009)

DoD Small Business Innovation Research (SBIR) Program: The program creates a competitive environment that provides incentives to small businesses to enhance

¹¹ Indian Incentive Program implements 25 U.S.C. 1544.

their “technological potential” and motivates them to “profit from their commercialization” (H. R. Rep. No. 104-14, 1995, p. 142). Government benefits from their innovations and R&D studies when meeting “its specific research and development needs” (H. R. Rep. No. 104-14, 1995, p. 142).

“The SBIR program funds early-stage R&D at small technology companies and is designed to: stimulate technological innovation, increase private sector commercialization of federal R&D, increase small business participation in federally funded R&D, foster participation by minority and disadvantaged firms in technological innovation” (DoD SBIR & STTR Programs, 2009, para. 3). It is a three-phased program as seen in Table 8.

	SBIR	STTR
Phase I: Project Feasibility	6 months up to \$150,000	12 months up to \$150,000
Phase II: Project Development to Prototype	2 years up to \$1,000,000	2 years up to \$1,000,000
Phase III: Commercialization	Commercialize, with non-SBIR/non-STTR funds, the technology in military and/or private sector markets	

Table 8. Three Phased Program of Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) from (After DoD OSBP, 2009)

Under DoD’s SBIR Program up to \$1,150,000 in early-stage research and development funding is available to small technology companies (or individuals who form a company) (DoD SBIR & STTR Programs, 2009). Figure 11 shows the SBIR dollars awarded to the small businesses for R&D.

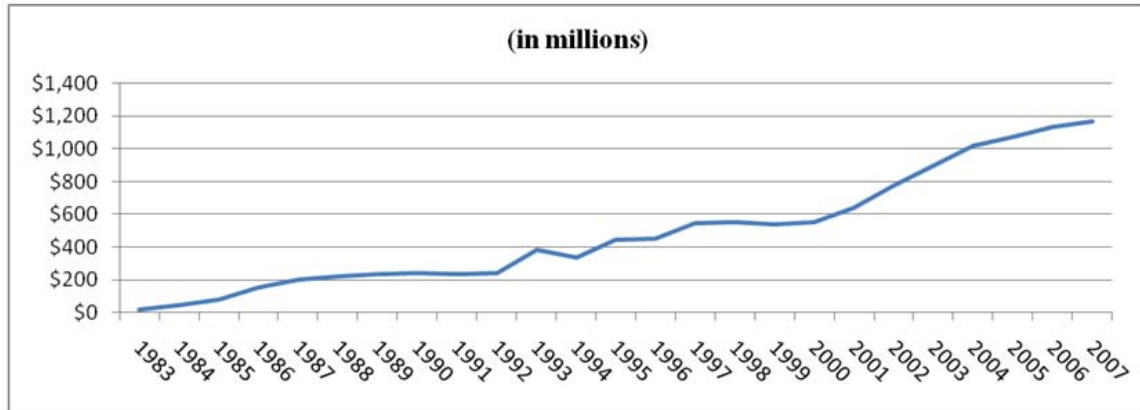


Figure 11. Small Business Innovation Research (SBIR) set aside Dollars awarded to Small Businesses (After DoD OSBP, 2009)

Some examples of successful outcomes of the SBIR program are:

- Airborne Remote Optical Spotlight System,
- Process which Disinfects Water,
- Small Arms Protective Inserts (SAP),
- Ducted-Fan Unmanned Aircrafts Systems (UAS),
- Night Vision Goggle Simulators,
- Smart Bomb Rack,
- Unmanned Aerial Vehicles Control Technology.

DoD Small Business Technology Transfer (STTR) Program: The STTR resembles SBIR. STTR, however, “funds cooperative R&D projects involving a small business and research institution,” such as “universities, federally-funded R&D centers or nonprofit research institutions” (DoD SBIR & STTR Programs, 2009, para. 6). The STTR aims to convey ideas from research institutions to the free market, where both military and private sector can use the good ideas (DoD SBIR & STTR Programs, 2009).

It is designed to combine two beneficial and powerful sources to improve the technology: “(1) the entrepreneurial talent of the high-tech small business and (2) the

innovative ideas, science and engineering expertise, and facility resources of the nation's universities and research institutes" (Army Material Command, 2001, p. 21). It is a three-phased program as seen in Table 8.

"Historically, about 15 percent of SBIR and STTR proposals are awarded a phase I contract; approximately 40 percent of phase I projects subsequently are awarded a phase II contract" (DoD SBIR Resource Center, para. 5). Figure 12 shows the STTR dollars awarded to the small businesses.

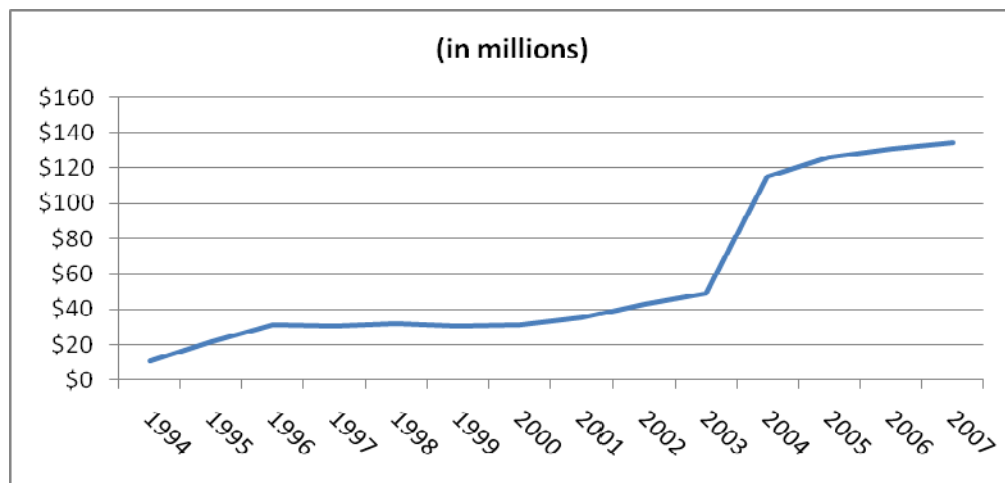


Figure 12. Small Business Technology Transfer (STTR) Set-aside Dollars (After DoD OSBP, 2009)

Small Business Set-Aside Program: This program established under section 15(a) of the Small Business Act (15 U.S.C. § 644(a)). "The purpose of small business set-asides is" to reserve and "award certain acquisitions exclusively to small business concerns" (FAR 19.501a). Set-asides may be awarded totally (entire purchase) or partially (part of the purchase) (FAR Part 19.501a).

The determination to make a small business set-aside may be unilateral (by contracting officer) or joint (recommended by SBA and agreed by contracting officer) (Part 19.501). "Contracting Officers (CO) are responsible for ensuring acquisitions are set-aside for HUBZone Small Business Concerns (SBCs) and small business, when regulatory requirements are met" (Small Business Set-Aside Fact Sheet).

Program	Legislation	Program's Goals
Goaling Program	The Small Business Reauthorization Act of 1997 (P.L. 105-135)	23% of total business \$
Small Business Subcontracting	Amendment to the Small Business Act (PL 95-507) in 1978	23% of total subcontracted dollars
Small Disadvantaged Business (Prime)	National Defense Authorization Act of 1987 (P.L. 99-661)	5% of the total U.S. Business base
Small Disadvantaged Business Subcontracting	National Defense Authorization Act of 1987 (P.L. 99-661)	5% of total subcontracted dollars
Women-Owned Small Business (Prime)	Executive Order 12138 signed in May 1979 and Federal Acquisition Streamlining Act of 1994 (P.L. 103-355)	5% of the total U.S. Business base
Women-Owned Small Business Subcontracting	Executive Order 12138 signed in May 1979 and Federal Acquisition Streamlining Act of 1994 (P.L. 103-355)	5% of total subcontracted dollars
HUBZone (Prime)	The Small Business Reauthorization Act of 1997 (15 U.S.C. 631), Revision (2003)	3% of all Federal prime contracts
HUBZone (Subcontracting)	Historically Underutilized Business Zone (HUBZone) Act of 1997 (P.L. 104-135) (15 U.S.C. 631 note), Revision (2003)	3% of total subcontracted dollars
Veteran-Owned Small Business and Service-Disabled Veteran-Owned Small Business (Primary)	Veterans Entrepreneurship and Small Business Development Act of 1999 (P.L. 106-50) and Veterans Benefits Act of 2003	3% of total awards
Veteran-Owned Small Business and Service-Disabled Veteran-Owned Small Business (Subcontracting)	Veterans Entrepreneurship and Small Business Development Act of 1999 (P.L. 106-50) and Veterans Benefits Act of 2003	3% of total subcontracted dollars
Indian Incentive Program	Indian Financing Act of 1974 (Public Law 93-262)	5% rebate to prime contractors
Mentor-Protegé Program	National Defense Authorization Act of 1991 (Pub. L. 101-510)	Incentivize Mentors to assist Protégés
Set-Aside Program	Section 15(a) of the Small Business Act 15 U.S.C. 644(a)	Reserving and awarding certain acquisitions exclusively to small businesses
Section 8(a) Business Development (BD) Program	Section 8(a) of the Small Business Act of 1958 (P.L. 85-536) and established by P.L. 95-507 in 1974.	Assisting for contracting opportunities
Small Business Innovation Research (SBIR) Program	Small Business Innovation Development Act of 1982 and reauthorized by the Small Business Research and Development Enhancement Act of 1992	Giving R&D opportunities to small business
Business Technology Transfer (STTR) Program	Small Business Technology Transfer Act of 1992 and Public Law 102-564	Giving R&D opportunities to small business and research institutions

Table 9. Legislation and Designated Goals of Small Business Program. Prepared Based on Identified Legislation and Associated Small Business Programs

Section 8(a) Business Development Program: The program “authorizes the SBA to enter into all types of contracts with other agencies and let subcontracts for performing those contracts to firms eligible for program participation. The SBA’s subcontractors are referred to as ‘8(a) contractors’” (Far Part 19.800).

