

SUCCESS AND FAILURE AMONG AGRICULTURAL
COOPERATIVES IN TURKEY

By

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Success and Failure Among Agricultural Cooperatives in Turkey

Approved:  _____

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This study investigates the impact of democratic control on Turkey's cooperatives. Turkey has had agricultural cooperatives in one form or another since the early 13th century; before the rise of the Ottoman Empire. Yet, the movement has consistently underperformed financially since the founding of the republic in 1923. This study seeks to understand the degree to which Turkey's agricultural cooperatives are controlled democratically by their members and whether that has an effect on their financial performance. Democratic control is an indicator of collective action. Furthermore, how does the organizational structure of a cooperative influence democratic control? How does a cooperative's relationship with the state impact democratic control? In order to answer these questions, my research had two parts that analyzed primary and secondary sources. Key informant interviews were conducted via Skype, telephone, and email with government officials, cooperative employees, and academics in both Turkey and the United States. I also analyzed technical reports and other policy documents published in English by the Turkish government, the Food and Agriculture Organization, and the World Bank.

I found that there are three main inhibitors of collective action among Turkey's agricultural cooperatives: poor relations between cooperative executives and members, state intervention, and lack of member participation. I conclude by offering several policy recommendations for overcoming those inhibitors.

For Kiwi

Who's still amazing, even if she can't fly.

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PREFACE

The origin of this project is personal in nature. I was raised on a farm in rural Oregon. Cooperatives were always part of my life because our farm belongs to a hazelnut marketing cooperative and my father also works as an agronomist at a local supply cooperative. Cooperatives were interesting to me because they have the potential to slow or reverse the trend of corporatization of agriculture as well as protect smaller family-owned farms.

Agricultural cooperatives are an ideal topic for Planning, Public Policy and Management because they combine both issues of agriculture policy and nonprofit management. They also operate as civil society institutions and political pressure groups, which are commonly studied in the field of Political Science. Given the nature of agricultural cooperatives and my double major in Political Science and Planning, Public Policy and Management, an interdisciplinary approach was a natural fit. I drew mostly on economics and political science to reach analytical conclusions. My use of collective action theory is emblematic of this approach. However, since cooperatives are nonprofits and businesses, some business and legal theory were also included. Since this is a thesis through the Robert D. Clark Honors College, I also felt comfortable including some humanities, such as philosophy and history, in my background and literature review.

The selection of Turkey as subject of my research might seem somewhat odd to a casual observer. Why exactly is Turkey worth studying in this way? Turkey has a high number of cooperatives and their mixed success is a frustrating puzzle to those

involved. However, what first drew me to Turkey was not the precarious state of its cooperatives. The draw had more to do with Turkey's history, which is appropriate given that the Clark Honors College is a liberal arts school. Since the fall of the Ottoman Empire, and some would argue before, Turkey has found itself struggling with its national identity. It lies on the crossroads between Asia, the Middle East and Europe. It could be understood through any one of those lenses and this causes conflict. Since the abolition of the caliphate, there has also been an intense debate as to whether Turkey should be secular and "western" or an Islamic state. These questions of national identity have always been fascinating to me. While they don't arise explicitly in my thesis or research, any discussion of Turkey will find them just below the surface.

I would also like to take this opportunity acknowledge the people who helped make this thesis project possible. First, I would like to thank my parents, Kevin and Amy Aman for their love and support. My father was also immensely helpful throughout the research process by providing an insider's perspective to agricultural cooperatives. I would also like to thank my girlfriend, Nicole Kramer, who I love dearly and encouraged and inspired me at the darkest moments of this process. I want to give my thanks to those that helped me with my research by pointing me to people and places I never would have otherwise found. Thanks to everyone who allowed me to interview them, especially those in Turkey. Finally, I want to express my deepest appreciation and gratitude to my thesis adviser, Michael Hibbard. His guidance and editing have proved invaluable in the past year.

Chapter I: Problem Statement

Introduction

According to *The Secret History of the Mongols*, an ancestor of Genghis Khan, Alan Ho'a, had five sons who were constantly quarreling amongst themselves. One day, Ho'a gathered them together and presented each with an arrow. She instructed her sons to break their arrows, and they did so easily. Then she took five arrows and bound them together with rope. She asked her sons to break the bundle of arrows, but they could not. Upon their failure, she said to them, "Brothers who work separately, like a single arrow shaft, can be easily broken, but brothers who stand together against the world, like a bundle of arrows, cannot be broken."¹ The point of this parable is to teach the importance of cooperation for mutual benefit. Like the sons in the story, farmers are in competition to produce the highest yield of crops and attain the highest price for their goods. But also like the sons, they face great adversity from outside forces. Such forces include bad weather conditions, a global marketplace, and price instability, to name a few. The purpose of my thesis is to examine a possible solution to these woes: agricultural cooperatives.

This study specifically focuses on agricultural cooperatives in the nation of Turkey. Turkey is an ideal subject for several reasons. It has a long history of agricultural cooperatives that stretches back before the Ottoman Empire to the late thirteenth century.² Furthermore, despite recent developments, it remains the most

¹ Paula Sabloff, *Modern Mongolia: Reclaiming Genghis Khan*, (Philadelphia, PA: University of Pennsylvania Museum of Archaeology and Anthropology, 2001)

² Okan, Nedret. Food and Agriculture Organization, "An Overview of Turkish Cooperatives." Last modified 2013.

developed liberal democracy in the Middle East. It is currently a candidate country for membership in the European Union. Between 2002 and 2012, Turkey's GDP per capita increased 20% relative to the Euro Area.³ These facts are relevant because they characterize Turkey as a nation that is amiable toward democratic principles and is more industrialized than many comparable Middle Eastern and Eastern European nations. Theoretically, this would allow Turkey to develop stronger cooperatives than a nation without these attributes.

However, even given these strengths, the results of Turkey's cooperatives have been mixed. On one hand, agricultural credit cooperatives are generally considered financial successes. These institutions receive heavy support from the state and, in turn, are subject to heavy regulation. On the other hand, agricultural sales cooperatives find themselves in a much worse position. Because they are controlled by different government ministries, they receive far less state support. As a result, every agricultural sales cooperative in Turkey is in bankruptcy.

Turkey's lack of success in cooperative agriculture raises many interesting questions about how Turkish agricultural cooperatives are organized and managed. I considered three variables that are crucial in the management of cooperatives in any setting: interactions between the state and the cooperative, decisions made by the cooperative's executive team, and the degree of control cooperative members have over their cooperative. My thesis seeks to explore and evaluate why Turkey's cooperatives remain stagnant. How does member control and involvement affect their efficacy and whether increased state intervention have an effect on collective action. According to

³ Eurostat, "GDP per capita in PPS." Last modified 06 1, 2013. Accessed November 24, 2013.

Gulen Ozdemir, cooperatives are regulated differently by what type of cooperative it is.⁴ Credit and sales cooperatives run as “top down organizations,” hence they are generally stable institutions; but they are not democratic and do not provide useful services to their members. Meanwhile, development cooperatives are “bottom up” in that they are democratic in nature and have services that are useful to their members; but they are less financially stable. By comparing these two types of cooperatives, I am able to ask the research question: **How does the democratic control of Turkish agricultural cooperatives by members influence them as institutions and how does it affect their efficacy?** In order to answer these questions, I have analyzed Turkish agricultural co-operatives and conducted open-ended interviews with scholars and practitioners.

In the next paragraph, I establish the importance of this study and its contribution to the academic literature. Then, I use the remainder of the chapter to provide background information on my topic. I will cover the basic fundamentals of cooperative regulation and law in the United States as a foundational example for how a government handles cooperatives. After that, I will briefly describe the methodology I have utilized in my thesis. Finally, I will give an overview of the structure of my thesis on a chapter-by-chapter basis.

Importance of the Study

Cooperatives are often discussed as a possible means of economic development, especially in rural regions that rely on agriculture for their economy. The United

⁴ Ozdemir, Gulen. Journal of Asian Economics, "Cooperative Shareholder Relations in agricultural cooperatives in Turkey." Last modified 1 25, 2005.

Nations emphasized this in their literature on the 2012 Year of Cooperatives initiative. Despite its strong economic growth in recent years, the majority of Turkey's landmass is unindustrialized and rural. Of Turkey's rural population, 35% is living below the poverty line.⁵ Rural poverty hits women harder than men, and in these regions only 25% of the labor force is made up of women. As these dire statistics show, the country is still in need of rural and agricultural development. Cooperatives could be a possible avenue for this development. Since Turkey has a fairly stable, modern, and democratic government, development through cooperatives is more feasible than in other developing countries. Yet, agricultural cooperatives in Turkey remain stagnant. There is a significant amount of literature on agricultural cooperatives in the field of agricultural economics. This literature analyzes cooperatives using paradigms such as game theory and econometrics. There is also literature that evaluates and explains cooperatives through the lens of business and nonprofit theory. The literature is both theoretical and specific case studies and analysis. However, there is very little that focuses on Turkey or similar developing nations with high economic growth and large agriculture sectors.

Background

What is a Cooperative?

A cooperative is an alternative business model to the standard corporation. A corporation is owned its shareholders; however, there is no limit to the number of shareholders that could be invested in it. The day-to-day operations of the cooperative

⁵ International Fund for Agricultural Development1, "Rural Poverty in Turkey." Last modified 2010. Accessed November 21, 2013.

are handled by a team of management executives and staff. The purpose of a standard corporation is to maximize profits in order to raise the share price and provide a dividend to shareholders. A cooperative has a very similar management structure; but its ownership and mission are entirely different. Its purpose is to provide services to members rather than maximize profits. These members replace the role of stockholders in the organization. Each member has equity in the organization and has an equal share in the organization. Depending on the cooperative, these services might take a variety of forms. With credit unions, which are a form of cooperative, members gain access to savings accounts, checking accounts, and insurance.⁶ An agricultural cooperative might sell equipment or fertilizers to member farmers, process and distribute goods, and make loans.

Types of Agricultural Cooperatives

There are several different types of agricultural cooperatives that serve different needs and functions.⁷ First, there is the marketing cooperative, which processes, packages, and distributes agricultural products. Many popular brands of agricultural products in the United States are owned by cooperatives, including: Ocean Spray (fruit/juices), Sun-Maid (raisins), and Land O'Lakes (dairy products). A supply cooperative gives farmers inputs like seed, fertilizer, fuel and services like planting or harvesting. Credit cooperatives operate like a credit union and provide farmers with low interest loans and banking services. Finally, bargaining cooperatives negotiate on

⁶ Oregon Community Credit Union, "Member Services." Accessed November 14, 2013.

⁷ Broadmoore, Amy. "What are Agricultural Cooperatives." *Agricultural Law* (blog), 10 31, 2006.

behalf of their members with the processors in order to get a price that is more favorable to farmers.

In Turkey, these types of cooperatives still exist, but under different names.⁸ Marketing cooperatives are referred to as agricultural sales cooperatives. Agricultural credit cooperatives in Turkey provide much more than simply access to credit. They are basically equivalent to supply cooperatives in the United States and also offer financial services. Agricultural Development Cooperatives are not found in the United States at all like they are in Turkey. They provide a range of services to their members such as machinery pools, technical expertise, and irrigation. In the United States, these services would likely be provided by a supply cooperative or an individual cooperative that specialized in that service.⁹

How Do Cooperatives Work?

In United States, cooperatives are classified as 501(c)(12) nonprofits. Cooperatives themselves are exempt from corporate income taxes although members must still pay taxes on the income that comes from the cooperative in the form of a dividend.¹⁰ In the United States, cooperatives also benefit from special exemptions to antitrust law thanks to the Capper-Volstead Act.¹¹ This law, passed by congress in 1922, legally recognizes cooperatives by granting them special exemptions and restrictions. A cooperative must be operated democratically and each member may vote

⁸ Ozdemir, Gulen. Journal of Asian Economics, "Cooperative Shareholder Relations in agricultural cooperatives in Turkey." Last modified 1 25, 2005.

⁹ Okan, Nedret. Food and Agriculture Organization, "An Overview of Turkish Cooperatives." Last modified 2013.

¹⁰ Cornell Law School, "26 USC Part I - TAX TREATMENT OF COOPERATIVES." Last modified 08 13, 2013. Accessed November 14, 2013.

¹¹ "Representing the Business Interests of Agriculture." *National Council of Farmer Cooperatives*. National Council of Farmer Cooperatives, n.d. Web. 3 June 2012.

in elections to select the board of directors. The board of directors sets the general direction and chooses the executive staff (CEO, CFO, etc.) to run the day-to-day operations. There can also be votes for decisions that would have a major impact on the members of a cooperative. Unlike a corporation, a more powerful shareholder does not have more influence in the operation. For example, if a particular farmer belongs to a wheat marketing cooperative, and he accounts for 10% of the volume of wheat that the cooperative takes in, he is entitled to 10% of the profits. However, this only entitles him to one vote; the same as all larger and smaller shareholders in the cooperative. In a standard corporation model, a person with a 10% stake is entitled to 10% of the profit and 10% of the votes to make management decisions. Cooperatives are allowed to violate antitrust laws in order to act collectively. In exchange, cooperatives are required to comply with several conditions. Cooperatives must either give each member a single vote in board elections regardless of stock held or pay a dividend no more than 8% of capital investment per year and from doing a majority of its business with nonmembers. The purpose of these restrictions is to make sure that cooperatives are providing services to their members and not pursuing profit maximization.

Theory of Agricultural Cooperatives

Since the development of the modern cooperative movement in the 19th century, a number of competing schools of thought have arisen surrounding them.¹² The schools can be divided into two camps: American and European. The major European school was the commonwealth school; it, like most of its European counterparts was idealistic

¹²Togerson, Randall. University of Wisconsin, "EVOLUTION OF COOPERATIVE THOUGHT, THEORY AND PURPOSE." Last modified 1 16, 1997. Accessed November 21, 2013.

in nature. It grew out of the anarchist and socialist movements that were popular among the European Intelligentsia at the time. It postulated that cooperatives would eventually become the prevailing business model in agribusiness. It would make coalitions with similar likeminded leftist organizations such as labor unions.

The two American schools are more known for their practicality (and admittedly less left-wing). The California School is defined by aggressive cooperative advocacy in order to benefit farmers.¹³ Aaron Shapiro, the founder of the California School and a lawyer by trade, believed farmers were being taken advantage of by large agribusiness and financial firms. His goal was to use cooperatives to increase productivity through competition and shift the balance of power back to farmers.

The Nourse School rose in opposition to the California School by arguing it went too far by advocating cooperative monopolies in markets.¹⁴ Instead, cooperatives should be smaller, more local, and have more membership control. Their primary purpose should be to offer farmers a “competitive yardstick.” By this Nourse meant that cooperatives would allow farmers to see if they were getting a bad deal from for-profit firms.

The two schools had a distinct effect on how cooperatives organized themselves in 20th century America.¹⁵ Adherents of the California School set up large cooperatives that tried to control a large market share in agricultural commodities. The Nourse

¹³ Larsen, Grace. The Mississippi Valley Historical Review, "Asron Scapiro: Genius of Farm (o-operative Promotion." Last modified 09 1962. Accessed November 28, 2013.

¹⁴ Nourse, E.G. Journal of Cooperatives, "The Place for Cooperatives in Our Economy." Last modified 1942. Accessed November 29, 2013. <http://ageconsearch.umn.edu/bitstream/46287/2/Volume 7 Article 8.pdf>.

¹⁵ Togerson, Randall. University of Wisconsin, "EVOLUTION OF COOPERATIVE THOUGHT, THEORY AND PURPOSE." Last modified 1 16, 1997. Accessed November 21, 2013.

School influenced smaller cooperatives that were more “bottom up” organizations.

Economics of Cooperatives

When thinking about possible benefits of cooperatives to farmers, consider the economics of small independent farmers. Their production exceeds the demand at the extremely local level (enough to feed their families and sell at the local farmers market). What should they do with the surplus? Of course they should sell it; but to whom? None of them individually produces a large enough crop to justify building a processor, or packaging and distributing their commodities themselves. Therefore, they must sell their products to a company that processes and distributes that commodity to consumers. In a perfectly competitive market, there would be many producers and processors competing amongst themselves for market share. This would lead to a commodity of uniform quality being traded solely on price. This would lead the market price to converge at an optimal equilibrium for both the buyer and seller. Such a market would look like this:

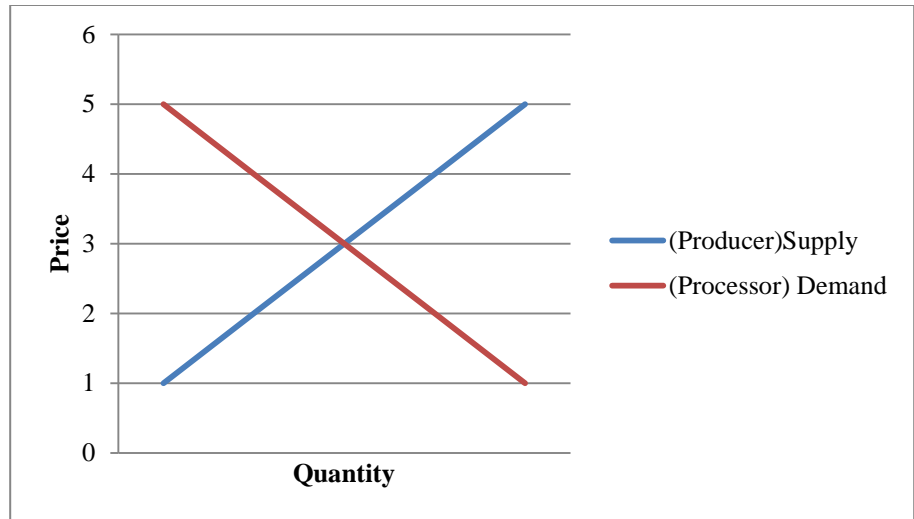


Fig. 1: Supply and Demand Curve in Perfect Equilibrium

However, that does not reflect the reality. Often, there are only one or two processors in a given market. In most cases, the burden is on farmers to transport the crop to the processor; therefore it is unfeasible to bring their crops to a competitor that is farther away for a higher price. That means that there will always be lower demand than supply, hence lower prices for farmers. Thus, the demand curve is shifted and actually looks like this:

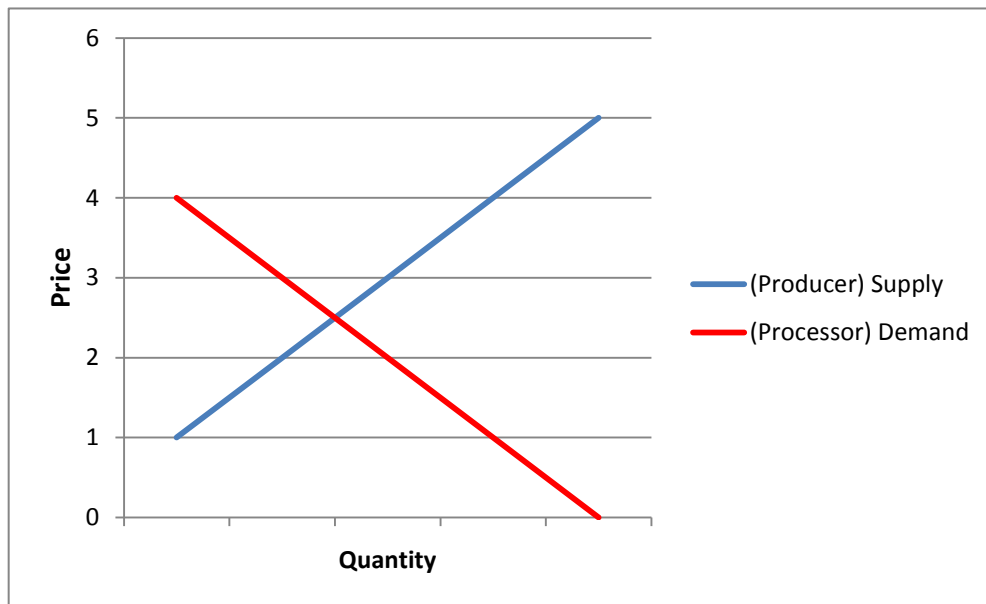


Fig. 2: Supply and Demand Curve Adjusted Equilibrium

In light of this, the goals of cooperatives are to lower the cost of production for farmers and to act collectively when negotiating a price with processors or retailers. The California School of Cooperative Theory, pioneered by Aaron Sapiro, “sought to correct imbalances in grower treatment and improve marketing coordination by using cooperatives organized along commodity lines to achieve more orderly marketing.”¹⁶ Sapiro believed that cooperatives existing in the marketplace will make the market more efficient and productive. This has the effect of shifting the supply curve back toward the middle to equitability for both sides.

Cooperatives in the Developing World

Cooperatives have perhaps the greatest possibility in the developing world. The equity divide between processors and producers is even more pronounced in this context. Through pooling resources, farmers could invest in modern farming techniques that would increase yield and reduce hunger in developing countries. However, there are inherent challenges to a “bottom-up” enterprise that can be even harder to weather in the developing world. It can be difficult to get a group of people to cooperate under any circumstances; this can be exacerbated by insecure property rights, and extreme poverty. Furthermore, in this sort of environment, there is a lack of quality management and business professionals to operate the organization. Unlike in the United States or Europe, the regulatory apparatus simply is not there; and governments can be neglectful or even adverse to cooperative efforts.¹⁷

¹⁶ Togerson, Randall. University of Wisconsin, "EVOLUTION OF COOPERATIVE THOUGHT, THEORY AND PURPOSE." Last modified 16, 1997. Accessed November 21, 2013.

¹⁷ Hahn, Robert. World Bank, "The Costs and Benefits of Regulation: Implications for Developing Countries." Last modified 1997. Accessed November 24, 2013.

Cooperatives in Turkey

Turkey has a long and illustrious history with cooperative enterprise. Ahi Evren (1172-1261), a Turkish craftsman, economist, and religious figure formed the “Ahi Movement.”¹⁸ The goal of the movement was to conduct commerce in an ethical way without exploiting either producers or consumers. It cannot properly be categorized as a cooperative, but it shared many of the same values and goals. This is significant because the cooperative movement only came to fruition in Europe in the 19th century. In the 19th century, Turkey under the Ottomans instituted “country chests,” which was a proto-credit cooperative.¹⁹ In 1912, the first real attempt was made at an agricultural marketing cooperative. The fig growers of the Aegean region formed the Taris Union of Fig Producers (which still exists today²⁰) to break the monopoly in the fig market.²¹

Turkish Politics

Broadly, Turkish history can be divided into three eras: Pre-Ottoman, The Ottoman Empire, and the Post-Ottoman Republic. The Pre-Ottoman Turks were nomadic steppe people that descended from Central Asia.²² Eventually, they began to adopt agriculture and settle in the fertile Anatolia and Rumelia.

From 1374 to 1918, the Ottoman Empire Turks ruled large portions of territory outside of Turkey from the Balkans to Arabia to North Africa. Arnold Toynbee notes that the Ottoman Empire “inevitably broke down, though, being more scientifically

¹⁸ Okan, Nedret. Food and Agriculture Organization, "An Overview of Turkish Cooperatives." Last modified 2013. Accessed November 21, 2013.

¹⁹ Okan, Nedret. Food and Agriculture Organization, "An Overview of Turkish Cooperatives." Last modified 2013. Accessed November 21, 2013

²⁰ Taris Figs Agricultural Sales Cooperatives Union, "About Us." Accessed November 24, 2013.

²¹ Okan, Nedret. Food and Agriculture Organization, "An Overview of Turkish Cooperatives." Last modified 2013. Accessed November 21, 2013.

²² Aksin, Sina. Turkey: from Empire to Revolutionary Republic. (London: Hurst & Company, 2007), 3.

constructed than most of its kind, it defied destiny for a longer period and struggled more obstinately against dissolution than the empires of the Huns, the Avars, the Mongols.”²³ The key to its longevity was its ability to import its administration into its newly acquired provinces and delegate power to regional governors. Yet at same time, throughout the height of its power, it remained a vertically integrated and hierarchical organization. Toynbee notes that the Turks, because they descended from steppe herdsmen, tended to see the citizens of the empire as “human cattle.”²⁴ The members of the bottom parts of Ottoman society such as merchants and peasants were collectively referred to as the *Reaya* or “The Flock.”²⁵ The sultan took upon himself the position of shepherd to the flock, while the military (especially the Janissaries) and administration of the empire assumed the role of watchdog over the flock.²⁶

Beginning in 1918, after the defeat of the Central Powers in World War I, the Ottoman Empire was dissolved.²⁷ Out of the ensuing political vacuum, Mustafa Kemal Atatürk led a revolution against the Allies and established the Republic of Turkey and established the capital at Ankara. As the founder of the republic and the first President of Turkey, he reengineered Turkish government, law and society. His goal was to quickly modernize Turkey and create a secular westernized state. The Constitution of 1924, which were part of Atatürk’s Reforms, created legislative, executive, and judicial branches. The Constitution of 1924 was replaced by newer constitutions in 1961 and

²³ Arnold Toynbee, and Kenneth Kirkwood, *Turkey*, (New York: Charles Schribner's Sons, 1927), 20.

²⁴ Arnold Toynbee, and Kenneth Kirkwood, *Turkey*, (New York: Charles Schribner's Sons, 1927), 21.

²⁵ Aksin, Sina. *Turkey: from Empire to Revolutionary Republic*. (London: Hurst & Company, 2007), 9.

²⁶ Arnold Toynbee, and Kenneth Kirkwood, *Turkey*, (New York: Charles Schribner's Sons, 1927), 21.

²⁷ Arnold Toynbee, and Kenneth Kirkwood, *Turkey*, (New York: Charles Schribner's Sons, 1927), 21.

1982 as the result of military coups.²⁸ Subsequent constitutions led to a more conventional parliamentary democracy.²⁹

In recent decades, Turkey has seen a greater degree of political stability. The ruling majority has consistently been dominated by center-right political parties. The current ruling AK Party is committed to economic and social conservatism. (One might uncharitably call it Islamism.) As a parliamentary democracy, it is governed by a prime minister from the ruling party. Turkey also has a president that is elected democratically, but it is a largely ceremonial figurehead position.

Geography of Turkey

Turkey is a fairly large country with an area of 302,535 square miles (roughly twice the size of California).³⁰ As such, the climate and geography vary across its borders. It shares elements of Mediterranean, Eastern European, and Middle Eastern climates. Naturally, different climates are ideal for different crops, which incline Turkey toward a more diversified agricultural economy. According to the *New Agriculturist*, 57% of Turkey's agricultural industry is made up of crop production, 34% is dedicated to livestock production, 6% to forestry, and 3% to fisheries.³¹ Of the crop producing land in Turkey, 75% raises cereal grains (wheat and barley in particular). Other major crops are fruits such as, grapes, dates, figs, olives, apricots, and citrus fruits. Turkey is also a major producer of hazelnuts and legumes. It also produces large

²⁸ Weiker, Walter. *The Turkish Revolution: 1960-1961*. Washington, D.C.: The Brookings Institution, 1963.

²⁹ Turkish Grand National Assembly, "Constitution of the Republic." Last modified 1982. Accessed April 7, 2014.

³⁰ Infoplease, "Turkey." Last modified 2005. Accessed April 13, 2014.