The 8(a) Program is a business development program that helps disadvantaged business firms compete in the American economy by assisting in the expansion and development of existing, newly organized, or prospective profit-oriented small firms. Under this program, the government awards prime contracts to the SBA, which in turn, subcontracts with one of its approved 8(a) contractors. By Partnership Agreement dated February 1, 2002, between the Small Business Administration (SBA) and the Department of Defense (DoD), the SBA delegated to the Under Secretary of Defense (Acquisition, Technology, and Logistics) its authority under paragraph 8(a)(1)(A) of the Small Business Act (15 U.S.C. 637(a)) to enter into 8(a) prime contracts, and its authority under 8(a)(1)(B) of the Small Business Act to award the performance of those contracts to eligible 8(a) Program participants. However, the SBA remains the prime contractor on all 8(a) contracts, continues to determine eligibility of concerns for contract award, and retains appeal rights under FAR 19.810. (Army Material Command, 2001, p. 23)

Procurement Technical Assistance (PTA) Cooperative Agreement Program:

The purpose of this program is “to help small businesses in understanding Acquisition Regulations and DoD Contracting” (Public Law 98-525). The program is funded by Defense Logistics Agency (DLA). The Procurement Technical Assistance Centers (PTA) teaches small businesses the basics of doing business with DoD.

There are also programs like Comprehensive Subcontracting Test Program or Competitiveness Demonstration Program that small businesses benefit that is not mentioned in this study.

B. TURKISH DEFENSE INDUSTRY AND DEFENSE PROCUREMENT POLICY

The history of the Turkish defense industry goes back to “the canon casting workshops and galley building shipyards of the Ottoman Empire” (Defense Industry Manufacturers Association (SASAD), 2009. p. 2). Until the 17th century, the Ottoman Empire was a superpower and was leading in military technology, but, beginning with the 18th century, European military technology started to lead.

In the first years of Turkish Republic, establishing a national defense industry was one of the most important priorities for the founder of the Turkish Republic, Mustafa

Kemal Atatürk. He “developed a model based on state-owned or led industrialization for defense industry.” In that period, maintenance and repair facilities for small arms and ammunition, an ammunition production plant, a brass production facility, a primer factory, an electrical plant and steel factory, a rifle and artillery gun factory, and a gas mask plant were established. “Additionally in 1930, an entrepreneur named Nuri Killigil established a factory in Istanbul to produce arms and ammunition. This [was] the first privately owned defense [enterprise] in Turkey. Killigil produced 81 mm mortar and mortar ammunition and various explosives to supply Turkish Armed Forces during the Second World War.”

In 1924, Ministry of Navy, which was independent of Ministry of Defense, was established with a special legislation. Its main task was “to establish a fleet within the very limited sources of the nation.”

As for aviation, in 1926, Turkish Airplane and Engine Inc. (TAMTAŞ) was formed. In 1928, Kayseri Plant began production and produced a total of 112 planes until 1939. Then, other plane production and maintenance facilities were established.

Institute of Machinery and Chemistry (MKEK) was established as a state economic enterprise in 1950. MKEK is still functional today and is the biggest state-owned defense industry enterprise of Turkey.

After the Second World War, United States started to provide military aid under the framework of Truman Doctrine and the Marshall Plan. In 1952, Turkey became a NATO member and other allies also started to provide surplus military equipment to Turkey. These events negatively affected the national defense industry because Turkey quitted producing military arms and equipment.

In 1964, Cyprus crises broke out, but there were difficulties with the military equipment that was provided to them by the United States and other allies. “This situation clearly showed the disadvantage of dependence [on foreign] defense equipment.” Turkey started to consider developing its own defense industry. Accordingly, Foundation of Turkish Naval Force was established in 1965 to build landing ships. Similarly, Turkish Air Force Support Foundation was established in 1970 to develop the Turkish aviation

industry. In 1974, due to Cyprus Operation of Turkish Armed Forces, Turkey was exposed to the U.S. embargo. Turkish Land Forces Support Foundation was established in the same year. Following this event, ASELSAN (1975), İŞBİR (1979), ASPİLSAN (1981), and HAVELSAN (1982) were established by foundations to produce defense equipment. These companies are still dominating Turkish Defense Industry.

After 1980, many sectors restructured according to changing conditions. “Government tried to develop a model to satisfy the high technology, long period and big financial budget projects of Turkish Armed Forces.” In 1985, Defense Industry Fund was established to financially support the defense industry projects; Defense Industry Development and Support Organization (SAGEB) was established to conduct the defense industry projects, and High Level Coordination Board and Defense Industry Executive Committee were formed to make decisions about the defense industry projects.

In 1989, SAGEB was reorganized as Undersecretariat of Defense Industries (SSM). In this period, big defense industry projects such as F-16 (1987), Armed Personnel Carrier (1988), Mobile Radar Complex (1990), Electronic Warfare Equipment for F-16, HF/SSB Radios, CASA Light Transport Aircraft (1991) started. A number of defense industry companies were established with foreign capital contribution such as TAI (1984), TEI (1985), MIKES (1987), FNSS (1988), MARCONI KOMÜNİKASYON (1989), THOMSON – TEKFEN RADAR (1990) to carry out the new projects. In 1980s, a number of industrial private enterprises previously established for non-defense production, such as OTOKAR, MERCEDES, BMC, NUROL MAKİNA organized production lines for defense products and some companies such as ROKETSAN (1989) were formed by as private enterprises.

In 1987, separate foundations for Land Forces, Air Force, and Navy were organized under one umbrella: the Turkish Armed Forces Support Foundation (TSKGV). After 2000, TSKGV and Undersecretariat for Defense Industries (SSM) bought the foreign shares of some of the companies established with foreign capital contribution. In this period, Turkey also participated in the European Coproduction Program for Stinger Missiles (SASAD Web site).

In 1998, the government decree on “The Policy and Strategic Principles of Turkish Defence Industry (TDIPS)” came into effect. “This document redefined and restructured the framework of the Turkish defense systems acquisition policy” (Korkmaz, 2009, p. 36).

Through the Defense Industry Law (law number 3238) enacted in 1985, Turkey put into effect a new defense industry policy aimed to improve the capabilities of the Turkish defense industry. Accordingly, the modern defense equipment requirements of the Turkish armed forces are being met through domestic sources to the extent that proves to be economic and feasible (SSM Web site).

In Turkey’s defense systems acquisition process, the Council of Ministers decides the general strategy; the Defense Industry High Coordination Board is responsible for guiding directives; the Defense Industry Executive Committee consisting of the Prime Minister, the Chief of General Staff, and the Minister of National Defense is responsible for decision making; the Turkish General Staff is responsible for requirement generation; the Ministry of National Defense and Undersecretariat for Defense Industries are responsible for implementation, industrialization, procurement, export, and finance; the Defense Industry Audit Board is responsible for auditing and control; and universities, research centers, and companies are responsible for design, production, manufacturing, and R&D (EC, 2006).

1. Defense Industry Executive Committee

Defense Industry Executive Committee, authorized by law number 3238, is responsible for making the critical decisions regarding the defense industry issues and major defense procurement projects. It is chaired by the Prime Minister and consists of the Chief of General Staff and the Minister of National Defense. Its other functions are to instruct SSM in conducting research and development of modern arms and equipment, having their prototypes built, and setting guidelines for the uses of Defense Industry Support Fund.

2. Undersecretariat for Defense Industries (SSM)

SSM was created (by law number 3238) as the implementation body to materialize the premises of the new defense industry policy. According to this law, the main task of SSM is to constitute a modern defense industry in Turkey and to achieve the modernization of the Turkish Armed Forces. SSM, a special legal entity, has its own budget and is tied to the Ministry of National Defense. The functions of SSM stated in the law are:

- to carry out the decisions taken by the Defense Industry Executive Committee,
- to reorganize existing Turkish Industry in line with the prerequisites of defense industry,
- to plan the production of modern arms and equipment at private and public sector entities,
- to conduct research and development of modern arms and equipment and to have their prototypes manufactured,
- to coordinate export and offset trade issues relating to defense industry products.