³¹ New Agriculturist, "Country profile - Turkey." Last modified 05 2000. Accessed April 13, 2014.

amounts of cash crops like cotton and tobacco. Among livestock bred in Turkey, the most popular are sheep, goats, and poultry. This map³² displays the dominant crop in the various regions of Turkey:

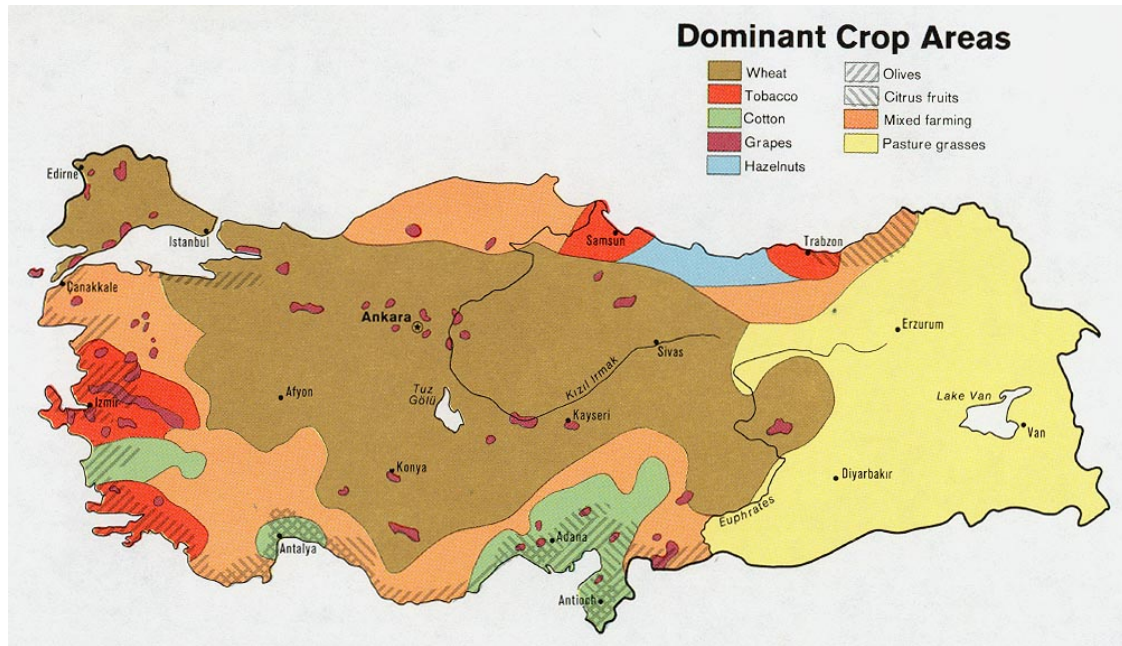


Fig. 3: Dominant Crop in Turkey by Region

Turkey has a population of 74 million with a growth rate of 1.3%.³³ As a developing economy with a mostly agrarian economy, Turkey has a rather sparse population density. The majority of population is focused into urban centers, but the majority of land is lightly populated agricultural land. This map³⁴ illustrates the

³² NationMasters, "Turkey - Dominant Crop Areas." Last modified 2014. Accessed April 13, 2014.

³³ Central Intelligence Agency. "World Factbook- Turkey." Central Intelligence Agency. (accessed April 14, 2014).

³⁴ Encyclopedia Britannica, "Turkey: Population Density." Last modified 2002. Accessed April 13, 2014.

population density in Turkey:

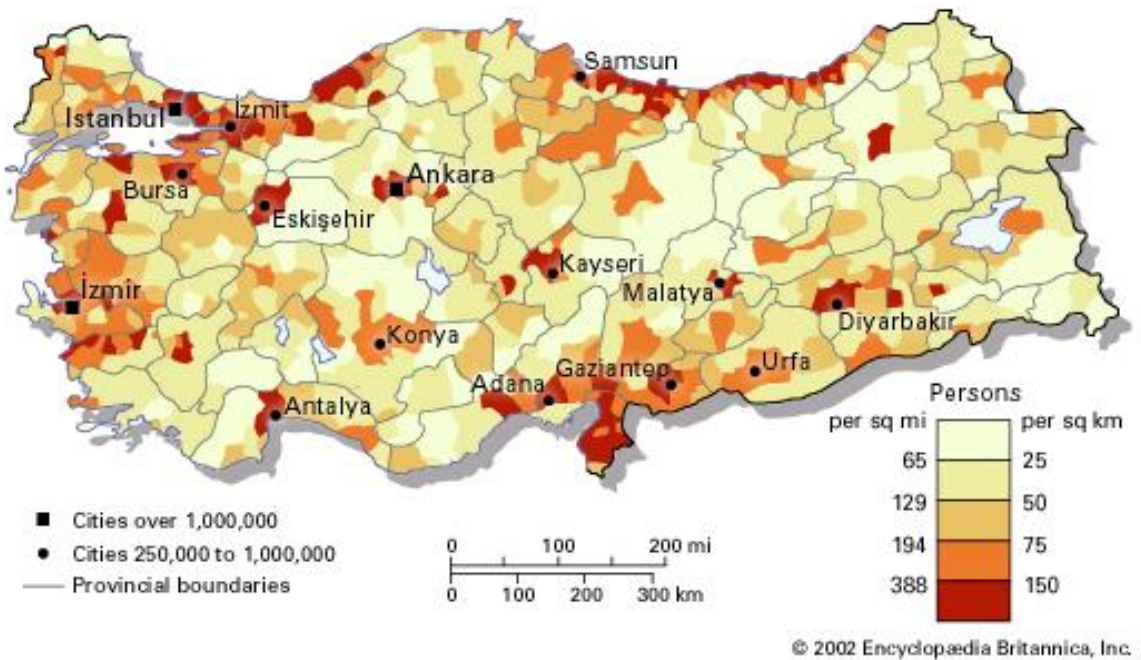


Fig. 4: Population Density in Turkey

Since the collapse of the Ottoman Empire, Turkey has defined itself as a homeland for ethnic Turks. This has proved problematic for the ethnic minority groups that live in live in Turkey. According to the *CIA World Factbook*, 70-75% of the population is Turkish, 18% are Kurdish, and the remainder being an assortment of

minorities. This map³⁵ displays the dominant ethnic groups across Turkey:

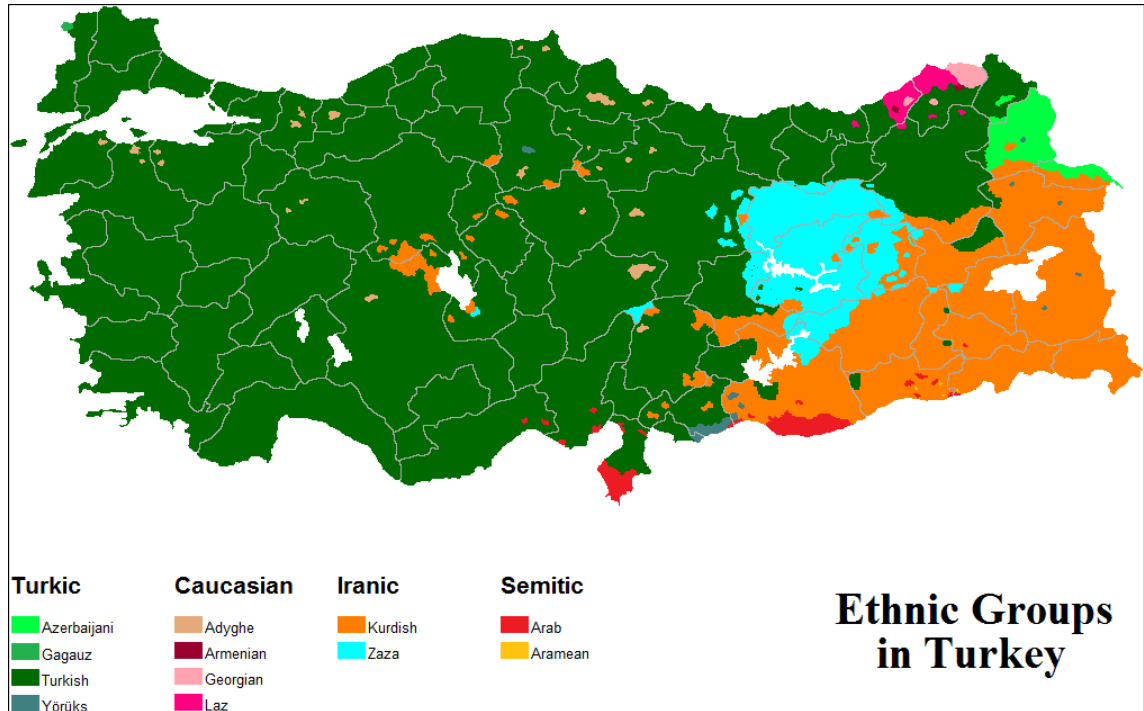


Fig. 5: Dominant Ethnic Group in Turkey by Region

For years, the Kurds have been working to carve a state out of Southeastern Turkey, Northwestern Iran, and Northern Iraq and Syria. The most significant territory in most proposed boundaries for a hypothetical Kurdistan comes from Turkey. Notice where Kurdish territory lies in relation to the agricultural geography of Turkey; western part of the country is well suited to crop production and the eastern portion is mountainous and only suitable for livestock herding.

The other ethnic concern facing Turkey is the Armenian Genocide. The Armenian Genocide occurred under the rule of the Young Turks during World War I.³⁶

³⁵ Blogspot. "The Sixteen Petal Flower / Sixteen Spoke Wheel symbol of Israel." The Sixteen Petal Flower / Sixteen Spoke Wheel symbol of Israel.

³⁶ Adalian, Rouban. "Ottoman Empire and the Armenian Genocide." Ottoman Empire and the Armenian Genocide.

The Young Turks led a military coup against the Ottoman Empire and abolished the absolute rule of the sultanate and replaced it with a constitutional monarchy.³⁷ The Young Turk movement was made up of westernized progressive university students and military officers. The party that came forth from the movement had two factions: liberal reformers and Turkish nationalists. The Young Turks blamed their military defeats against the Russians on the local Armenian population. They accused the Armenian population of aiding the enemy and planning to secede and form an autonomous state. What resulted was the first modern genocide. It began by arresting and summarily executing Armenian leaders and intellectuals. Then, the military killed Armenian men through forced labor and extermination. Women and children were sent to concentration camps in the Syrian Desert. It is estimated that the Ottoman Empire killed 1 to 1.5 million Armenians between 1914 and 1918. Despite condemnations from the international community, the government of Turkey still refuses to acknowledge the events as genocide and even that they occurred at all.³⁸ As a result, relations between Turkey and Armenia remain tense and the position of the Armenian community remains precarious.

Culture of Turkey

Turkey, since the dawn of the Ottoman Empire, has been a predominantly Islamic region. According to the *CIA World Factbook*, 99.8% of the population is

³⁷ Hanioglu, M. Şükrü. *Preparation for a revolution: the Young Turks, 1902-1908*. Oxford: Oxford University Press, 2001.

³⁸ Hovannisian, Richard G.. *Remembrance and denial: the case of the Armenian genocide*. Detroit: Wayne State University Press, 1998.

identifies as Muslim.³⁹ Of that Muslim population, the majority is Sunni. After Atatürk's reforms, the country was greatly secularized and Islam was removed from the law and government. For a period of time, religious education was forbidden.⁴⁰ After the suppression of religion as part of the Atatürk reforms, religion in public life has reemerged; however it remains a constant struggle within Turkish society.

According to a hadith (quotations from Muhammad or his followers that make up the Islamic theological tradition), Muslims are called to agriculture: "If the Day of Resurrection about to occur, while in the hands of one of you is a palm seed is planted when he was able to before the end of the world then he should plant it."⁴¹ According to the interpretation, a good Muslim ought to engage in agriculture, even when there is no direct benefit to oneself, because it benefits others and fulfills their call to charity. This firmly establishes agriculture as necessary and productive in an Islamic society (such as Turkey).

Furthermore, Islam encourages fair business practices and dealings. Anas Ibn Malik relates the following hadith: "Allah's Messenger forbade the sale of fruits till they are almost ripe. Anas was asked what is meant by 'are almost ripe.' He replied, 'Till they become red.' Allah's Messenger further said, 'If Allah spoiled the fruits, what right would one have to take the money of one's brother?'"⁴² This principle can be applied beyond agriculture, but it is perfectly applicable to agriculture. A farmer ought

³⁹ Central Intelligence Agency. "World Factbook- Turkey." Central Intelligence Agency. (accessed April 14, 2014).

⁴⁰ Georgetown University. "Turkey: Atatürk and the Secular State." Turkey: Atatürk and the Secular State.

⁴¹ Priyadi, Sugeng. "Islam invites Muslims to raise." AGRICULTURE IN ISLAM. (accessed April 20, 2014).

⁴² Beekun, Rafik. "Islamic Business Ethics." Institute for Islamic Thought. November 1, 1996.

not to sell a crop they know is defective or unsatisfactory and a supplier should not provide goods at reasonable prices. Islamic law bans usury (charging interest on loans).⁴³ In Turkey this is not legally forbidden because the state is secular. However, it is considered sinful in the eyes of Islam. According to Businessculture.org, the culture of business in Turkey is relationship-based and very hierarchical.⁴⁴

Organization of Thesis

Directly following this introductory chapter, in the second chapter I review the academic literature and theory associated with my topic. In my third chapter, I state my research question and methodology. The fourth chapter contains my research findings, which consists of an analysis of interviews and documents. Finally, the fifth chapter contains policy recommendations based on my findings and a conclusion.

⁴³ Gambling, Trevor, and Rifaat Ahmed Karim. *Business and accounting ethics in Islam*. London: Mansell, 1991.

⁴⁴ European Commission. "Turkey." *Business Culture*, 2013.

Chapter II: Literature Review

Introduction

My literature review will cover the theories that undergird my thesis. The theories I will cover are: cooperation, game theory, collective action, and member relations. These all describe, in some respect, how cooperatives function and, at times, break down. These theories, collective action and game theory especially, explain how people interact and work together. At its most basic, a cooperative is a group of people collaborating to fulfill their common needs. Through the course of this chapter I introduce each theory in general terms and apply it specifically to agricultural cooperatives.

Theories

Cooperation

Cooperation occurs when multiple organisms work together toward a common goal of mutual benefit. Games such as the Prisoner's Dilemma and Darwin's theory of evolutionary competition are pessimistic about the possibility of cooperation and favor individual self-interest. Conversely, there were others who were more hopeful. In *Mutual Aid*, Russian radical anarchist thinker Peter Kropotkin optimistically argued that previous interpretations of Darwin were fundamentally wrong.⁴⁵ Darwin's notions of species adapting to their environments were correct. However, instead of being in competition for food and mates, individuals of the same species were meant to

⁴⁵ Kropotkin, Petr Alekseevich, and Emile Capouya. *The Essential Kropotkin*. "Mutual Aid." New York: Liveright, 1975.

cooperate and help each other survive for the betterment of the species. One could argue that there is a parallel between the ideas of Kropotkin and the idealistic philosophy of the first European agricultural cooperatives.

Ernst Fehr, an Austrian Economist, argues that cooperation can exist, but there must be a framework that punishes free riders and rewards cooperation.⁴⁶ One can reasonably state that a group can accomplish more than an individual. Given that premise, individuals are provided an incentive to cooperate. However, for an individual, it is possible to reap the rewards of the group's efforts without contributing, which is known as freeriding. Despite the greater benefit for the group, the freerider takes advantage of their efforts for personal gain. Since this is the case, Fehr argues that an individual who would otherwise be predisposed to cooperation would not contribute because they do not see the situation as "fair." According to Fehr, perceived fairness and individual incentives are the biggest In order to overcome this challenge and make cooperation possible, a framework must be instituted that rewards cooperation and disciplines freeriders.

However, Robert Axelrod, a political scientist at the University of Michigan, theorized that cooperation is possible even in anarchy.⁴⁷ In this situation, anarchy can mean one of two things. It can mean a Hobbesian state of nature; a state of pure competition, where there is no state to enforce justice and the strong dominate the weak.⁴⁸ The second interpretation is Kantian anarchy in which moral norms exist, but

⁴⁶ Fehr, Ernst. Quarterly Journal of Economics, "A Theory of Fairness, Competition, and Cooperation." Last modified 1999. Accessed November 28, 2013.

⁴⁷ Axelrod, Robert. Science, "Evolution of Cooperation." Last modified 03 27, 1981. Accessed November 28, 2013.

⁴⁸ Hobbes, Thomas, and J. C. A. Gaskin. Leviathan. . Reprint, Oxford: Oxford University Press, 1998.

with no enforcement mechanism.⁴⁹ The first is always negative, but the second one is not necessarily bad. Both interpretations can be cited in political and biological examples. However, for this situation, Kant's interpretation is more prescient. Darwin's theory is counterfactual because there is evidence in nature that organisms cooperate. Animals, for instance, live in anarchy and have no system of punishment or reward; yet they cooperate. Axelrod cites the example of bees pollinating flowers. Both species benefit from the exchange and it becomes more widespread because of its success. Axelrod uses both biological and social science examples to develop a strategy for cooperation and quantify its success. Through his reasoning, it should be possible for humans to cooperate even without a formal framework to hold them accountable.

According to psychological research, the instinct of whether or not to cooperate with others is based on trust. According to Gareth Jones and Jennifer George, trust is built and maintained through increased interaction and familiarity, as well as shared goals, attitudes and values.⁵⁰ This is why we trust family members more than we trust strangers. Recognizing this, some organizations have begun to encourage working in smaller tight-knit groups. Certain organizations have also flattened their management structure to foster a more collaborative environment. Members of an agricultural cooperative must trust the cooperative and one another in order for the enterprise to be a success. Members must trust that each will honor and make the right choices to advance the group effort. Farmers often have similar backgrounds, values and goals. Therefore, they are more likely to trust and form solidarity with one another.

⁴⁹ Rauscher, Frederick. "Kant's Social and Political Philosophy." Stanford University.

⁵⁰ George, Jennifer M.. "The Experience And Evolution Of Trust: Implications For Cooperation And Teamwork." *Academy of Management Review* 23: 531-546.

Game Theory

Game theory is, in a simple explanation, a way of thinking about choices and how other actors react to those choices.⁵¹ The most famous games in game theory are the “Prisoner’s Dilemma” and the “Stag Hunt.” Both games represent the struggle between players to act collectively. In the Prisoner’s Dilemma, two players are forced between confessing to the police or remaining silent. If both prisoners remain silent, they will receive a minimal sentence, if one confesses and one stays silent, the first will go free and the second will serve a long sentence. If both confess, they will receive a medium sentence. Both players would be better off if they cooperated, but risk aversion forces them to confess.⁵² In the Stag Hunt, a group of hunters is hiding to hunt a stag. The hunters see a rabbit, but if any of them move to get it, the stag will escape and the other hunters will starve. Unlike the Prisoner’s Dilemma, this game encourages collective action. The results from the games rely on whether the participants can communicate with each other. The payouts for the games also alter the players’ decisions. In the Prisoner’s Dilemma, the biggest possible payout comes from defecting when the other person cooperates and the worst possible payout is cooperating when the other person defects. While in the Stag Hunt, the biggest payout comes from both people cooperating and the worst comes from both defecting.

A common outcome from multiplayer games that require cooperation is a Nash Equilibrium.⁵³ In game such as the Prisoner’s Dilemma, each player is pressured to confess. The best possible outcome is to confess while the other player remains silent.

⁵¹ Levine, David. UCLA, "What is Game Theory?" Last modified 04 16, 2013. Accessed November 28, 2013.

⁵² GameTheory.net, "Prisoner's Dilemma." Accessed November 28, 2013.

⁵³ McCain, Roger A.. ""Solutions" to Nonconstant Sum Games." Nash Equilibrium.

The worst possible outcome is to remain silent while the other player confesses. This incentivizes both players to defect. The result is suboptimal but acceptable to both players.

According to John Staatz, an agricultural economist, cooperatives can be thought of as a cooperative game because a large number of players must decide how to allocate services and surpluses amongst themselves.⁵⁴ Also, farmers will not decide to join a cooperative unless the benefits they receive are greater than any other configuration. They will leave the cooperative if it is advantageous for them to do so.⁵⁵ Farmers are rational actors and will not cooperate unless it is in their financial interest to do so.

Collective Action

The concept behind collective action is that a group of individuals can accomplish more than the members of that group can accomplish individually. Conventional wisdom dictates that a group of individuals with common interests will naturally work together for their mutual benefit. However, in 1965, Mancur Olson, an economist at the University of Maryland, introduced the idea of a collective action problem.⁵⁶ He emphasized two examples of collective action problems: public goods and free riders. Public goods are goods that cannot be provided by the private enterprise because they are not profitable. The reason for this is that a person cannot be

⁵⁴Staatz, John. American Journal of Agricultural Economics, "The Cooperative as a Coalition: A Game-Theoretic Approach." Last modified 12 1983. Accessed November 28, 2013.

⁵⁵Sexton, Richard. American Journal of Agricultural Economics, "The Formation of Cooperatives: A Game-Theoretical Approach with Implications for Cooperative Finance, Decision Making, and Stability." Last modified 05 1986. Accessed November 28, 2013.

⁵⁶Mancur Olson, *The Logic of Collective Action*, (Cambridge, MA: Harvard College, 1965), 153.

excluded from utilizing the good; and access to the good is not competitive. A classic example of a public good is a lighthouse; a boat kept safe by the lighthouse cannot be compelled to pay for the service. The free rider problem is when a group collaborates to accomplish something and an individual who did not contribute to the project still benefits from it. Imagine an asteroid is headed for the Earth. All the countries of the world pool their resources to build a bomb to blow up the asteroid, except one. If the plan is successful, the abstaining country would be rewarded for its bad behavior by not getting hit by the asteroid and not having to contribute to solving the problem. Marx is drawn on to explain how a minority can come to dominate the majority. This would appear to be the case between agricultural producers (who are numerous) and processors (who are few). Olson concludes that collective action is easier to achieve among a small group rather than a large one.

Agricultural issues are specifically mentioned by Olson as an area of interest where collective action is applicable. First, he acknowledges the potential for political action on behalf of farmers. He notes that there have been many farmers' organizations throughout the history of the United States; however, few of them remain viable in the present day.⁵⁷ During the Progressive Era, farmers controlled a significant faction within the Democratic Party which culminated in the nomination of William Jennings Bryan in the Presidential Election of 1896.⁵⁸ They strongly supported pro-farmer populist policies such as printing greenbacks and Free Silver. However, these movements were ultimately unsuccessful in achieving their aims and William Jennings

⁵⁷ Mancur Olson, *The Logic of Collective Action*, (Cambridge, MA: Harvard College, 1965), 149.

⁵⁸ AuthenticHistory.com. "The Election of 1896." The Election of 1896. <http://www.authentichistory.com/1865-1897/4-1896election/index.html> (accessed April 26, 2014).

Bryan lost all three of his elections as presidential nominee. The Grange, a lobby group for farming and ranching interests, formed a successful and influential organization between 1867 and 1880. During that period, the Grange successfully lobbied for the creation of the Farm Credit System and the extension service. Although it still remains active today, the institution declined greatly due to financial and organizational difficulties. These difficulties arose because of the group's rapid expansion like "wildfire" in which gained hundreds of thousands of members in a matter of months. This meant that the organization's structure didn't have time to grow sustainably and it fell as quickly as it rose.

Olson also describes the success of the Farm Bureau as the largest and most widespread farmer's organization in the nation. The Farm Bureau is not strictly speaking a cooperative; however it provides services and education to member farmers. In its early days, 1911-1914, it also functioned as a political organizer for farming interests. After its success in this capacity, these functions were curtailed because the bureau accepted public funds. The Farm Bureau is a prime example of member owned and service driven organizations that are not cooperatives. They use collective action to provide services or achieve political change.

Another important article on collective action is "Bowling Alone" by Robert Putnam, a political scientist at Harvard University. This could be considered a corollary to collective action problems; with an emphasis on the decline of modern American society.⁵⁹ The argument is that the inclination toward collective action comes from

⁵⁹ Putnam, Robert. *Journal of Democracy*, "Bowling Alone." Last modified 1995. Accessed November 27, 2013.

community engagement. People who have repeated interactions on a regular basis build trust and are more likely to cooperate. By increasing member control and democratic participation in a cooperative, individuals will have increased solidarity with one another and collective action will be more effective.

Member Relations

Member relations indicate the relationships between management and the shareholder-members. Even though they are affiliated with the same organization, these relationships can be somewhat strained. Atmiş, *et. al* wrote an a report on Turkey's Forestry Cooperatives with an emphasis on member relations and poverty reduction. The report was written at the behest of the World Forestry Congress, a gathering of foresters from around the world sponsored by the Food and Agriculture Organization. According to the report, "Management and members of cooperatives suffer a communication problem, which cause the members to lose their loyalty in their cooperatives. Only when the management staff explains what they do for what reason can the relations between the management and the members improve,"⁶⁰ Furthermore, management and the members have somewhat divergent interests. Atmis states, "Villagers are interested in cooperatives through which they can obtain concrete benefits in the short run,"⁶¹ Members want to see positive results immediately, like any group of investors. (The problem is compounded in the developing world, where the membership is poor and without other income opportunities.) Meanwhile, the management, like any good executive team, wants to think long term by expanding and

⁶⁰ Erdogan Atmis, et. al. World Forestry Congress, "Forest cooperatives and its importance in rural poverty .reduction in Turkey." Last modified 2009. Accessed November 28, 2013.

⁶¹ Atmis, Erdogan. World Forestry Congress, "Forest cooperatives and its importance in rural poverty reduction in Turkey." Last modified 2009. Accessed November 28, 2013.

growing their business. This is a serious problem that must be overcome in order to make cooperatives a viable business model. According to Gulen Ozdemir, member relations in cooperatives will be stronger if the organization is run in a more democratic fashion.⁶²

Member relations are an example of the economic concept of the principal-agent problem. The Principal-agent problem occurs when the membership of a group selects leaders to represent its interests.⁶³ The problem arises because often the appointed managers have different priorities and interests than the membership. Managers feel loyalty to the institution and not necessarily the membership.

There are two economic components to the principal-agent problem. Moral hazard is when a person has no incentive to behave responsibly. The most common example of moral hazard is insurance. For example, if a person buys car insurance, they have a reduced incentive to drive cautiously because their car will be replaced if they crash it. Lucian Bebchuk, a professor at Harvard Law School, applies this principle to business through CEO pay.⁶⁴ In the corporate world, CEOs are paid highly regardless of their job performance. Therefore, CEOs do not have to be good at their jobs in order to be successful, which results in poor performance. Bebchuk also cites information asymmetry as a factor. The principal has no way to measure or account for the agent's actions. How could a shareholder determine if poor performance was the fault of the CEO or structural economic factors?

⁶² Ozdemir, Gulen. *Journal of Asian Economics*, " ." Last modified 1 25, 2005. Accessed November 22, 2013.

⁶³ Times International Limited. "Principle Agent Problem Definition | Principle Agent Problem Meaning - The Economic Times." *The Economic Times*.

⁶⁴ Bebchuk, Lucian, and Jesse Fried. "Introduction." In *Pay Without Performance*. Cambridge, MA: Harvard University Press, 2004. .

Hart and Grossman, both economists, analyzed the principal-agent problem through the lens of game theory.⁶⁵ A situation that features the principal-agent problem can be described as a cooperative game because two or more parties must work together to succeed. Through their study, they determined that the problem inevitably results in a Nash Equilibrium, which is a suboptimal outcome for both parties.

This problem is easily applicable to politics in a democracy or to business in both a for-profit and cooperative model. As an example, imagine a medium-sized agricultural supply cooperative. The cooperative has members who invest capital in the cooperative in exchange for fertilizer, pesticides, and livestock feed. The shareholders have a mechanism to indicate how the company should use their investment and provide services: voting. A shareholder votes for the board of directors who then in turn select an executive staff. However, once installed, the management team decides to expand their services by selling to nonmembers. Suppose this proposition will bring in a significant amount of money for the cooperative and make it more financially stable. However, it will mean that the quality of services provided to cooperative members will decrease. The management has an incentive to pass this proposal because it will help the cooperative long term, which employs them. The members would oppose this action because it violates their financial interests as patrons.