In 2007, the Strategic Plan of Undersecretariat for Defense Industry (2007–2011) was published. This strategic plan gives direction to the activities of SSM. Four strategic goals stated in the plan are:

- to improve the procurement activities in accordance with the user requirements and industrial goals,
- to restructure the defense industry to be able to provide unique local solutions and compete in the international arena,
- to participate actively in the multinational defense and security projects those promote the international cooperation,
- to improve the organizational structure.

To achieve these goals, a number of sub-goals for each strategic goal are determined in the plan.

3. Defense Industry Support Fund

The Defense Industry Support Fund is a special fund for the SSM to carry out its mission. It has a highly flexible and bureaucracy-free structure. It provides constant cash flow to the SSM. Allotments from corporate taxes, fees, and levies imposed on alcoholic and tobacco products, and all forms of chance games and betting, constitute the main income streams of this fund. Since its establishment in 1986, 80 percent of \$11 billion was spent on domestic production, 16 percent on direct procurement projects, and 4 percent on the Advanced Technology Industrial Park (ATIP) Project (SSM Web site).

4. The Role of SMEs

One of the four strategic goals stated in the Strategic Plan of SSM (2007–2011) is to restructure the defense industry to provide unique local solutions and to compete in the international arena. To achieve this strategic goal, four sub-goals are determined. The first sub-goal is to enhance the indigenous share in expenditures for the defense equipment expenditures of Turkish Armed Forces. To increase the local content in defense procurement projects towards an average of 50 percent by the end of 2010 is determined as the performance goal by SSM. To increase the participation of SMEs in defense acquisition projects is very crucial for achieving this goal. Another sub-goal is to enhance the integration of SMEs and supplier companies to the defense industry. To achieve this goal, SSM requires prime contractors to subcontract at least 20 percent of the work to domestic SMEs (SSM, 2007).

Additionally, in recent years, SSM has been working on developing a document regulating relations between the prime contractors, which are mainly foundation-shared enterprises, and the subcontractors, which are generally formed by SMEs (SSM, 2009).

C. CHAPTER SUMMARY

This chapter explains the relationship between small businesses and defense buyers. The next chapter is an application of small business policies and programs that were discussed in previous chapters on the Turkish defense acquisition programs. This

includes the analysis of defense procurement system in Turkey and recommendations, based on the best practices in the U.S, for the challenges and concerns faced by Turkey.

V. APPLICATION

A. SME SUPPORT BY UNDERSECRETARIAT FOR DEFENSE INDUSTRY (SSM)

Developing a domestic defense industry is the major concern for Turkey. In addition to the common reasons, Turkey has three major unique reasons for developing its own industry. The first reason is the experience learned from history, i.e., the U.S. embargo during Cyprus Conflict. The second one is terrorist attacks, especially in the Southeast region of Turkey. The third one is its geographical and strategic position and proximity to the conflict zones: the Balkans, the Caucasus, and the Middle East (Korkmaz, 2009).

Annual arms and defense systems expenditures of Turkey is nearly \$3.5 billion. The national share of Turkey's defense procurement was 44.2 percent in 2008. The SSM aims to increase the local content in defense procurement projects towards an average of 50 percent by the end of 2010 (SSM Web site). According to 2009 SASAD data, the distribution of local content is as seen below:

- State-owned Enterprises : 31%
- Enterprises owned by TSKGV : 33%
- Private Enterprises : 36%

The SMEs have a vital role in achieving the SSM's 50 percent local content goal because the private sector in the defense industry is generally formed by SMEs. SSM is aware of this fact. Thus, it has been trying to expand the defense industrial base to ensure more SMEs to participate in defense projects.

Subcontracting Assistance: The first instrument utilized by SSM to increase SME participation in defense procurement projects is subcontracting assistance. SSM has started to require prime contractors to give at least 20 percent of the work share to domestic SMEs by putting binding rules to procurement agreements.

Assistance in Offsets: Another instrument used by SSM to increase SME participation is the Offset Agreements with foreign countries. The Industrial Participation/Offset proposals submitted to SSM are evaluated according to a formula: $S = 0.20 * (Y) + 0.10 * (SMEp) + 0.70 * (Offset)$, which promotes the proposals with higher SME work share. The highest SME work share will get a score of 100 and the other proposals will be proportionally scored (SSM, 2007b).

Preparation of a Document Regulating SMEs Relations with Large Firms: In addition to giving work share from procurement agreements and promoting their participation in industrial participation and offset agreements, to assist SMEs to develop long-term relations with prime defense firms, SSM has been working on a document regulating relations between prime contractors and subcontractors, namely SMEs (SSM, 2009).

Other Supports: The other efforts by the SSM to increase the SME participation in defense procurement projects are: providing R&D support, organizing conferences related to SMEs, and allocating them space to exhibit their products in Turkish Defense Industry Products Catalog (SSM, 2008b).

B. CURRENT TURKISH DEFENSE PROCUREMENT PROGRAMS

The current and future plans regarding Turkish defense procurements include unmanned aerial vehicles, electronic warfare and system integration programs. Turkish manufacturing strategy has shifted since 2005 from co-production under license to the indigenous design and production of strategic arms systems. The Main Battle Tank Program is a good example of this strategy in which the solution at system level, and some major subsystems, is purely indigenous design and production (Defense 21, 2008). Some of the major defense acquisition projects are discussed below:

The Main Battle Tank Project (ALTAY): OTOKAR, one of the major automotive manufacturers in Turkey established in 1963 as a private enterprise, will design, develop, produce, test, and qualify the prototypes of Turkish National Main Battle Tank (ALTAY) by receiving technical support and assistance from Hyundai-Rotem (South Korea) in areas required. The contract was signed on 29 July 2008. Currently,

conceptual design activities are being conducted (SSM Web site). The objective [of the Turkey's National Main Battle Tank Project (ALTAY)] is to produce 250 tanks for the Turkish Army after 7 years of prototype production and testing. The estimated budget for design, prototype production, test, and evaluation is \$500 million. ASELSAN will work as a subcontractor on subsystems, such as the fire control system, C4SI Systems, and integration studies. The other subcontractors are MKE and ROKETSAN. They will design, develop, and produce gun systems and armor systems (Korkmaz, 2009). According to SSM's subcontracting goal concerning SMEs, 20 percent of the work share, which is \$100 million, shall go to SMEs. In EU, on average 30 percent of the work share goes to SMEs, which is \$150 million, and in the United States, on average 40 percent of the work share goes to small businesses, which is \$200 million.

Turkish ATAK Combat Helicopter Program: The objective of the ATAK program is to meet the requirements of the Turkish Land Forces for Tactical Reconnaissance and Attack Helicopters. The program model is a co-production. The prime contractors are TAI, Agusta Westland, and ASELSAN. The contracts were signed on 7 September 2007. ATAK Program will be a unique program for the helicopter industry and, also, for the defense industry in Turkey. It will be the first helicopter program that has been established on the basis of worldwide partnership. Turkey will be the owner of the helicopter and the designation of the helicopter will be T129. AgustaWestland will provide airworthy helicopters meeting the requirements. Helicopters will be manufactured in TAI as prime contractor. All systems and weapon integrations will be performed in Turkey by ASELSAN (SSM Web site). The budget information for this program has not been available yet, but potentially 20 percent of this work will go to SMEs as part of SSM's subcontracting goal.

F-35 Joint Strike Fighter (JSF) international consortium: The JSF Program, the largest defense acquisition program in history, was initiated by the U.S. government to meet the new generation fighter aircraft requirements of the U.S. Services beyond 2010. The program scope consists of cooperative development, production, and sustainment of the F-35 aircraft within an international partnership. Turkey wants to acquire one hundred aircrafts at a cost of around \$10 billion to replace the existing F-4

and F-16 aircrafts beyond 2012. The prime contractor is LM Aero Team (Lockheed Martin, Northrop Grumman, and BAE Systems). F-35 has state-of-art technologies and Turkey desires to gain technological benefits from the program. Also, industrial participation is a key issue for Turkey. To improve the current level of Turkish industrial participation in the program, SSM and Lockheed Martin signed a “Letter of Intent and Industrial Participation Plan” on 6 February 2007 in Ankara (SSM Web site). “Lockheed Martin has so far identified \$4.5 billion of potential work for Turkey within the JSF program and has promised to increase this to around \$5 billion.” The Northman Group and TAI signed an intent agreement about the job share over the 20 years that is worth \$3 billion. According to this agreement, TAI will take part in the production of the center fuselage (Korkmaz, 2009). Since SSM use a formula supporting SMEs participation in Industrial Participation and Offset Agreements, some of the work share of the potential work for Turkey within the JSF program, which is approximately \$5 billion, will probably go to SMEs.

A400M international consortium: Turkey is participating in another collaboration project: the A400M international consortium. The objective of this program is to provide tactical transportation to the Turkish Armed Forces. Ten A400M transport aircraft will be procured using the consortium model. The prime contractor is the Airbus Military Sociedad Limitada (AMSL). The contract was signed in 2003. The contractual delivery period of ten A400M aircraft to Turkey is between 2009 and 2014. Nevertheless, a 3-year delay in the deliveries is expected. The next challenging phase for A400M is the in-service-support period. Turkey desires to utilize the existing capabilities in Turkey and to increase the local industry participation (SSM Web site).

C. CHALLENGES AND CONCERNS

Despite the supports provided by KOSGEB, and other national and international agencies, and SSM’s efforts to increase SME participation in defense procurement projects, SMEs in defense industry have been facing to several challenges.

Challenges regarding SME Definition: The first challenge is related to SME definition of Turkey. As was discussed in Chapter II, Turkey’s SME definition does not

reflect the industry differences. According to the SME Definition Directive of 2005, SMEs in Turkey is made up of enterprises which employ fewer than 250 persons and which have an annual turnover and/or an annual balance sheet total not exceeding 25 million TL (nearly \$16.7 million). On the other hand, in the United States, for most of the industries regarding arms and defense systems production, small business size standards are either 500, 1000 or 1500 persons. This is a really important disadvantage for Turkey's defense-related small firms.

Another shortcoming of Turkey's SME definition is being more vulnerable to fraud and manipulation than the U.S. small business definition. While comparing the two countries' small business definitions in Chapter II, unlike the United States, Turkey has not yet established the necessary safeguards to protect the SME size standards from fraud and manipulation.

Challenges Concerning SMEs not Getting Fair Share from Public Procurements: In Turkey, the programs assisting SMEs are not sufficient compared to the programs assisting small businesses in the United States. The KOSGEB and some other national and international agencies provide financial and technical support to SMEs. These types of support are necessary, but not enough. Public procurement assistance to small businesses proved to be a successful policy in assisting small firms. It has been used in the United States since 1930s. In Turkey, however, there has been no regulation to assist SMEs in public procurement. The SSM currently provides subcontracting assistance ensuring at least 20 percent of work shares to go to SMEs in defense procurement projects, but this is a temporary solution for increasing domestic content in defense procurements. Moreover, SSM does not provide any assistance to SMEs in prime contracting. In the United States, the SBA assists small businesses in government contracting; advocates them before Congress and the President; defends their rights against large businesses and other government agencies; tries to reduce the burdens that federal policies impose on small firms and maximize the benefits small businesses receive from the government; provides and sponsors scholar researches related to small businesses, and provides statistical data regarding small businesses besides financial and technical support to small businesses.

Challenges Regarding the Implementation of the SME Policies: In Turkey, not having the offices responsible for implementing small business programs within each government agency with contracting authority makes the implementation of small business programs difficult. On the other hand, each federal agency with contracting authority in the United States has an obligation to establish the Office of Small Business Program (OSBP), responsible for ensuring that small businesses are getting maximum benefits from federal contracts (Executive Office of the President, 2002).

Challenges Regarding SMEs' Relationship with Large Firms: Regarding defense procurement projects, the SSM currently tries to assist small firms to get work share from the projects by putting binding terms to procurement agreements. Additionally, it tries to prepare a document that regulates the relations between prime contractors and subcontractors. These efforts, however, have so far not adequately helped SMEs. On the other hand, the U.S. Mentor Protégé Program gives incentives to large businesses to subcontract some of the work to small firms.

Challenges Regarding Innovation: As was discussed in Chapter II, Turkish SMEs are not very innovative compared to the small businesses in the United States. Although the KOSGEB, TUBITAK, SSM, and other national and international agencies have been providing R&D support to the SMEs, there has not been substantial change in the innovative capacity of the Turkish SMEs. According to a study conducted by State Statistical Institution (TÜİK), covering the period between 2006 and 2008, 33.8 percent of small-sized enterprises and 43.7 percent of medium-sized enterprises have made innovations, while 54.4 percent of large firms have made innovations. On the other side, the U.S. SBIR and STTR programs have been carried out to enhance the innovative activities by small businesses, which have efficiently contributed to enhance the innovation activities and patents by small businesses.

Challenges Related to the Sources not Utilized Sufficiently: This study will now focus on two types of underutilized sources in Turkey: women and eastern region. In Turkey, despite the fact that many women are well educated, only a small number of them are working in any economical sense. If they are given the right incentives, their contribution to the private sector, particularly to SMEs, can be ensured either by owning

their own businesses or working in managerial and technical positions. On the other hand, in the United States, there is a program helping women-owned small businesses to access and have a 5 percent share from the federal procurement prime and subcontracting dollars.

Despite the well-intentioned efforts of Turkish government, due to the geographical and historical challenges, the eastern region of Turkey has not been able to gain sufficient economical development. The government has tried its best to enrich the region, increase employment, and help the businesses to develop themselves by either lending opportunities or reimbursing taxes to businessmen who invest in the eastern region of the country. The desired investment level, however, has not yet been achieved. On the other hand, for the Historically Underutilized Business Zones, there is a program assisting small businesses located in historically underutilized business zones with federal contracting opportunities in the United States.

D. RECOMMENDED POLICIES AND PROGRAMS TO TURKEY FROM U.S. BEST PRACTICES

As the biggest single purchaser of the world and the spender of two thirds of the total Federal procurement dollars of the United States, the DoD plays a significant role in the success of small business share goals from Federal procurement dollars. Because the U.S. government perceived this importance, Congress created specific programs for DoD to increase the participation of small businesses in the Federal procurement market. The DoD small business programs are discussed in Chapter IV.

Turkey may implement and benefit from policies and programs based on the experiences and past performances of the U.S. economy. Instead of walking in the thorny path the United States had passed before, Turkey should investigate the best practices and their results for small businesses. This study only submits an overview of ideas and recommendations.

Recommendation 1: Switching to the Industry-Sensitive Small Business Definition: Due to their financial inabilities and insufficient capabilities, Turkish SMEs are not able to get prime contracts from government procurements. To ensure that SMEs

get prime contracts from government procurements, it could be helpful to increase the size standards of the SMEs in Turkey to the levels of the small businesses in the U.S. defense industry. This could be achieved by switching to the industry-sensitive definition of small businesses in the United States. Also, to protect small business size standards against fraud and manipulation, Turkey may adopt the safeguards from the U.S. small business definition.

Recommendation 2: Making the Necessary Legislation for Giving SMEs Fair Share from Public Procurements: Due to their importance to the Turkish economy, focusing only on lending opportunities, another way to enhance its SMEs should be found. The U.S. Congress searched for new methods to improve the small business sector, aside from lending opportunities, in 1930s and grasped the idea of federal procurement assistance to small businesses. Although complete implementation of the fair share could not be achieved until the late 1970s with the creation of the 1978 amendment to the Small Business Act of 1958, substantial improvements have succeeded.

The experience of the U.S. small businesses to get a fair share from the federal procurement dollars shows steps Turkey should take for its SMEs. It is understood, from the past development in the legislative history of the United States, that fair share for small businesses from federal procurement spending cannot be achieved until specific small business goals are set and overseen by Congress. Before specific small business goals were set and monitored by authorities, previous efforts did not achieve their intended purposes.

In Turkey, there has been no regulation to assist SMEs in public procurement. Thus, the first step for Turkey is to make necessary legislation that gives SMEs fair share from public procurements. Turkey should establish specific legislative goals for SME share of public procurement. Then government agencies should be given the responsibility to submit reports about the goals in certain periods and monitoring authorities should have sanctions to implement if the established goals are not met. Scorecard application in the United States is a good example of monitoring the agencies. This will ease control of the goals.

Subcontracting:

Small business share of subcontracting dollars from Federal procurements has hovered between 32 and 45 percent for the last two decades in the DoD as seen in Figure 4. The Amendment to the Small Business Act (PL 95-507) in 1978 has made a huge contribution to these numbers. After the creation of specific goals, agencies tried to reach the established goals because, if they did not, they had to explain why the goals were not achieved. Although the U.S. Congress created this specific subcontracting goal 3 decades ago, Turkish legislation does not include a phrase to enable the small business share of procurement dollars. The SSM currently provides subcontracting assistance ensuring at least that 20 percent of work shares go to the SMEs in defense procurement projects, but this is a temporary solution for increasing the local content in defense procurements. SSM also gives an incentive to the large firms that propose to give higher work share to SMEs while evaluating the Industrial Participation/Offset proposals. This is also a sector-specific and temporary solution. Although it is a starting point, 20 percent subcontracting goal and the indirect assistance to SMEs in Industrial Participation/Offsets cannot accomplish the intended target without legislative efforts to make required laws. If Turkey wants these goals to be permanent and reliable, it should turn these efforts into legislation by broadening the extent of the subcontracting goal to the procurements by all of the government agencies. Otherwise, each new agency head or bureaucracy may change the regulations. Furthermore, the 20 percent subcontracting goal is a very small number as compared to the 32-45 hovering percentage of the U.S. subcontracting share within the last two decades.