No group is at fault in this situation. One might be inclined to always be in support of the membership. However, that assumes that the membership is infallible. The shareholders (the principals) might be in favor of bad strategies that the

⁶⁵ Hart, Oliver D., and Sanford Grossman. "An Analysis of the Principal-Agent Problem." *Econometrica* 51 (1): 7-46.

management (the agents) would otherwise avoid. In finance, many “activist investors” advocate policies that are bad for the overall health of the company. They do this in order to boost the short-term stock price and make a personal profit. Given these possibilities for error or bad faith on both sides, the principal-agent relationship is likely to always be a fraught one.

Conclusion

The purpose of this review of the areas of scholarly literature and theory related to agricultural cooperatives was to lay a foundation for the practical evidence that I will present in my research findings in chapter 4. It is important to merge theoretical and empirical knowledge and hope that my thesis has a satisfactory synthesis of both. This review of literature reflects my interdisciplinary approach by presenting primarily theories from economics and political science. My goal was to move from the most abstract theories to the most practical. In the next chapter, I will explain my research methods and give detailed explanation to the process I will take to answer my research question. I relied heavily on the theory discussed here to craft interview questions. My research question draws on the theories discussed in this chapter by asking whether democratic control is linked to collective action and cooperation. And whether cooperation and collective action are linked to successful cooperatives.

Chapter III: Methodology

Introduction

In this chapter, I detail the methods I used to explore my research question. This study used two distinct methodologies: qualitative information gathered from interviews and textual analysis of documents related to agricultural cooperatives in Turkey. The chapter itself consists of sections that give a detailed a description of the research design, discuss which sources I used, explain specifically how I conducted interviewed and analyzed documents, and review the potential limitations and weaknesses of my study.

Research Design

The methodology has two aspects: interviews with key informants and document analysis. Through this combined approach, I take advantage of the strengths of both interviews and textual analysis. These research methods are complementary because they present theoretical and experiential explanations of agricultural cooperatives in Turkey. One aspect of my thesis seeks to understand how the Turkish state interacts with cooperatives. In that regard, it would be inadequate to only analyze the government's perspective through official documents without taking into account the facts on the ground. However, cooperatives themselves are not represented through such documents; therefore the interviews are necessary and complement the other part of the methodology.

Sources

I conducted interviews with five key informants who have special expertise by virtue of their experience or knowledge with agricultural cooperatives in Turkey. Both American and Turkish citizens are represented in the interviews in order to communicate a broader spectrum of perspectives and opinion. The key informants fall into three not mutually exclusive categories: academics, government officials, and practitioners involved directly in agricultural cooperatives. In recruiting academics, I contacted several people in the Agricultural Economics Department at Ankara University. I also contacted several other professors in agriculture related fields in Turkey and the United States. For contacts in government, I contacted the U.S. Embassy in Ankara, Turkey and the Turkish Embassy in Washington. For contacts in cooperative agriculture, I contacted the vice president of sales of a local Oregon cooperative that was active in Turkey. For all my recruitment procedures, I contacted the potential interview subject by email and explained my project and asked if they would be willing to be interviewed. I found potential interviewees by emailing academics that specialized in Turkish agriculture. I contacted the several members of the agricultural economics faculty at Ankara University. While many people I contacted did not personally have knowledge or experience with cooperatives in Turkey, they were able to give me support and refer me to people who did. The interview subjects were chosen because they voluntarily responded to my email and had time in their schedule to be interviewed. Another factor in selecting subjects was whether they spoke English and had means to conduct the interview through Skype, telephone, or email.

In order to find documents, I first used a simple Google search and a Google Scholar search. Then I looked for reports and white papers at many non-governmental organizations and think tanks. I utilized resources published by international bodies like the United Nations and European Union. The United Nations declared 2012 the “International Year of Cooperatives” and has produced much literature on the subject. I looked at reports published by the United States Foreign Agriculture Service, an agency within the Department of Agriculture. The Republic of Turkey has also published strategic documents on cooperatives, particularly the Ministry of Agriculture and the Ministry of Trade and Customs, which regulate agricultural cooperatives.

Instrumentation

I recruited potential interview subjects through email. I utilized Google Scholar and similar resources to find academics and others who had experience in international cooperatives and Turkish agriculture. I sent each potential contact an email asking if they would be willing to be interviewed and waited for a response. I also asked them if they knew anyone else who would be knowledgeable about the topic or had relevant documents I could analyze. In order to increase participation, if I heard nothing for a week, I sent a follow-up email.

In preparation for the interviews, I developed a series of open-ended questions aimed at revealing the subjects’ views and opinions on agricultural cooperatives in general and specifically in Turkey. I interviewed each subject only once for approximately an hour at the most, depending on the subject’s knowledge of the topic and the constraints on their schedule.

For my document analysis, I skimmed through each report and took notes on the primary ideas and themes through the document. Then I searched through the text of the document for words or concepts that relate to my specific research question and read those passages carefully.

Limitations

The main limitations of my thesis are that I do not speak Turkish and did not travel to Turkey to do primary research. Traveling to Turkey would have been preferable in order to attain accurate firsthand knowledge and qualitative data on Turkey's agricultural cooperatives. Being able to speak, read and write Turkish would have been ideal because it would have given me access to more possible interview subjects who do not speak English and would have allowed me to use Turkish language documents.

Chapter IV: Research Findings

Introduction

In this chapter, I present the results of my study. My interviews and document analysis have produced many individual anecdotes and facts that I have organized into a few greater themes. The chapter begins with a detailed description of cooperatives in Turkey as a historical movement from the time of Atatürk to the present. This section also explains the regulatory apparatus that governs cooperatives and explains their financial state at the present time. Then I move into the larger themes that were gleaned from my research. First, I cover the relationship between members and the cooperative management. Second, I examine the degree to which individuals participate in the cooperatives in which they hold memberships in. Third, I discuss the role of the state in governing and supporting cooperatives and the general impact the government has on cooperatives. Then, I discuss the business climate, the size of farms and other factors that may contribute to the state of cooperatives in the country. At the end of the chapter I cover the viability of cooperatives going forward into the future. After that, I report on some of the proposed alternatives to cooperatives in Turkey.

I conducted interviews with five key informants, experts in various ways on Turkish cooperatives. The first person I interviewed was Samet Settras. He is employed as an agricultural analyst by the USDA Foreign Agricultural Service at the U.S. Embassy in Ankara. Previously, he worked for the Turkish Grand National Assembly and the Ministry of Food, Agriculture, and Livestock as an analyst. Of all the people I interviewed, he was the most pessimistic. Throughout the interview, it was

clear that he was disillusioned with Turkish politics and the prospects of agriculture in the country. This might explain why chose to work for the U.S. Embassy rather than the government of Turkey. Ultimately, he believed that cooperatives could not be reformed without regime change in Turkey.

When I interviewed Samet Settras, another USDA employee also participated. Jess Paulson initially responded to my email and set up the interview. He served as more of a facilitator role than an active interview subject. He also helped translate some abstract concepts we were trying to communicate because there was somewhat of a language barrier. He only contributed a single quote to my findings, but he seemed to support Samet's interpretation of the situation.

The second person I interviewed was Unal Ornek. He is an agricultural economist and works as a consultant for cooperatives in Turkey. Additionally, he writes articles and blogs for organizations such as the World Bank and the International Cooperative Alliance. He was the most optimistic expert I spoke to. His stance might be explained by his position as an "insider" among cooperatives. He acknowledged many of the problems identified by the other interview subjects; however, his prescriptions were less severe.

The third interview I conducted was with Doug McClellan. He is the Vice President of Sales and Marketing at the Hazelnut Growers of Oregon, an Oregon-based cooperative. Over the course of his career, he has traveled to Turkey many times and was very familiar with their agricultural sector and hazelnut market. He is able to bring an outsider's perspective because he is not directly involved in Turkey's cooperatives,

but is knows about cooperative governance and principals. He provided an insight into Turkey's business culture and international trade.

My final interview was with Kassim Al-Khatib. He is a professor of agriculture at the University of California, Davis. Unlike my other interview subjects, he has no background in agricultural economics, social science, or business. Instead, he is an expert in the agricultural sciences. He is a Turkish national, but currently resides in the United States. This might account for his explanation of cooperatives that varies greatly from the other interviews.

Findings

State of Turkey's Cooperatives

Before I address specific issues on why Turkish cooperatives remain stagnant, it would be helpful to provide a more in-depth explanation of the current state of the cooperative movement. This section is distinct from my background because it draws heavily on my original research, the interviews I conducted and documents I analyzed. This explanatory information focuses on the fiscal health of cooperatives, the development of cooperatives and the regulation of them, and the structure of cooperatives (especially in comparison to the United States and the European Union). This provides a foundation that frames the rest of my findings as well as my policy recommendation.

It can be broadly stated that cooperatives as a group in Turkey are in poor financial health. To be more specific, the financial status depends greatly on the type of cooperative. As of this writing, Turkey's agricultural sales cooperatives are in dire

straits. According to Samet Serttas, an agricultural specialist at the United States Embassy in Ankara, every single agricultural sales cooperative in the country is currently going through bankruptcy proceedings. He expects only one will survive the bankruptcy process and eventually return to profitability. According to a 2006 report by the World Bank on the Turkish financial sector, agricultural sales cooperatives are having difficulty securing stable access to credit.⁶⁶ This obstacle, coupled with continually running annual deficits, led to the mass bankruptcy epidemic.

Agricultural credit cooperatives, on the other hand, find themselves in a stronger position financially. In recent years, agricultural credit cooperatives have become profitable and even expanded their enterprises outside of Turkey to Iran and Bulgaria. Samet Serttas noted that Gübretaş, a Turkish producer of fertilizer owned by an agricultural credit cooperative, recently acquired an Iranian fertilizer producer, Razi Petrochemical, for \$656 million. According to the aforementioned 2006 World Bank report, Turkish agricultural credit cooperatives began a transformational restructuring in 2005 to comply with a series of reforms passed in 2004 and 2005. According to the World Bank, their long term success and growth will depend on “improved corporate governance, rationalizing its cost structure, covering IT costs and expected losses through increasing its interest rates charged to market levels, and eventually increasing its access to funds through liquidation of non-core assets and increasing its liabilities.”⁶⁷ Of course, this is easier said than done. But the World Bank indicated optimism for this restructuring process because both policymakers and those within agricultural credit cooperatives expressed desire to implement the proposed changes. In the eight years

⁶⁶ World Bank. "TURKEY Rural Finance Study." May 2006.

⁶⁷ World Bank. "TURKEY Rural Finance Study." May 2006.

since the World Bank report, the resurgence of agricultural sales cooperatives indicates that the process achieved its desired effect.

Agricultural development cooperatives are of somewhat ambiguous financial health. According to Gulen Ozdemir, they have achieved a moderate level of financial stability while providing more useful services than agricultural credit cooperatives.⁶⁸ However, he notes that this analysis is not unanimously supported by scholars. Their financial stability comes from combining services of small cooperatives that would otherwise have a membership in the single digits. It is difficult to maintain a cooperative with such a small membership and these small cooperative often dissolve under financial pressures caused by drought or price instability. Agricultural development cooperatives consolidate smaller service oriented cooperatives in order to have the security of a large cooperative.

Turkey's cooperatives are distinctly categorized by their hierarchical structure. The method I use for defining this structure is the "top down vs. bottom up" dichotomy. A top-down organization has power concentrated at the top of the organization. Decisions are made at the top and passed down the chain of command. In contrast, a bottom-up organization, which could also be described as grassroots or "flat," makes decisions collectively and passes instructions up to management to implement. According to a report by the Food and Agriculture Organization, Turkish agricultural credit cooperatives are notoriously top-down.⁶⁹ From their creation in 1935 to their reform in 1972, they remained an official extension of the Ministry of Food,

⁶⁸ Özdemir, Gülen. *Journal of Asian Economics*, "Cooperative Shareholder Relations in agricultural cooperatives in Turkey." Last modified 1 25, 2005.

⁶⁹ Okan, Nedret. *Food and Agriculture Organization*, "An Overview of Turkish Cooperatives." Last modified 2013.

Agriculture, and Livestock. To this day, all their loans must be approved by the Ziraat Bankası, a large government-owned agricultural bank in Turkey, their funding must be approved by the Grand National Assembly of Turkey (parliament), and the Ministry of Food, Agriculture, and Livestock plays a strong role in selecting their board members.

Sales cooperatives and development cooperatives, in contrast, are less hierarchical. Gülen Özdemir argued that agricultural development cooperatives are structured more like bottom-up organizations.⁷⁰ They must have at least seven members to form a charter and get credit through the Ziraat Bankası. Other than that, they have much more flexibility in their governance than agricultural credit cooperatives. This is because they are active and controlled almost exclusively in the most rural areas of Turkey and receive little government funding. Agricultural sales cooperatives fall somewhere in the middle between credit and development cooperatives. They receive more government support, but they are also subject to strict auditing from the Ministry of Customs and Trade.

According to the Food and Agriculture Organization, cooperatives were implemented early on in the Republic under Atatürk. Atatürk's support for cooperatives came from the belief that they would have the effect of "modernizing Turkish society so as to broadly distribute the economic benefits and encourage democratic participation."⁷¹ At this point the Turkish Republic was still quite new and democracy was an unfamiliar concept. The rationale was to promote democracy in another arena in order to legitimize the new regime. He was also trying to rapidly

⁷⁰ Özdemir, Gülen. Journal of Asian Economics, "Cooperative Shareholder Relations in agricultural cooperatives in Turkey." Last modified 1 25, 2005.

⁷¹ Okan, Nedret. Food and Agriculture Organization, "An Overview of Turkish Cooperatives." Last modified 2013.

modernize a nation that was considered an economic backwater. Cities were able to benefit from industrialization, but as the report notes, Turkey was still overwhelmingly rural and agrarian. Cooperatives could theoretically raise yields and distribute the surpluses equally among the actors. The initial legislation created forty cooperatives located in Western Turkey.

In 1929, the Grand National Assembly passed Law no. 1470; which legalized agricultural credit cooperatives.⁷² Any village with a population greater than five hundred could form a cooperative. By 1930, Turkey had 191 registered cooperatives. In 1935, Law no. 2834 allowed the creation of agricultural sales cooperatives. In the 1960s, Turkey began making 5 year plans to set goals and focus the cooperative sector. The first 5 year plan created agricultural development cooperatives in 1964 as “village development cooperatives.”