Prime Contracting:

Small business share from prime contracts in the DoD has floated the level of 19 and 24 percent for the last two decades as seen in Figure 4. Because the prime contract dollars are huge compared to subcontract dollars, the share of the small businesses is so important. In Turkey, there is not an established goal for the SME share from the public procurements.

Recommendation 3: Restructuring KOSGEB as an Advocacy for SMEs:

This study recommends that Turkey should restructure its main SME support agency, KOSGEB, as an advocacy for SMEs in Turkey to protect, strengthen, and effectively represent the SMEs in Turkey. The KOSGEB currently provides financial and technical support to SMEs. On the other hand, in the United States, in addition to financial and technical support, the SBA assists small businesses in public procurement; advocates them before Congress and the President; defends their rights against large businesses and other government agencies; tries to reduce the burdens that federal policies impose on small firms and maximize the benefits small businesses receive from the government; provides and sponsors scholarly research related to small businesses, and provides statistical data regarding small businesses. The KOSGEB should provide SMEs with additional supports and services that the SBA provides U.S. small businesses. Therefore, the organizational structure of the SBA can be a good model for Turkey's new SME support agency.

Recommendation 4: Establishment of the Offices Responsible for the Implementation of Small Business Programs within each Government Agency with contracting authority:

To emphasize the importance of advocacy for small business within the government agencies, the Small Business Act directed that each Federal agency with contracting authority must establish the Office of Small and Disadvantaged Business Utilization (OSDBU), with the director reporting to the head of the agency. OSDBUs are responsible for ensuring that small businesses get maximum benefits from Federal contracts (Executive Office of the President, 2002). U.S.C. § 634 (2010) requires OSDBU offices to closely work with the SBA. According to FASA of 1994, OSDBUs coordinate their efforts through participation in a voluntary Federal OSDBU Director Interagency Council and in the formal Federal Small Business Procurement Advisory Council, chaired by the SBA Deputy Administrator (as cited in Kidalo, 2010, p. 45).

To implement effective small business programs, this study recommends that the offices responsible for implementing small business programs and preparing quarterly reports, similar to the OSDBU in the United States, should be established within each

government agency with contracting authority. These offices should work closely with KOSGEB. This thesis' investigators think that it is an important step for the effective implementation of small business programs in Turkey.

Recommendation 5: Creating a Program Promoting Large Firms Subcontracting to SMEs (Similar to Mentor Protégé Program of the United States):

Enacted by the National Defense Authorization Act of 1991, the Mentor Protégé Program gave large businesses the opportunity benefit by subcontracting to small businesses as their protégés. Two primary benefits for large businesses subcontracting to protégés are: credit for subcontracting goals and direct reimbursement. The program increased the employment and revenue gains of the participating small businesses and made an important contribution to the U.S. economy.

Turkey should implement a version of the Mentor Protégé Program to give incentives to large Turkish businesses to serve as mentors by subcontracting SMEs in their sub works. Thus, this will be a win-win strategy by giving incentives to larger firms create teams with their smaller counterparts. Large businesses will have credit opportunities or direct reimbursement for their subcontracting and SMEs will learn how to develop new technologies and will gain experience about working with government procurements.

Reimbursements play a key role in attracting the mentors for the program (as seen in Figure 6). According to surveys of Jennings et al. (2000) and Jennings, Koch, and Mercer (2006), more than two-thirds of the mentors mentioned they would not participate in the Mentor Protégé Program if it were not for direct reimbursement of the mentor costs. Others stated that they would participate less in the program without direct reimbursement opportunity. As a result, the direct reimbursement contributes greatly to the success of this program. Thus, Turkey should use direct reimbursement as a method to effectively and efficiently implement the program. In that way, SMEs will learn how to deal with government contracts administratively and financially. Hence, in the future, these SMEs will be able to work with the Federal government as prime contractors.

Between 1998 and 2006, “for which data are available, protégés have reported aggregate annual net employment gains roughly between 1,400 and 4,000 workers and aggregate annual net revenue gains (as measured in FY 2009 constant dollars) between \$190 million and \$1.1 billion” (Moore et al. 2009, p. 53). As seen in Figure 5, the figures of employees and revenues moved parallel. Thus, the implementation of the Mentor Protégé Program not only enables small businesses to be prepared and experienced for future prime and subcontracting opportunities, but also contributes to the Turkish economy by generating new jobs and opening new revenue doors.

Recommendation 6: Creating an Innovation Program for SMEs Similar to the U.S. SBIR and STTR Program:

Enacted in the Small Business Innovation Development Act of 1982 and reauthorized by the Small Business Research and Development Enhancement Act of 1992, the SBIR program contributed innovation and increased small business participation in federally funded R&D. In the SBIR program, government provides necessary funding and resources for small firms willing to innovate goods and services.

Enacted in the Small Business Technology Transfer Act of 1992, the STTR program aims to convey ideas from research institutions to the free market, where both military and the private sector can use the good ideas (DoD SBIR & STTR Programs, 2009). In the STTR program, two beneficial and powerful sources (high tech small firms and university or research institute) meet to improve the technology. The STTR program has a two way benefit: it serves as a matchmaker for universities, federally funded R&D centers or nonprofit research institutions, and small businesses. In that way, these entities and small businesses have incentives to create new technologies and to use their innovative potential with Federally-provided dollars.

The STTR and SBIR programs make important contributions to the R&D practices by giving incentives to small firms for innovation and technological development. The SBIR Program budget has skyrocketed from its first year of 16,7 million dollars in 1983 to 1,17 billion dollars in 2007 (Figure 11). The STTR program

budget has increased from its first year of \$10.97 million in 1994 to \$134.09 million in 2007. These numbers show the successful past performance of the SBIR and STTR programs for the last decades.

Implementation of these programs in the Turkish Public Procurement Market will contribute to the innovation and entrepreneurship of the Turkish SMEs. Since SMEs have not had enough sources to afford R&D studies, they have a very unsuccessful patent percentage and innovation history in Turkey. If the government can supply the necessary funding with these types of programs, small businesses will have enough incentive and entrepreneurship for innovation.

As the owner of the youngest population in Europe, Turkey has a huge university student potential. If the Turkish government can guide these university students to the innovation and creation of new ideas by providing them the necessary funding, the whole Turkish economy and the technological potential of Turkey would benefit.

Recommendation 7: Creating a Program Promoting the Small Businesses Owned by Women (Similar to U.S. WOSB Program):

Created by the Executive Order 12138 signed in May 1979 and revised by the Federal Acquisition Streamlining Act of 1994, Women-Owned Small Businesses Program helps women-owned small businesses to access and have a 5 percent share from the federal procurement prime and subcontracting dollars. As seen in Figure 10, for the last two decades, while subcontracting dollars has increased steadily from 1 percent to 5 percent, prime contract dollars has increased and hovered at a 3 percent level. There is an untapped reservoir of educated women who are simply continuing to be Turkish housewives. To draw these well-educated women from their households into contributing to the Turkish economy, there must be incentives and others steps. Turkey should implement a program similar to the WOSB of the United States to encourage the women to participate more in the market place to contribute to the economy. Although the effects of the new program will not show immediately as it did in the United States, the women-owned small businesses will benefit from the program in a decade or less.

Recommendation 8: Creating a Program Promoting the Small Businesses Located in Historically Underutilized Business Zones (Similar to the U.S. HUBZone Program):

Created by the Historically Underutilized Business Zone (HUBZone) Act of 1997, the objective of the program is to assist “small business concerns located in historically underutilized business zones” about federal contracting opportunities (FAR Part 19.1301). This assistance program will contribute to job creation, new investments, and economic progression in these areas (FAR Part 19.1301). HUBZone share of the DoD contracts has increased from 0.01 percent in 1999 to 2.5 percent in 2007 (as seen in Figure 7).

The Turkish economy enjoys huge contributions from industries and services in the western part of Turkey. Because of geographical and historical challenges of the eastern part of Turkey, there is significantly less economic contribution from this region. Every administration in the Turkish Government tries its best to enrich the eastern region, increase employment, and help businesses to develop by either lending opportunities or reimbursing taxes to businessmen who invest in the eastern region of Turkey. Despite these efforts, the eastern region continues to suffer a high rate of unemployment, poor industrialization, inadequate number of government officials, such as doctors, teachers, engineers, etc. To change this bad fortune of the eastern region, the Turkish government may try a small business incentive program similar to the HUBZone program to enrich and to provide necessary resources for the development of the region.