In each successive plan, the Turkish government followed the mantra of “strong, effective and democratic cooperatives based on voluntary initiatives would be supported.” The government between the 1960s and the present provided strong financial support in exchange for heavy regulation. The 5 year plans also divided control of cooperatives among different ministries. In the 2001-2005 plan, the Ministry of Customs and Trade announced that it would allow agricultural credit cooperatives more autonomy. In practice what this meant was that the government would no longer pay off the cooperatives’ annual deficits. This plan also initiated an eight year period of reform and restructuring for agricultural credit cooperatives, similar to the one that

⁷² Okan, Nedret. Food and Agriculture Organization, "An Overview of Turkish Cooperatives." Last modified 2013.

agricultural credit cooperatives went through in 2006. However, this process was less successful for sales cooperatives.

The most current 5 year-plan, published by the Ministry of Customs and Trade, states that Turkey is growing more “globally competitive and fully completed her coherence with the European Union.”⁷³ Samet Settras notes that Turkey has mostly adopted cooperative laws and practices from the European Union. Turkey made that decision rather than adopt their own for two reasons. First, the European Union has had great success with their cooperatives and it is understandable that Turkey would want to emulate that success. Second, Turkey and the European Union have long been in negotiations for accession. Most observers of the process think that Turkey will ultimately not join. However, Turkey is still changing its laws in order to be compliant. Therefore, it would be worthwhile to examine the regulations and protocols of the European Union.

According to the European Union’s website, a cooperative may be formed by five natural persons in the European Union,⁷⁴ as opposed to seven people in Turkey.⁷⁵ Cooperatives must have the following characteristics: “1. Possibility of free, open, and voluntary association and withdrawal from the enterprise. 2. Democratic structure, with each member having one vote, majority decision making and an elected leadership accountable to its members. 3. Equitable, fair and just distribution of economic results.

⁷³ Republic of Turkey Ministry of Customs and Trade. "Turkish Cooperatives Strategy and Action Plan 2012-2016." 2012.

⁷⁴ European Commission. "Co-operatives - Small and medium sized enterprises (SME)." 2012.

⁷⁵ Republic of Turkey Ministry of Customs and Trade. "Turkish Cooperatives Strategy and Action Plan 2012-2016." 2012.

4. Autonomous and independent.”⁷⁶ The European Union also created the European Society for Cooperatives.⁷⁷ This is a supranational organization that ensures cooperatives are uniform across international boundaries. It does not supersede national laws on cooperatives, but it does homogenize cooperatives and attempt to improve cooperative governance across the European Union. Also, it allows cooperatives to collaborate across national boundaries. Although free trade is one of the fundamental tenets of the European Union, the Cooperative Society allows these organizations to cooperate and integrate past what is allowed for for-profit corporations.

Member Relations

Samet Settras also noted that the board of directors in every cooperative is chosen by the ministry that controls it. The cooperative still holds elections; but the ministry selects a slate of candidates for each position. He was unclear as to what would occur if a cooperative declined to select the ministry’s slate. Presumably, the government’s financial support would be withdrawn, which would put many cooperatives in dire straits. The government’s position on the issue is understandable. They view their support as an investment and as such they have a right to control that investment. However, that attitude violates the fundamental principles of cooperatives. Doug McClellan works as Vice President of Sales and Marketing for the Hazelnut Growers of Oregon, a marketing cooperative that does business in Turkey. He stated that in his experience, policies such as this lead to weak cooperatives that never function properly. Furthermore, the selections for the slates appear to be politically motivated.

⁷⁶ European Commission. "Co-operatives - Small and medium sized enterprises (SME)." 2012.

⁷⁷ European Commission. "Co-operatives - Small and medium sized enterprises (SME)." 2012.

The positions of cooperative board member or executive staff member are seen as stepping stones for ambitious young politicians. They are often given to prominent agricultural families to control in order to gain their political support. These positions are doled out as political spoils rather than to qualified candidates.

Unal Ornek, a Turkish consultant for cooperatives, argued that one of the central problems of cooperatives in Turkey is the lack of leadership. As a result of the preferential hiring and election process, Turkey's cooperatives are plagued by poor management. The board members are often either member farmers serving their own interests, or politicians who have little interest in the position that they have been given. Also, the education and training for cooperative leaders is lackluster. The business higher education system is not as good as in the United States, especially in the niche of agriculture. When a person has good business experience and credentials, they would rather lead a for-profit corporation than a cooperative. The pay is less and the organizations have a negative reputation. Therefore, cooperative leaders tend to be the sort that doesn't have other options because they are incompetent. If they are competent, the job is just a stepping stone to more prestigious and profitable positions.

According to Kassim Al-Khatib, a professor of agriculture at UC Davis and a Turkish national, one of the issues of equity surrounding cooperatives is actually between members. Members from larger farms tend to have a larger voice in the governance of the cooperatives than smaller farmers.⁷⁸ Cooperatives may give preferential treatment or better prices to members that bring in more business. They

⁷⁸This issue is also present in agricultural cooperatives in the United States to some extent. One of the provisions in Capper-Volstead allows, under certain conditions, voting based on equity.

might allow a big farmer to have a seat on the board or have some form of representation on the board. In voting, the biggest farmer might be given more votes. Since the opportunity cost would be great if the big member left the cooperative, there is an incentive for other members to allow this in order to protect their business.

Member Participation

Unal Ornek notes that another central problem with cooperatives in Turkey is the lack of participation by members. Because the elections are uncompetitive, the membership tends to not feel compelled to vote in them. This deprives the cooperative and the membership of an effective mechanism to communicate their desires and evaluation of the cooperative's performance. In order to be useful to the membership, cooperatives need guidance from the membership on the future of the cooperative. In order to be an efficient organization, they need to be able to see their weak points. The members are in a uniquely strong position to do that, but they have no means to do so. This produces an infinite cycle of inattentive and disengaged managers and members, which leads to a principle-agent problem. Agricultural development cooperatives tended to have higher degrees of participation according to Gulen Ozdemir. In contrast to agricultural credit cooperatives, their elections were less ministry controlled. Overall, members tended to be more satisfied with the services provided and the cooperative as a whole. They attended more meetings and were more likely to understand the democratic principles behind cooperatives.

Both Samet Settras and Unal Ornek noted that the members were often not involved in their cooperatives financially or otherwise because they were forced to join

the cooperative. In certain commodity markets, the government requires farmers to join a particular cooperative in order to receive benefits or aid. The problem with this policy is that it is blind to the needs of farmers. Why should a farmer join a cooperative that provides services they have no use for? Instead of swelling the numbers of cooperatives and promoting them, it bloats the membership with farmers who are uninvolved and disinterested in the cooperative.

Financial participation is also a related problem. To a certain extent, it is irrelevant if the member is actively participating in the cooperative through governance as long as the member continues to trade with the cooperative. If an individual maintains their membership and actively makes financial transactions with the cooperative, that expresses some degree of satisfaction with the organization. However, among members of certain cooperatives, this can be a problem even though it is a relatively low bar to pass. Unal Ornek also notes this problem as a subset of participation problems. It is especially problematic among agricultural credit cooperatives and other large cooperatives. The specific services they provide allow an individual to gain membership but do not necessitate using that membership. This is a financial problem because due to the structure, a cooperative cannot survive on membership fees or other revenues that are gained through inactive members. This problem is two-fold. Members use the passive benefits allowed to them by cooperative membership, but do not patronize the cooperative with the majority of their business. An example would be a member using free or subsidized extension services from a cooperative but choosing to sell their crops to a for-profit corporation because the price is higher. Gülen Özdemir found that a higher number of members were satisfied with

the services provided by agricultural development cooperatives over agricultural credit cooperatives. He also noted that they traded more with agricultural credit cooperatives over agricultural credit cooperatives.

State Support

A central theme that has arisen from the discussion of cooperatives in Turkey is the question of state support. Has the government helped or hindered the cooperative movement by providing them with extensive support, both financial and otherwise? The question extends beyond just cooperatives to the entire agricultural sector. Decisions made by the Ministry of Food, Agriculture, and Livestock in areas of agriculture ostensibly unrelated to cooperatives still have an impact upon them.

In my first interview for this study, I spoke with Jess Paulson and Samet Settras of the Foreign Agricultural Service at the U.S. Embassy in Ankara, Turkey. At the opening of the interview, Paulson discussed the design of my study. He recommended that I also study the agricultural economies in other nations in Eastern Europe as a comparison. When asked to elaborate, he explained that Turkey could be at times “inconsistent.” By this he meant that Turkey, the Turkish government in particular, espouses contradictory policies and goals. The actions it takes help one sector but harm another sector, and as a result the entire system becomes inefficient. He gave an example of the government wanting to help grain producers and artificially inflating the price. This had the effect of helping grain growers but being disastrous for livestock producers.

Another prime example of this is in the market for hazelnuts. The government wished to provide assistance to the hazelnut growers. According to Doug McClellan, for many years, the Turkish government simply bought large amounts of hazelnuts directly. This ensured that demand would always meet supply and stabilize the price to help the growers. The government, rather than immediately process and sell the hazelnut crop domestically or abroad, kept the crop in warehouses for several years. After becoming tired of sitting on huge quantities of hazelnuts, it would dump several years' crop on the international market all at once. This policy was a failure for several reasons. It was expensive for the government and yielded no monetary profit. It undermined the international hazelnut market every few years when the government sold off its hazelnuts. Because the hazelnuts were being stored in warehouses for several years, the quality of the crop was extraordinarily bad. Despite being inefficient and wasteful, the period when this policy was in effect ruined the reputation of hazelnuts internationally. This peculiar policy reminds one of the Japanese policy of importing rice and storing it in warehouses to comply with WTO trade regulations.⁷⁹ The Japanese meet their demand for rice through domestic production and don't wish to lower the price for their farmers by forcing them to compete with foreign rice.

The policy of the government buying hazelnuts was ended only several years ago. It was replaced by a program that pays hazelnut farmers to cut down their hazelnut orchards and allow the land to become fallow. The goal of the program was to raise the hazelnut price by tightening the market supply. The government targeted the small farm plots in the mountainous regions in the Southeast for this program. Through the

⁷⁹ Hall, Kenji. "How Japan Helped Ease the Rice Crisis." Bloomberg Business Week.

removal of hazelnut orchards in areas that are less suited to this type of agriculture, the government is supporting increased efficiency in the market, whereas the previous policy reduced it. Kassim Al-Khatib blames this policy for the increasing inequality and corporatization in Turkish agriculture. Through this program, he argues, the government is supporting larger farms in fertile areas and pushing small rural farmers out of the market completely. This question draws comparisons to the peculiar Agricultural Adjustment Act in the United States.⁸⁰ This program pays eligible farmers not grow crops on their land and kill off livestock in order to tighten the market for those commodities. The program was launched during the Great Depression to stabilize the industry which had seen much volatility. McClellan argues that these programs are to blame for the lack of strong hazelnut cooperatives in Turkey. Because of heavy state support, the farmers do not have an incentive to organize for their own interests. Furthermore, he alleged that the support was a form of political corruption in which financial support was given in exchange for continued political support from farmers.

Another form of state support came in the form of access to capital.⁸¹ The government provides loans with 5% interest, quite a low rate historically, from the Central Bank of Turkey via the Ziraat Bank. By providing this access, cooperatives have become dependent on it and are unable to access credit through other means. When the government shifts away from providing this subsidization, it drastically harms the cooperative. Cooperatives have benefited from a fixed interest rate, especially in periods where the Central Bank set interest rates as high as 80%.⁸² However, by doing

⁸⁰ Frank, Robert. "Why Does the Govt. Pay Farmers to Not Grow Crops?." PBS, 2009.

⁸¹ World Bank. "TURKEY Rural Finance Study." May 2006.

⁸² Delta Stock. "Central Bank Interest Rates." Central Banks Interest Rates, 2012.

this, cooperatives may only attain credit from a single source. As such, it is hard for cooperatives to get funding through credit.

At a certain point, one must question the wisdom of the 5 year-plan model of regulating cooperatives. Of course it is important to have goals and benchmarks for success. However, the plans are more than that. They change the levels of support, shift regulatory duties, among other things. This dynamic inevitably leads to some confusion among the sector. It makes the process inherently political and extremely volatile. The process is well-meaning but doesn't produce the desired results.

The Turkish government divided the control of agricultural cooperatives among the Ministry of Food, Agriculture, and Livestock and the Ministry of Customs and Trade. According to Samet Settras, this was done for political reasons rather than sound regulatory ones. By spreading control across the ministries, the government created unnecessary red tape and bureaucracy. It also set up an inherent bureaucratic turf war between the two ministries. Both ministries feel immense pressure to have better performing cooperatives and to spend as little money on them as possible. This leads to policies such as selecting the board of directors and not paying off agricultural sales cooperative deficits. They are made with the intention of strengthening cooperatives and ultimately making them independent.

Samet Settras also noted the current Turkish coalition government's ideological hostility toward cooperatives. The current government is considered liberal in the European, not American sense of the word, meaning that they are right-leaning on the political spectrum. Therefore, they are more supportive of markets and for-profit

business. Despite superficially supporting them, they have no desire for cooperatives to become successful or dominant.

Farm Size and Economic Factors

Turkey's agricultural markets are distinct from those in the United States and the European Union because of the small size of individual farms. According to a Food and Agriculture Organization report from March 2003, sixty-seven percent of Turkey's farmers own less than 12 acres of land.⁸³ Compare this to the United States, where the average size of a small farm is 213 acres.⁸⁴ However, those farmers only own twenty-two percent of Turkey's farmland, while the top five percent of farmers own nearly forty percent of the agricultural land in Turkey.⁸⁵ This information distills to several key facts. The average Turkish farmer owns a very small amount of land. There are a huge amount of farmers producing crops in Turkey. There is a great deal of inequality in the land holdings of rich and poor farmers.

Kassim Al-Khatib argued that Turkey's cooperatives are not being mismanaged by the government, the bureaucracy, or the cooperative management. He believes that cooperatives are victims of larger structural forces in the agricultural markets and in Turkish society as a whole. In recent years, Turkey has been rapidly industrializing. Along with that industrialization trend, there is a rising trend away from land being owned by small farmers and toward consolidated family and corporate farms with massive land holdings. He compared the trend to the plight of the small farmer in the

⁸³ Karagöz, Alptekin. "Turkey." Turkey.

⁸⁴ U.S. Farmer and Rancher Alliance. "Farm Size and Ownership." Food Dialogues: Farmers & Ranchers Committed to Continuous Improvement of How We Grow & Raise Food.

⁸⁵ Karagöz, Alptekin. "Turkey." Turkey.

United States. This was the trend that has made cooperatives unsuccessful in the country in the past and will continue to dog them in the future. By his reasoning, cooperatives and small farmers have a symbiotic relationship. The cooperative benefits because a small farmer has less individual market power than a larger farmer. Therefore, they are more likely to patronize the cooperative. The farmer benefits because they will likely receive a better price than they would from a for-profit competitor. With the decline of the small farmer, cooperatives have also not been able to have a stable base of member support.

According to Doug McClellan, Turkey's agricultural sector produces an inferior hazelnut crop to that grown in the United States or in Europe. The reason for this inferiority, McClellan believes, is because the huge number of growers makes it difficult to enforce quality. However, the for-profit corporations he had dealt with were well run from a management perspective and had invested in state-of-the art processing facilities.

Furthermore, the agriculture industry as a whole (including cooperatives) has been hurt in doing business internationally by weak contract enforcement. He stated that though the law requires honoring contracts, it is seldom the norm when it is not beneficial to the parties. The law is not widely enforced and the judicial system is not as robust and as in the United States.

Viability of Cooperatives

This evidence begs the question, "Do cooperatives have a future in Turkey?" This question basically comes down to the evaluation of the previously mentioned

problems. One's perspective depends on judgments of how severe they are and the extent to which they are entrenched into the culture of cooperatives and agriculture.

The most recent cooperative 5 year-plan was released in 2012 to coincide with the United Nations' Year of Cooperatives.⁸⁶ In the plan, the Ministry of Customs and Trade assesses the strengths and weaknesses of cooperatives through a SWOT analysis. They come to the conclusion that cooperatives are an important aspect in Turkish agriculture and should be supported and encouraged by both farmers and the government. The government has reason to be highly optimistic about cooperatives and their future considering they are under their direct control. Given that, their SWOT analysis is bleak. There are over twice as many weaknesses as there are strengths; but that fact, in and of its self, does not mean anything. Significantly, the strengths that are listed are weak and superficial. For example, they include: "Legal guarantee in the Constitution and in the legislation for the development of cooperatives," and "Long-standing and deep-rooted experience in terms of cooperatives in Turkey." These statements are not false, and they are truly strengths. However, they appear insignificant and superficial in light of weakness column. They include: "Great number of inactive cooperatives waiting liquidation," and "Inadequate internal and external audit mechanisms and their inadequacy in providing the expected benefit." The weakness column also notes the lack of experienced managers and lack of access to capital. These are very real and serious problems that face cooperatives and make the strengths column look all the more paltry by comparison. Furthermore, the

⁸⁶ Republic of Turkey Ministry of Customs and Trade. "Turkish Cooperatives Strategy and Action Plan 2012-2016." 2012.

opportunities and threats columns are no better. As far as these weaknesses are concerned, the most troubling aspect is the lack of introspection on the part of the government.

The issue of size is also relevant to the stability of a cooperative. According to Unal Ornek, smaller cooperatives are ineffective; even if they are popular among their members. He is very supportive of agricultural development cooperatives because they provide what a smaller village cooperative does with the financial viability of a larger cooperative. The 2012 Turkish action plan notes that the only successful agricultural cooperatives are credit cooperatives. They are successful because they are large pseudo-corporate enterprises.

According to Hagen Henry, the chief of the International Labor Organization's cooperative branch argues that cooperative institutions are more resilient in times of crisis than traditional corporations, in financial terms. In an interview on the International Labor Organization's website, he explained his work studying cooperatives and the global financial crisis in 2008.⁸⁷ He noted that in his home country of Germany, not a single cooperative bank filed for financial aid during the crisis. Cooperative institutions actually saw their business improve during the crisis. In fact, "At the peak of the crisis cooperative banks were faced with an increase in membership and savings deposits and found it difficult to respond to this sudden growth in demand."

⁸⁷Henry, Hagen. "Coops and the global financial crisis." Coops and the global financial crisis. 2009.

Agricultural Unions and Associations

Of all the individuals I interviewed over the course of this study, Samet Settras was the most bearish on the future of cooperatives. Without “fundamental change,” (by which he appeared to indicate regime change) cooperatives would be never be a positive avenue for farmers in Turkey. The existing structures are unfavorable and are entrenched against reform. This begs the question, “If not cooperatives, then what?” According to Settras, the answer to this lies in agricultural associations and unions. These are civil society organizations in agriculture that operate similarly to cooperatives. They serve the same function and provide similar services. However, they exist outside of the current regulatory structure for cooperatives. This provides them the flexibility to innovate and be successful.

However, not all Turkish agriculture experts agree on the benefits of these organizations. Unal Ornek is especially vocal in his opposition to them. He claims that they aren't meaningfully different from cooperatives. They divide the movement and therefore inhibit collective action and organizing efforts. Perhaps most controversially, he accused the proponents of unions and associations as bringing about a self-fulfilling prophecy. They claim that they do not support cooperatives because they are unsuccessful, but according to Ornek, they are unsuccessful because they received insufficient support. The people now advocating to divert money and resources away from cooperatives toward these new organizations are the same people who opposed cooperatives all along.

Conclusion

My document analysis and interviews with experts reinforce my review of the scholarly and professional literature. Despite continued support and interest from farmers and the government, Turkish agricultural cooperatives remain inefficient and stagnant. There is no single problem that bedevils the movement. Instead, there are several interlocking issues due to actions by various actors. This is why the problem of cooperatives is so hard to fix. There is no single issue or actor that can be rectified. In the next chapter, I will draw conclusions from my research findings and make policy recommendations based on the evidence.

Chapter V: Summary, Conclusions and Recommendations

Introduction

In this final chapter, I lay out the most salient conclusions and insights from my research. I recap the major issues facing Turkish agricultural cooperatives and examine their practical implications. Finally, I make a series of policy recommendations for cooperatives in Turkey based on the evidence.

Summary of Issues

Problems with Cooperatives

Turkey's problems with agricultural cooperatives sort into three categories: financial, organizational, and regulatory. Their financial problems are the most visibly distressing. Too many cooperatives cannot turn a profit and run deficits. For many years, the only way some cooperatives, most notably agricultural sales cooperatives, have been able to stay afloat was through direct government assistance. This is obviously problematic from a business perspective. Despite their noble goals, cooperatives are not designed to be charitable organizations; they have to be solvent and financially self-sustaining. It would be problematic if cooperatives as a group could only stay in business in the long term through outside funding.

The organizational problems in agricultural cooperatives are more subtle, but more ingrained and insidious. These problems can come from deficiencies among the management, the membership, or both. For example, executives might be corrupt, unfamiliar with cooperatives or agriculture, or ill-suited to the position. This is always

a risk with elections in government or the corporate world. However, the problem is exacerbated in this situation because the Turkish government plays a strong role in selecting the boards of directors of agricultural cooperatives. At the same time, the members might also be unfamiliar or uninterested with cooperatives their governance. They become burdens on the effectiveness of the cooperative.

Another endemic problem for cooperatives is the response by the government. Actions toward cooperatives by the government come in the form of regulation and support. Government support comes in the form of money or other resources usually given in exchange for complying with certain standards. Regulation is the government writing legislation or rules of behavior which and cooperatives to comply with. Both occur with frequency and both have a somewhat troubling dynamic with cooperatives. State support creates moral hazard among cooperatives by protecting them from the consequences of failure. Regulations change with every five year plan, so cooperatives don't benefit from stability and continuity.

The government's treatment of cooperatives recalls the "shepherd and flock" metaphor from the Ottoman Empire. The Ottoman Empire adopted a strictly hierarchical attitude toward its citizens, but it also delegated many duties to provincial governors. As noted in my background section, this structure is what made the Ottoman Empire so large and enduring. However, these qualities are ultimately what expedited its decline and fall. My research has shown that the heavy hand of the Turkish state remains even after reign of the Ottoman Empire. This mindset of providing "guidance" has proved stifling for cooperatives.

In my literature review, I introduced the “Nash Equilibrium” in the context of game theory. The players involved in Turkey’s cooperatives, members, managers, and the government, find themselves in a Nash Equilibrium. Their interests and payouts diverge; therefore, they do not cooperate. In the end, all parties receive less than optimal outcomes.

Cooperatives in Turkey have failed to act collectively as community institutions and political pressure groups. As large associations of farmers, cooperatives have a unique opportunity to achieve political action that is advantageous for farmers and for cooperatives. This opportunity is wasted for the same reason that the farm bureau ultimately became unsuccessful at political organizing. They are too close to the state and therefore unable to organize to change it. Outside of agricultural development cooperatives, the movement has failed to build up cooperatives as community institutions. They could bring greater dedication to the cooperative, therefore bringing that elusive financial stability, if they tied its success to the growth and prosperity of the greater community.

Roadblocks to Success

One of the principle obstacles to cooperatives’ financial success is access to credit. Unlike a traditional corporation, a cooperative can’t simply issue more stock to raise funds. Raising funds by asking the membership for investment money is an option. However, given that the most cooperative members are impoverished farmers, that option is unlikely and unattractive. Hence, cooperatives must rely on credit to raise funds. The Turkish government requires cooperatives to borrow from the Ziraat Bank

at 5% interest. By closing off other sources of credit, cooperatives have difficulty finding funding.

Cooperatives must also struggle with finding better leadership. Cooperative leadership has long been lacking for several reasons. First is the political nature of board elections, which appoint individuals based on political loyalty rather than merit. Second, cooperatives are negatively affected by the lack of education, experience, and technical expertise among cooperative managers. This can be explained by their weak institutions of business and agriculture higher education. Those that leave the country for education tend to stay abroad to work or take higher paying jobs in the government or private sector.

The response by the government has also been contradictory and unhelpful toward the cooperative movement. On one hand, the state offers support, but on the other hand it enforces constraining regulations. While some state support has provided temporary improvements in some instances, it has become clear that Turkey has no comprehensive agricultural strategy. That is why their policy stimulates conflicting outcomes. This has hurt cooperatives along with the rest of the industry and makes one pessimistic about the future. In response, I offer a few suggestions to improve the situation.

Policy Recommendations

The first policy that ought to be changed is the government meddling in cooperative board elections. That is clearly a conflict of interest, and violates the principles of cooperatives and democracy. By allowing cooperatives to pick their own

leaders, they would have agency and ownership over their decisions, be accountable for their own over their successes and failures rather than blaming the government. This is a difficult proposition from the government's perspective, but it would achieve better results in the long term. It would address both member relations and member participation problems.

Second, the government should end the 5 year-plan as a model for modernizing cooperatives. It has a poor effect on cooperative performance and the five year timespan leads to shortsighted decisions. It also makes no real sense for agricultural cooperatives to be paired with nonagricultural ones like housing cooperatives. Instead, planning for nonagricultural cooperatives be completely separate. Agricultural cooperatives should be part of a larger initiative to better plan the entire agriculture sector. Many of Turkey's agricultural policy decisions are divorced from one another. The government does not account for their cause and effect. This leads to policies with contradictory effects and rampant unintended consequences. Generally, the government has too tight a grip on its agricultural sector. As part of this new comprehensive strategy for agriculture, it should adopt a lighter touch.

The government should also reform the way cooperatives get access to credit. As previously mentioned, the lack of credit is a stumbling block to prosperity for cooperatives. Cooperatives need a more diverse set of options for raising funds. The best option would seem to be allowing cooperatives to borrow from a larger pool of private lenders in addition to public loans. This trade-off would allow cooperatives better access to credit, albeit at higher interest rates. Better access to credit would allow

cooperatives to finance expansions to their business and membership and hopefully make them profitable in the long run.

Finally, the government should slowly reduce the amount of financial aid it provides to cooperatives over a number of years. One of the reasons, I believe, that the removal of financial support from agricultural sales cooperatives was so disastrous is that it was announced through a 5 year-plan and immediately implemented in full. There was no period of transition where the payments slowly decreased. This made the transition harder and more detrimental than it needed to be. Instead of providing monetary aid, the government could provide more nonmaterial support to assist cooperatives. This aid could come in the form of technical assistance and education. As was noted in my findings, the quality of Turkey's agricultural products is lacking because of the huge number of small farms. Improved extension services and education could alleviate this problem. It could also improve competence among the cooperative managers and board members. This could come in the form of business and agriculture classes which could be specifically geared toward cooperative management. Similarly, it could educate members about the principles of democracy and cooperation that cooperatives are built on.

Conclusion

These policy recommendations I have made are not without their limits. What I have proposed are relatively small solutions to a much deeper problem. These reforms would not solve the underlying problem in and of themselves if the involved parties are not committed to change. What may be needed is larger and more structural reform

within the ministries themselves, a challenging issue that would test the political will of any government. But it will ultimately determine the fate of the cooperative sector. If the government remains aloof and obstinate, perhaps the farmers of Turkey should turn to the aforementioned agricultural associations and unions.

My research question asks: How does the democratic control of Turkish agricultural cooperatives by members influence them as institutions and how does it affect their efficacy? The answer to this question is unclear. Democratic control is not the only factor that affects the efficacy of cooperatives. The most financially successful cooperatives are the least democratic. And the more democratic ones have trouble getting off the ground. However, the cooperatives that have the greatest impact are agricultural development cooperatives; which are very democratic in nature.

The research I have conducted through reports and interviews has left me rather disheartened on the current state of Turkey's cooperatives. However, there are some glimmers of hope for the future in the form of the government and other actors recognizing the problems in the sector. Furthermore, some of these actors have begun to see their role in perpetuating these problems. Perhaps in the future, farmers and other actors may, like the sons of Alan Ho'a, stand together against the world.