LIST OF REFERENCES

- Acs, Z.J., & Audretsch, D.B. (1988). Innovation in large and small firms: An empirical analysis. *The American Economic Review*, 78, 678–690.
- Amendment to the Small Business Act, Pub. L. No. 94-305, 90 Stat. 663 (1976).
- Amendment to the Small Business Act, Pub. L. No.95-507, 92 Stat. 1757 (1978).
- Army Material Command (2001, December 11). *Small business program guide for government and industry*. Washington, DC: Government Printing Office.
- Audretsch D.B. (2000). *The economic role of small- and medium-sized enterprises: The United States*. Retrieved December 7, 2009, from <http://www.spea.indiana.edu/ids/pdfholder/ISSN-00-2.pdf>
- Banking Regulation and Supervision Agency (BDDK). (2007, June). *Finansal piyasalar raporu*. Retrieved December 7, 2009, from http://www.bddk.org.tr/Web/sites/turkce/Raporlar/Finansal_Piyasalar_Raporlari/3896FPR_Haziran_2007_26_10_2007.pdf
- Baumol, W.J. (2005). *Small firms: Why market driven innovation can't get along without them*. Retrieved December 7, 2009, from http://www.sba.gov/advo/research/sbe_05_ch08.pdf
- Blackford, M.G. (2003). *A history of small business in America* (2nd ed.). Chapel Hill, NC: The University of North Carolina Press.
- Boden, R., Ou, C., Berney, B., & Headd, B. (2001). The State of Small Business. In *The small business economy: A report to the president (FY1999-2000)*. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Boutin, B. A. (1967a, March 1). *Small business administration and small business partnership*. Statement of Bernard A. Boutin before the Senate Select Committee on Small Business. Washington, DC: Government Printing Office.
- Bunn, P. and Barfitt, L. (1999). Federal Trade Commission Act of 1914. Encyclopedia of Business, 2nd ed. FindArticles.com. Retrieved on April 16, 2010, from http://findarticles.com/p/articles/mi_gx5209/is_1999/ai_n19125714/
- Campbell, Donald L. (1997). Acquisition Reform—A Good Omen or the Trojan Horse in Our Midst? *Program Manager*.
- Cansiz, M. (2008). *Türkiye’de KOBİ’ler ve KOSGEB* (Speciality Thesis). Ankara: Devlet Planlama Teskilati. Retrieved December 7, 2009, from <http://ekutup.dpt.gov.tr/esnaf/cansizm/kobi.pdf>
- Cheifetz, A. A. (2004). *The effect of acquisition reform on small business participation in the federal marketplace*. Master’s thesis, Naval Postgraduate School. Retrieved November 25, 2009, from, http://edocs.nps.edu/npspubs/scholarly/theses/2004/Mar/04Mar_Cheifetz.pdf

- CHI Research (2004). *Small firms and technology: Acquisitions, inventor movement, and technology transfer* (SBA-HQ-02-M-0491). Report prepared for the Small Business Administration Office of Advocacy. Haddon Heights, NJ: Author.
- CHI Research. (2003). *Small serial innovators: The small firm contribution to technical change* (SBAHQ-01-C-0149). Report prepared for the Small Business Administration Office of Advocacy. Haddon Heights, NJ: Author.
- Chism, D. M. (1970, January). *A critical analysis of the small business assistance programs of the department of defense*. Master's thesis, Bowling Green State University.
- Clark, M. (2004). Procurement. *The small business economy: A report to the president (FY2002-2003)*. Chapter 4. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Clark, M. (2005). Federal Procurement from Small Firms. *The small business economy: A report to the president (FY2005)*. Chapter 4. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Clark, M. (2006). Federal procurement from small firms. *The small business economy: A report to the president*. Chapter 3. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Clark, M., & Moutray, R. (2004). *The future of small businesses in the u.s. federal government marketplace*, (Working paper). Washington, DC: U.S. Small Business Administration, Office of Advocacy. Retrieved on 15 March, 2010, from <http://www.sba.gov/advo/stats/wkp04mccm.pdf>
- Clark, M., & Saade, R. (2007). Federal procurement from small firms. *The small business economy: A report to the president*. Chapter 3. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Clark, M., & Saade, R. (2009, February). Federal procurement from small firms. *The small business economy: A report to the president*. Chapter 3. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Clark, M., & Tobias, K. (2004). Procurement. *The small business economy: A report to the president (FY2001)*. Chapter 3. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Clark, M., Moutray, C., & Saade, R. (2006, September). *The government's role in aiding small business federal subcontracting programs in the United States* (SBA Office of Advocacy Working Paper No. 06mccmrs). Washington, DC: SBA Office of Advocacy. Retrieved November 25, 2009, from, <http://www.sba.gov/advo/research/rs281tot.pdf>
- Clinger-Cohen Act of 1996, Pub. L. No. 104-106, 110 Stat. 186 (1996).

- Committee on Small Business. (1980, April). *Government procurement from small and small disadvantaged businesses (Public Law 95-507 and Accompanying Reports)*. Washington, DC: U.S. House of Representatives, Ninety-Sixth Congress, Committee Print.
- Conte, C. (2006, January 3). Small business in U.S. history. *eJournal USA*. Retrieved from <http://www.america.gov/st/business-english/2006/January/20080814215602XJyrreP0.6187664.html>
- Cook, F. H. (1951). *Principles of business and federal law*. New York: The Macmillan CO.
- Coordination Council for the Improvement of the Investment Environment (YOİKK). (2010). *SMEs in Turkey & SME support mechanism of KOSGEB*. Retrieved March 1, 2010, from, <http://www.yoikk.gov.tr/dosya/up/eng/SMEs%20IN%20TURKEY%20%20SME%20SUPPORT%20MECHANISM%20OF%20KOSGEB.doc>
- Corey, L. (1935). *The crisis of the middle class*. New York: Covice-Friede.
- Davis, S.J., Haltiwanger, J., & Schuh, S. (1996). Small business and job creation: Dissecting the myth and reassessing the facts. *Small Business Economics*, 8(4), 297–315.
- Defense Industry Manufacturers Association (SASAD). (2009). *About SASAD*. Retrieved May 5, 2010, from http://www.sasad.org.tr/dosya/eoe/Ataselere_Not_02.pdf
- Defense Industry Manufacturers Association (SASAD). (2010). *History of Turkish defense industry*. SASAD.org.tr. Retrieved May 5, 2010, from <http://www.sasad.org.tr/sub.asp?tnm=TARIHCE>
- Department of Defense. (1970a). *Military Prime Contract Awards and Subcontract Payments or Commitments: July 1969-June 1970*. Washington, DC: Government Printing Office.
- Department of Defense. (1970b). *Military Prime Contract Awards*. Washington, DC: Government Printing Office.
- Department of Defense, Office of Small Business Program. (2008, October 1). *Office of small business program strategic plan 2009*. Retrieved December 9, 2009, http://www.acq.osd.mil/osbp/publications/OSBP_SP_FY2009rx.pdf
- Department of Defense, Office of Small Business Program. (February 18, 2009). *Mentor-Protégé program*. Retrieved December 30, 2009, from Http://Www.Acq.Osd.Mil/Osbp/Mentor_Protege/
- Department of Defense, Office of Small Business Programs. (2007, August 14). *Women-owned small business*. Retrieved December 10, 2009, from <http://www.acq.osd.mil/osbp/programs/wosb/index.htm>
- Department of Defense, Office of Small Business Programs. (2010). <http://www.acq.osd.mil/osbp/>

- Department of Defense, SBIR & STTR Programs (2009, August 19). *Overview of SBIR&STTR programs*. Retrieved December 08, 2009 from <http://www.acq.osd.mil/osbp/sbir/overview/index.htm>
- Department of Defense, SBIR and STTR Programs (August 19, 2009). *Overview*. Retrieved November 30, 2009, from <http://www.acq.osd.mil/osbp/sbir/overview/index.htm>
- Department of Defense, SBIR Resource Center. (n.d.). *About DoD's SBIR and STTR programs*. Retrieved December 10, 2009, from <http://www.dodsbir.net/about/about.htm>
- Department of Housing and Urban Development. (2010). Retrieved December 10, 2009, <http://www.hud.gov>
- Department of Housing and Urban Development. (n.d.). *OSDBU legislative mandates*. Retrieved December 3, 2009, from <http://www.hud.gov/offices/osdbu/policy/laws.cfm>
- Department of the Army, Office of Small Business Programs. (2010). <http://www.sellingtoarmy.info/user/showpage.aspx?SectionID=9>
- Department of Veterans Affairs, Office of Acquisition and Materiel Management (June 19, 2007). *Information letter* (IL 049-07-08). Retrieved March 12, 2010, from http://www1.va.gov/oamm/_bf/oa/il07-08.pdf
- Douglas Richard (2008). *Small Business and Government: The Richard Report*. Retrieved June 10, 2010, from www.bl.uk/bipc/pdfs/richardreport2008.pdf
- Eagle Eye Publishers (2000, September 12). *The impact of contract bundling on small business FY 1992- FY 1999*. Prepared for the Small Business Administration Office of Advocacy under contract number SBAHQ-97-M-0861. Washington: GAO.
- Else, H. D. (2009). *Defense production act: Purpose and scope*. CRS Report for Congress. Retrieved March 12, 2010, from <http://www.fas.org/sgp/crs/natsec/RS20587.pdf>
- European Commission (EC). (2006, May). *Agenda item xv defense industries*, PowerPoint presentation. Retrieved May 3, 2010, from http://www.docstoc.com/docs/13710397/ SC20DET_DEFENCEppt
- European Commission (EC). (2008). *Turkey 2008 progress report*. Retrieved April 1, 2010, from, http://ec.europa.eu/enlargement/pdf/press_corner/key_documents/reports_nov_2008/turkey_progress_report_en.pdf
- European Commission (EC). (2009). *Turkey 2009 progress report*. Retrieved April 1, 2010, from, http://ec.europa.eu/enlargement/pdf/key_documents/2009/tr_rapport_2009_en.pdf
- Federal Acquisition Streamlining Act of 1994, Pub. L. No. 103-355, 108 Stat. 3322 (1984).

- Fitzgerald, J.M., Ribar, DC (2001). *Does a rising tide of small business jobs lift all boats?* (SBAHQ-00-M-0574). Report prepared for the Small Business Administration Office of Advocacy. Washington, DC: GAO.
- Garman, E. T. (1997). *Consumer economic issues in America* (5th ed.). Houston, TX: DAME Publications.
- General Services Administration, Department of Defense, National Aeronautics and Space Administration. (2005, March). *Federal acquisition regulation (FAR)*. Washington, DC: Author.
- Gourlie, L. (1960, October 17). The facilities of the SBA. Publisher's Weekly.
- Government Accountability Office (1996, October). *Acquisition reform: Implementation of title v federal acquisition streamlining act of 1994* (GAO/NSIAD-97-22BR). Retrieved November 27, 2009, from GAO Reports: <http://www.gao.gov/archive/1997/ns97022b.pdf>
- Government Accountability Office (1998, March). *Defense contracting: Sufficient, reliable information on DoD's mentor-protégé program is unavailable*. (GAO/NSIAD-98-92). Retrieved February 2, 2010, from GAO Reports: <http://www.gao.gov/archive/1998/ns98092.pdf>
- Government Accountability Office (2007, January). *Contract management: Protégés value DoD's mentor-protégé program, but annual reporting to congress needs improvement*. Retrieved April 28, 2008, from <http://www.gao.gov/new.items/d07151.pdf>
- Government Performance and Results Act of 1993, Pub. L. No. 103-62, 107 Stat. 285 (1993).
- Grasso, V. B. (2002 January 9). *Defense acquisition reform: Status and current issues*. CRS Report IB96022. Retrieved March 13, 2010, from <http://www.globalsecurity.org/military/library/report/crs/IB96022.pdf>
- Hanks, C. H., Axelband, E. I., Lindsay, S., Malik, M. R., and Steele, B.D. (2005). *Reexamining military acquisition reform: Are we there yet?* RAND Corporation, Santa Monica, CA. Retrieved on 15 March 2010, from http://www.rand.org/pubs/monographs/2005/RAND_MG291.pdf
- Head, B. (2006). *The small business economy: A report to the president (FY2006)*. In Chapter 1. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Headd, B. (2004). The small business economy (2001–2002). *The small business economy: A report to the president (FY2002-2003)*. Chapter 1. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Headd, B., Ou, C., & Clark, M. (2004). Small business trends. *The small business economy: A report to the president (FY2004)*. Chapter 1. Washington, DC: U.S. Small Business Administration, Office of Advocacy.

- Hecker, J. Z. (2001). *Small business trends in federal procurement in the 1990s*, report to Congressional requesters.
- House of Representatives Report No. 104-14, (1995).
- Jennings, J. B., Koch, J., & Mercer, C. (2006, May). *Review of the DoD mentor-protege program*. McLean, VA: Logistics Management Institute.
- Jennings, J. B., Moody, A., Jackson, C., & Prospero, L. D. (2000, December). *A Review of the DoD pilot mentor-protege program*. McLean, VA: Logistics Management Institute.
- Jones, J. H. (1951). *Fifty billion dollars*. New York: The MacMillan.
- Jovanovic, B. (2001). New technology and the small firm. *Small Business Economics*.
- Karatas, S. (1991). *Sanayilesme sürecinde küçük ve orta ölçekli işletmeler*. Istanbul: Veli Yayinlari.
- Karlsson, C., & Karlsson, M. (2002). Economic policy, institutions and entrepreneurship. *Small Business Economics*, 19, 163–182.
- Kidalov, M. (2010, March). Small business contracting in America and Europe: A comparative assessment. Working Paper, Naval Postgraduate School.
- Kirwan, K. C. (1959, June). *The small business administration and its contribution to the small business community*. Master's thesis, Tufts University.
- Korkmaz, G. (2009). *An analysis of turkey's defense systems acquisition policy*. Master's thesis, Naval Postgraduate School.
- Minority Business Development Agency (2009, February 23). *MBDA historical highlights*. Retrieved December 10, 2009, from http://www.mbda.gov/?section_id=2&bucket_id=643&content_id=6380&well=entire_page
- Moore, N. Y., Baldwin, L.H., Camm, F., Cook, C.R. (2002). *Implementing best purchasing and supply management practices*. Santa Monica, CA: RAND Corporation.
- Moore, N. Y., Grammich C. A., & Bickel R. (2007). *Developing tailored supply strategies*. Santa Monica, CA: RAND Corporation. Retrieved December 2, 2009, from http://www.rand.org/pubs/monographs/2007/RAND_MG572.pdf
- Moore, N. Y., Grammich, C. A., DaVanzo, J., Held, B., Coombs, J., & Mele, J. D. (2008). *Enhancing the small-business opportunities in the DoD*. Santa Monica, CA: RAND Corporation. TR601-1. Retrieved February 1, 2010, from http://www.rand.org/pubs/technical_reports/2008/RAND_TR601-1.pdf
- Motta M., (2004). *Competition policy: Theory and practice*. Cambridge, United Kingdom: Cambridge University Press. Retrieved March 12, 2010, from <http://catdir.loc.gov/catdir/samples/cam041/2003046268.pdf>

- Moutray, C. (2009). The state of Small Business. *The small business economy: A report to the president*. Chapter 1. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Moutray, C., Lichtenstein, J., & Clark, M. (2009). The state of Small Businesses. *The small business economy: A report to the president*. Chapter 1. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- National Defense Authorization Act for Fiscal Year 1987, Pub. L. No. 99-661, 100 Stat. 3875 (1986).
- National Defense Authorization Act for Fiscal Year 1991, Pub. L. No. 101-510, 101st Congress, 2nd Session. Washington: GPO, (1990).
- National Defense Authorization Act of 1996, Pub. L. No. 104-106, 110 Stat. 315 (1996).
- O'Connor (1998). Procurement. *The state of small business: A report of the president (FY1997)*. Appendix B. Washington, DC: U.S. Small Business Administration, Office of Advocacy.
- Office of Inspector General, Department of Defense (DODIG). (2000, February 2009). *Shaping the Civilian Acquisition Workforce of the Future* (Report Number D-2000-088). Washington, DC: Author.
- Office of War Information. (1945). *United States governmental manual* (1st ed.): *Emergency war agencies*. Retrieved November 26, 2009, from <http://www.ibiblio.org/hyperwar/ATO/USGM/EWA.html>
- Official Gazette. (2005). *The directive about the definition, properties and classification of the small and medium-sized enterprises*. Retrieved December 7, 2009, from http://www.tobb.org.tr/organizasyon/sanayi/kobi/kobi_tanimi_yonetmelik.doc
- Organization for Economic Cooperation and Development (OECD). (2004). *SMEs in Turkey: Issues and policies*. Retrieved December 7, 2009, from <http://www.oecd.org/dataoecd/5/11/31932173.pdf>
- Parris, A. (1968). *The small business administration*. New York: Frederick A. Praeger.
- Philip, G.B. (2009, October). Federal business programs and Small Business Act of 1953. *Contract Management*, 24–41.
- Pike, W.C. (2004). *Measuring small business participation in air force contracting: The impact of acquisition reform*. Master's thesis, Air Force Institute of Technology.
- Piore, M.J., & Sabel, C.F. (1984). *Possibilities for prosperity: International keynesianism and flexible specialization: The second industrial divide*. New York, NY: Basic Books.
- Robbins, D. K, Pantuosco, L.J., Parker, D.F., & Fuller, B.K. (2000). An empirical assessment of the contribution of small business employment to U.S. state economic performance. *Small Business Economics*, 15, 293–302.