Appendix

Appendix: Interview Questions

This is a list of template questions that I asked my interview subjects. They are meant to be open-ended and spark a discussion. They were meant to guide the interviews down similar paths that highlight agreement and disagreement among the subjects. These questions are not meant to be comprehensive because I asked follow-up questions in response to specific answers by the subject.

1. My project seeks to understand the effectiveness of Turkish agricultural cooperatives and the usefulness of the services they provide to their members. I also want to know to what extent cooperatives are democratized and controlled by their members. Finally, I wish to determine if there is a causal link between democratization and the efficacy of the organization. I plan to explore this issue through conducting interviews and analyzing documents and academic literature. Now that I've provided you with some background...

a. What do you think of the general premise of my project?

b. Before we get into specifics, I'd like to know about your overall views on the subject. What is your general opinion of agricultural cooperatives in Turkey?

2. How do you feel cooperatives ought to be structured, in order to be most successful? Should cooperatives give more decision-making power to members or to managers, or the state?

3. How are development cooperatives, sales cooperatives, and credit cooperatives regarded in Turkey?

4. How does the state intervene or regulate agricultural cooperatives in Turkey?
 - a. Do cooperatives receive assistance from the state? What forms does that assistance come in?
 - b. How does the state treat development cooperatives, sales cooperatives, and credit cooperatives?
 - c. Is regulation and assistance voluntary?
5. How would you describe the relationship between cooperative members and management?
 - a. Do the members and managers have different goals in regard to the future of the cooperative?
 - b. Are these goals irreconcilable?
6. In regard to agricultural cooperatives in Turkey...
 - a. Would you describe cooperatives as financially stable institutions?
 - b. Would you describe cooperatives as democratic institutions?
 - c. Should there be more or less state intervention in cooperatives?
7. Do you have any particular stories or examples of success or failure among agricultural cooperatives you'd like to share?
8. Also, do you have any further ideas or thoughts on the subject that you want to mention?
9. In your opinion, are agricultural cooperatives a viable model to combat rural poverty in Turkey? Why or why not?
10. The other part of my methodology is an analysis of documents; can you suggest any English language documents that might be helpful?

11. Finally, I would like to ask some basic demographic questions.

a. What is your nationality?

b. What is your job title and place of employment?

c. Please briefly describe your personal or professional involvement with agricultural cooperatives.

d. What is your age?

Bibliography

- Adalian, Rouban. "Ottoman Empire and the Armenian Genocide." Ottoman Empire and the Armenian Genocide. <http://www.armenian-genocide.org/ottoman.html> (accessed April 19, 2014).
- Erdogan Atmis, et. al. World Forestry Congress, "Forest cooperatives and its importance in rural poverty reduction in Turkey." Last modified 2009. Accessed November 28, 2013.
- AuthenticHistory.com. "The Election of 1896." The Election of 1896. <http://www.authentichistory.com/1865-1897/4-1896election/index.html> (accessed April 26, 2014).
- Axelrod, Robert. Science, "Evolution of Cooperation." Last modified 03 27, 1981. Accessed November 28, 2013. http://www.reed.edu/biology/professors/srenn/pages/teaching/2007_syllabus/2007_readings/a13_axelrod_hamilton.pdf.
- Bebchuk, Lucian, and Jesse Fried. "Introduction." In Pay Without Performance. Cambridge, MA: Harvard University Press, 2004. .
- Beekun, Rafik. "Islamic Business Ethics." Institute for Islamic Thought. http://www.islamedu.me/uploads/ethics/islamic_bussiness_ethics.pdf (accessed April 20, 2014).
- Broadmoore, Amy. "What are Agricultural Cooperatives." Agricultural Law (blog), 10 31, 2006. <http://aglaw.blogspot.com/2006/10/what-are-agricultural-cooperatives.html> (accessed November 21, 2013).
- Blogspot. "The Sixteen Petal Flower / Sixteen Spoke Wheel symbol of Israel." The Sixteen Petal Flower / Sixteen Spoke Wheel symbol of Israel. http://ibokurddruzepathankashmirikukishchian.blogspot.com/2013_10_01_archive.html (accessed April 15, 2014).
- Central Intelligence Agency. "World Factbook- Turkey." Central Intelligence Agency. <https://www.cia.gov/library/publications/the-world-factbook/geos/tu.html> (accessed April 14, 2014).
- Cornell Law School, "26 USC Part I - TAX TREATMENT OF COOPERATIVES." Last modified 08 13, 2013. Accessed November 14, 2013. <http://www.law.cornell.edu/uscode/text/26/subtitle-A/chapter-1/subchapter-T/part-I>.
- Delta Stock. "Central Bank Interest Rates." Central Banks Interest Rates. http://www.deltastock.com/english/resources/interest_rate_history.asp?curr=TRY&hide= (accessed May 17, 2014)

- Encyclopedia Britannica, "Turkey: Population Density." Last modified 2002. Accessed April 13, 2014.
<http://www.britannica.com/EBchecked/media/65676/Population-density-of-Turkey>.
- European Commission. "Turkey." Business Culture. <http://businessculture.org/southern-europe/business-culture-in-turkey/> (accessed April 20, 2014).
- European Commission. "Co-operatives." - Small and medium sized enterprises (SME). http://ec.europa.eu/enterprise/policies/sme/promoting-entrepreneurship/social-economy/co-operatives/index_en.htm#h2-4 (accessed May 12, 2014).
- Eurostat, "GDP per capita in PPS." Last modified 06 1, 2013. Accessed November 24, 2013.
<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00114>.
- Fehr, Ernst. Quarterly Journal of Economics, "A Theory of Fairness, Competition, and Cooperation." Last modified 1999. Accessed November 28, 2013.
<http://web.mit.edu/14.193>
- Frank, Robert. "Why Does the Govt. Pay Farmers to Not Grow Crops?." PBS.
<http://www.pbs.org/newshour/making-sense/why-does-the-govt-pay-farmers/>
 (accessed May 10, 2014).
- Gambling, Trevor, and Rifaat Ahmed Karim. Business and accounting ethics in Islam. London: Mansell, 1991.
- GameTheory.net, "Prisoner's Dilemma." Accessed November 28, 2013.
<http://www.gametheory.net/dictionary/PrisonersDilemma.html>.
- GameTheory.net, "Stag Hunt." Accessed November 28, 2013.
<http://www.gametheory.net/dictionary/Games/StagHunt.html>.
- George, Jennifer M.. "The Experience And Evolution Of Trust: Implications For Cooperation And Teamwork.." Academy of Management Review 23 (): 531-546.
- Georgetown University. "Turkey: Atatürk and the Secular State." Turkey: Atatürk and the Secular State. <http://berkleycenter.georgetown.edu/essays/turkey-ataturk-and-the-secular-state> (accessed April 20, 2014).
- Gunes, Cengiz. The Kurdish national movement in Turkey: from protest to resistance. New York: Routledge, 2012.
- Henry, Hagen. "Coops and the global financial crisis." Coops and the global financial crisis. http://www.ilo.org/global/about-the-ilo/newsroom/features/WCMS_105073/lang--en/index.htm (accessed May 12, 2014).

- Hahn, Robert. World Bank, "The Costs and Benefits of Regulation: Implications for Developing Countries." Last modified 1997. Accessed November 24, 2013. <http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-1773>.
- Hall, Kenji. "How Japan Helped Ease the Rice Crisis." Bloomberg Business Week. <http://www.businessweek.com/stories/2008-05-22/how-japan-helped-ease-the-rice-crisisbusinessweek-business-news-stock-market-and-financial-advice> (accessed May 10, 2014).
- Hanioglu, M. Şükrü. Preparation for a revolution: the Young Turks, 1902-1908. Oxford: Oxford University Press, 2001.
- Hart, Oliver D., and Sanford Grossman. "An Analysis of the Principal-Agent Problem." *Econometrica* 51 (1): 7-46.
- Hobbes, Thomas, and J. C. A. Gaskin. *Leviathan*. . Reprint, Oxford: Oxford University Press, 1998.
- Hovannisian, Richard G.. Remembrance and denial: the case of the Armenian genocide. Detroit: Wayne State University Press, 1998.
- Infoplease, "Turkey." Last modified 2005. Accessed April 13, 2014. <http://www.infoplease.com/country/turkey.html>.
- International Fund for Agricultural Development, "Rural Poverty in Turkey." Last modified 2010. Accessed November 21, 2013. <http://www.ruralpovertyportal.org/country/home/tags/turkey>.
- Karagöz, Alptekin. "Turkey." Turkey. <http://www.fao.org/ag/AGP/AGPC/doc/counprof/turkey.htm> (accessed May 5, 2014).
- Kropotkin, Petr Alekseevich, and Emile Capouya. *The Essential Kropotkin*. "Mutual Aid." New York: Liveright, 1975.
- Larsen, Grace. *The Mississippi Valley Historical Review*, "Asron Scapiro: Genius of Farm (o-operative Promotion." Last modified 09 1962. Accessed November 28, 2013.
- Levine, David. UCLA, "What is Game Theory?." Last modified 04 16, 2013. Accessed November 28, 2013. <http://levine.sscnet.ucla.edu/general/whatis.htm>.
- McCain, Roger A.. ""Solutions" to Nonconstant Sum Games." Nash Equilibrium. <http://faculty.lebow.drexel.edu/McCainR/top/eco/game/nash.html> (accessed April 29, 2014).
- Okan, Nedret. Food and Agriculture Organization, "An Overview of Turkish Cooperatives." Last modified 2013. Accessed November 21, 2013. <http://www.fao.org/docrep/018/ar427e>

- Olson, Mancur. *The Logic of Collective Action*. Cambridge, MA: Harvard College, 1965.
- Oregon Community Credit Union, "Member Services." Accessed November 14, 2013. <https://www.oregoncommunitycu.org/resources-tools/member-services>.
- Ozdemir, Gulen. *Journal of Asian Economics*, "Cooperative Shareholder Relations in agricultural cooperatives in Turkey." Last modified 1 25, 2005. Accessed November 22, 2013. <http://social.un.org/coopsyear/documents/Turkish-cooperatives-action-plan2012.pdf>.
- New Agriculturist, "Country profile - Turkey." Last modified 05 2000. Accessed April 13, 2014. <http://www.new-ag.info/en/country/profile.php?a>
- NationMasters, "Turkey - Dominant Crop Areas." Last modified 2014. Accessed April 13, 2014. <http://maps.nationmaster.com/country/tu/1.=878>
- NationMasters, "Turkey - Dominant Crop Areas." Last modified 2014. Accessed April 13, 2014. <http://maps.nationmaster.com/country/tu/1>.
- Nourse, E.G. *Journal of Cooperatives*, "The Place for Cooperatives in Our Economy." Last modified 1942. Accessed November 29, 2013. <http://ageconsearch.umn.edu/bitstream/46287/2/Volume 7 Article 8.pdf>.
- Putnam, Robert. *Journal of Democracy*, "Bowling Alone." Last modified 01 1995. Accessed November 27, 2013. <http://archive.realtor.org/sites/default/files/BowlingAlone.pdf>.
- Priyadi, Sugeng. "Islam invites Muslims to raise." *AGRICULTURE IN ISLAM*. <http://agricultureinislam.wordpress.com/2009/11/03/islam-recommended-to-grow-crops/#more-7> (accessed April 20, 2014).
- Rauscher, Frederick. "Kant's Social and Political Philosophy." Stanford University. <http://plato.stanford.edu/entries/kant-social-political/#FreBasSta> (accessed May 17, 2014).
- "Representing the Business Interests of Agriculture." National Council of Farmer Cooperatives. National Council of Farmer Cooperatives, n.d. Web. 3 June 2012. <<http://www.ncfc.org/>>.
- Republic of Turkey Ministry of Customs and Trade. "Turkish Cooperatives Strategy and Action Plan 2012-2016." 2012. <http://social.un.org/coopsyear/documents/Turkish-cooperatives-action-plan2012.pdf> (accessed May 12, 2014).
- Sabloff, Paula. *Modern Mongolia: Reclaiming Genghis Khan*. Philadelphia, PA: University of Pennsylvania Museum of Archaeology and Anthropology, 2001, 99.

- Sexton, Richard. American Journal of Agricultural Economics, "The Formation of Cooperatives: A Game-Theoretical Approach with Implications for Cooperative Finance, Decision Making, and Stability." Last modified 05 1986. Accessed November 28, 2013.
- Staatz, John. Agricultural Applied Economics Association, "The Cooperative as a Coalition: A Game-Theoretic Approach." Last modified 12 1983. Accessed November 28, 2013.
- Taris Figs Agricultural Sales Cooperatives Union, "About Us." Accessed November 24, 2013. http://www.taris.com.tr/incirWEB_Eski_Hali/e_default.asp.
- Times International Limited. "Principle Agent Problem Definition | Principle Agent Problem Meaning - The Economic Times." The Economic Times. <http://economictimes.indiatimes.com/definition/principle-agent-problem> (accessed April 28, 2014).
- Togerson, Randall. University of Wisconsin, "EVOLUTION OF COOPERATIVE THOUGHT, THEORY AND PURPOSE." Last modified 1 16, 1997. Accessed November 21, 2013. <http://www.uwcc.wisc.edu/info/torg.html>.
- Turkish Grand National Assembly, "Constitution of the Republic." Last modified 1982. Accessed April 7, 2014. http://global.tbmm.gov.tr/docs/constitution_en.pdf.
- U.S. Farmer and Rancher Alliance. "Farm Size and Ownership." Food Dialogues: Farmers & Ranchers Committed to Continuous Improvement of How We Grow & Raise Food. <http://www.fooddialogues.com/foodsource/farm-size-and-ownership> (accessed May 5, 2014).
- Weiker, Walter. The Turkish Revolution: 1960-1961. Washington, D.C.: The Brookings Institution, 1963.
- World Bank. "TURKEY Rural Finance Study." <https://openknowledge.worldbank.org/bitstream/handle/10986/12883/699680v20ESW0P0Revised0DD0Volume0II.txt?sequence=2> (accessed May 10, 2014).