- Saltonstall, L. (1957, January 25). Lecture of small business and national security. Presented in a classroom lecture at Industrial College of the Armed Forces Washington, DC.
- SBA Office of Advocacy (2004 June). *Trends in electronic procurement and electronic commerce and their impact on small business*. Retrieved March 13, 2010, from <http://www.sba.gov/advo/research/rs240tot.pdf>
- SBA Office of Advocacy. (1998). *The state of small business: A report of the president 1997*. Washington, DC: GPO.
- SBA Office of Advocacy. (2009). *Frequently asked questions*. Retrieved December 7, 2009, from <http://www.sba.gov/advo/stats/sbfaq.pdf>
- SBA Office of Advocacy. (2009). *The small business economy: A report to the president*. Washington, DC: GPO. Retrieved December 7, 2009, from http://www.sba.gov/advo/research/sb_econ2009.pdf.
- SBA Office of Advocacy. (2010). Retrieved December 7, 2009, from <http://www.sba.gov/advo/>
- Schramm, Carl and Robert E. Litan (2009, February 6). The end of American capitalism? *The American*. Retrieved December 7, 2009, from <http://www.american.com/archive/2009/february-2009/the-end-of-american-capitalism/>
- Siller Bros. V. United States 655 F.2d 1039 Certiorari denied by 465 U.S. 925. Retrieved November 30, 2009, from <http://www.precydent.com/citation/655/F.2d/1039>
- Small and Medium Enterprises Development Organization (KOSGEB). (2010). <http://www.kosgeb.gov.tr>
- Small and Medium Enterprises Development Organization (KOSGEB). (2008). *KOSGEB 2008-2012 stratejik plani*. Retrieved December 7, 2009, from <http://www.sp.gov.tr/documents/planlar/KOSGEBSP0812.pdf>
- Small and Medium Enterprises Development Organization (KOSGEB). (2003, December). *KOBİ ekonomisi (Tarihi gelişimi)*. Retrieved December 7, 2009, from <http://www.kosgeb.gov.tr/Yayinlar/duyuru.aspx?yID=106>
- Small Business Act of 1953, Pub. L. No. 85-536, 85th Congress, 1st Session. Washington, DC: GPO.
- Small Business Act of 1958, Pub. L. No. 85-536, 85th Congress, 2nd Session. Washington, DC: GPO.
- Small Business Administration (1967b). Annual report to the president and congress. Washington, DC: Government Printing Office.
- Small Business Administration (1998, June 12). *The new american evolution: The role and impact of small firms*. Washington, DC: SBA. Retrieved on March 12, 2010, from http://www.sba.gov/advo/stats/evol_pap.html

- Small Business Administration. (2010). *Guide to SBA's definitions of small business*. Retrieved December 7, 2009, from http://www.sba.gov/idc/groups/public/documents/sba_homepage/guide_to_size_standards.pdf
- Small Business Administration. (2010). *Helping small business start, grow, and succeed: Recovery act overview*. Retrieved February 2, 2010, http://www.sba.gov/idc/groups/public/documents/sba_homepage/recovery_act_overview_033009.pdf
- Small Business Administration. (2010). *Overview & history*. SBA.gov. Retrieved December 2, 2009, <http://www.sba.gov/aboutsba/history/index.html>
- Small Business Administration. (2010). Retrieved February 2, 2010, from SBA.gov
- Small Business Competitive Demonstration Program Act of 1988, Pub. L. No. 100-656, 100th 102 Stat. 3853 Congress, 2nd Session. Washington, DC: GPO.
- Small Business Competitiveness Demonstration Program Fact Sheet. (n.d.). Retrieved December 10, 2009, from <http://oamp.od.nih.gov/ProgramNotes/CompetitiveDemonstration/CompetitivenessDemonstrationProgram.pdf>
- Small Business Innovation Development Act of 1982, Pub. L. No. 97-219, 97th Congress, 2nd Session. Washington, DC: GPO.
- Small Business Notes. (2010). *History of small business in the United States*. Small Business Notes.com. Retrieved December 01, 2009, <http://www.smallbusinessnotes.com/history/ushistory.html>
- Small Business Reauthorization Act of 1997, Pub. L. No. 105-135, 105th Congress, 1st Session. Washington, DC: GPO.
- Small Business Set-Aside Fact Sheet. (n.d.). Retrieved December 8, 2009, from <http://oamp.od.nih.gov/programnotes/smallbusinesssetasideprograms/setaside.htm>
- Small Business Technology Transfer Act of 1992, Pub. L. No. 102-564, 102nd Congress, 2nd Session. Washington: GPO.
- Tezyetis, S. (2007, November). *SMEs in Turkey & vision and support of KOSGEB*, PowerPoint presentation. KOSGEB. Retrieved May 3, 2010, from http://www.dps.tesoro.it/cd_cooperazione_bilaterale/docs/4.Study_Visits/2.Study_visit_II_november_2007/3.materials/8.KOSGEB.pdf
- U.S. Congress, Senate, 75th Cong., 2nd Sess., April 29, 1938, Congressional Record, LXXXIV, 5992
- U.S. Congress. (1995). *Small business administration procurement assistance: Hearing before the committee on small business house of representatives*, 104th Congress, 14 (1995).

- Undersecretariat for Defense Industries (SSM). (2007). *Defense industry strategic plan (2007-2011)*. Retrieved May 5, 2010, from <http://www.ssm.gov.tr/anasayfa/kurumsal/Documents/SP/bsunu.html>
- Undersecretariat for Defense Industries (SSM). (2007b). *Industrial participation / offset directive*. Retrieved May 5, 2010, from <http://www.ssm.gov.tr/home/institutional/Documents/SSM%20INDUSTRIAL%20PARTICIPATION%20AND%20OFFSET%20DIRECTIVE.pdf>
- Undersecretariat for Defense Industries (SSM). (2008). *Interview with defense 21 magazine*. Retrieved May 5, 2010, from http://ihracat.ssm.gov.tr/TR/Documents/BASINBILGINOTLARI/SAVUNMADERGILERI/DEFENCE21_DERGISI_Mart_2008.doc
- Undersecretariat for Defense Industries (SSM). (2008b). *Interview with infomag magazine*. Retrieved May 5, 2010, from http://ihracat.ssm.gov.tr/TR/Documents/BASINBILGINOTLARI/DIGERSURELIYAYINLAR/INFOMAG_DERGISI_Temmuz_2008.doc
- Undersecretariat for Defense Industries (SSM). (2009). *Defense industry sectoral strategy document (2009-2016)*. Retrieved May 5, 2010, from http://www.ssm.gov.tr/anasayfa/kurumsal/Documents/2009_SSSS.pdf
- Undersecretariat for Defense Industries (SSM). (2010). Retrieved May 5, 2010, from <http://www.ssm.gov.tr>
- Undersecretariat of State Planning Organization (DPT). (2004). *SME strategy and action plan (2004-2006)*. Retrieved December 7, 2009, from <http://ekutup.dpt.gov.tr/esnaf/kobi/strateji.pdf>
- Undersecretariat of State Planning Organization (DPT). (2007, January). *SME strategy and action plan (2007-2009)*. Retrieved December 7, 2009, from <http://www.dpt.gov.tr/DocObjects/Download/3077/2007.pdf>
- Veteran Benefits Act of 2003, Pub. L. No. 108-183, 108th Congress, 1st Session. Washington, DC: GPO.
- Wadhwa, V. (2008, November 7). Start-ups: The upside of a downturn. *Business week*. http://www.businessweek.com/smallbiz/content/nov2008/sb2008117_695019.htm
- Welch, B. (2000). Small business gets lost in big picture, *Government Executive*, 32: 106108.
- Williams, B. W. (1991, December). *An analysis of selected United States marine corps contracts involving minority owned small businesses*. Master's thesis. Naval Postgraduate School. Retrieved November 24, 2009, from, <http://handle.dtic.mil/100.2/ADA243081>
- Yarman, F.A. (2004). The survival power of SME's in an SMC: The Turkish case. In F.D. Carvalho (Eds.), *Defense related SME's: Analysis and description of current conditions* (pp.172–180). Amsterdam: IOS Press.

Yoder, E. C. (2007). Engagement versus Disengagement: How structural and commercially-based regulatory changes have increased government risks in federal acquisitions. *Journal of Public Procurement* 7, 135–172. Retrieved from http://findarticles.com/p/articles/mi_7625/is_200701/ai_n32230588/

THIS PAGE INTENTIONALLY LEFT BLANK

INITIAL DISTRIBUTION LIST

1. Defense Technical Information Center
Ft. Belvoir, Virginia
2. Dudley Knox Library
Naval Postgraduate School
Monterey, California
3. Kara Harp Okulu Savunma Bilimleri Enstitüsü
Bakanlıklar,
Ankara, Turkey
4. Max Kidalov
Naval Postgraduate School
Monterey, California
5. E. Cory Yoder
Naval Postgraduate School
Monterey, California
6. Genelkurmay Başkanlığı Kütüphanesi
Bakanlıklar, 06100
Ankara, Turkey
7. Hava Kuvvetleri Komutanlığı Kütüphanesi
Bakanlıklar, 06100
Ankara, Turkey
8. Kara Kuvvetleri Komutanlığı Kütüphanesi
Bakanlıklar, 06100
Ankara, Turkey
9. Harp Akademileri Komutanlığı Kütüphanesi
Yenilevent, 34334
İstanbul, Turkey
10. Mehmet Engin
Genelkurmay Başkanlığı, Bakanlıklar
Ankara, Turkey
11. Osman Koc
Hava Kuvvetleri Komutanlığı, Bakanlıklar
Ankara, Turkey