A PILOT STUDY ON THE IMPACTS OF EUROPEAN UNION INTEGRATION ON BULGARIAN COMMERCIAL PRODUCERS BUYING BEHAVIOR FOR CAPITAL EQUIPMENT

BY

LANCE MATTHEW CLEMENS

THESIS
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Master’s Committee:
Professor Peter Goldsmith
Dr. Matt Rosenstein
ABSTRACT

The fall of Communism abruptly ended collectivized farming and Agro-Industrial Complexes in Bulgaria, paving the way for modernization, privatization, consolidation and new markets through European Union (EU) integration. With integration came the rise of the Bulgarian commercial producer, resulting in new market opportunities for suppliers of capital inputs. Understanding how Bulgarian commercial producers buy capital equipment is extremely valuable to suppliers who hope to develop new selling and retention strategies in an emerging agricultural marketplace. This information is also beneficial to researchers who are concerned about various factors that influence and drive economic decisions on Bulgarian farms.

This thesis presents an exploratory pilot study utilizing a mixed methods approach integrating survey and interview data using a convergent parallel design of agricultural commercial producers in Bulgaria. Quantitative data was collected from responses to the 2013 Large Commercial Producer (LCP) survey by Purdue University’s Center for Food and Agricultural Business followed immediately by interviews with seven commercial farmers. The results show that when buying capital inputs, Bulgarian commercial producers have a strong loyalty to their current brands of capital equipment but not an overall loyalty to the brand itself. Market power favors the commercial producer making it a buyer’s market rather than a seller’s market. Producers indicated preferences characteristic of the Performance buyer segment wanting quality, reliability, durability, and good service when buying commercial equipment but they are also price sensitive. This pilot study has been a first step in better understanding the decision-making processes and motivation regarding how Bulgarian commercial producers buy capital equipment.
"Every blade of grass is a study; and to produce two, where there was but one, is both a profit and a pleasure. And not grass alone; but soils, seeds, and seasons - hedges, ditches, and fences, draining, droughts, and irrigation - plowing, hoeing, and harrowing - reaping, mowing, and threshing - saving crops, pests of crops, diseases of crops, and what will prevent or cure them - implements, utensils, and machines, their relative merits and how to improve them - hogs, horses, and cattle - sheep, goats, and poultry - trees, shrubs, fruits, plants, and flowers - the thousand things of which these are specimens - each a world of study within itself."

- Abraham Lincoln addressing the Wisconsin State Agricultural Society in Milwaukee Wisconsin, September 1859

One year after Abraham Lincoln gave this speech at the Wisconsin fair, he would be elected president, and two years after that he signed the bill establishing the U.S. Department of Agriculture.
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# ABBREVIATIONS

<table>
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<th>Description</th>
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<tr>
<td>AIC/APK</td>
<td>Agro-Industrial Complex</td>
</tr>
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<td>BSP</td>
<td>Bulgarian Socialist Party</td>
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<td>CAP</td>
<td>Common Agricultural Policy</td>
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<tr>
<td>CEE</td>
<td>Central and Eastern European</td>
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<td>CMEA</td>
<td>Council of Mutual Economic Assistance</td>
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<td>DZS</td>
<td>Bulgarian State Farms</td>
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<td>EU</td>
<td>European Union</td>
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<td>GAP</td>
<td>Gross Agricultural Product</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>ISPA</td>
<td>Instrument for Structural Policies for Pre-Accession</td>
</tr>
<tr>
<td>MRF</td>
<td>Movement for Rights and Freedom</td>
</tr>
<tr>
<td>MTS</td>
<td>Machinery Stations</td>
</tr>
<tr>
<td>NMS</td>
<td>New Member States</td>
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<tr>
<td>SAPARD</td>
<td>Special Accession Program for Agriculture and Rural Development</td>
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<td>SAPS</td>
<td>Single Area Payment Scheme</td>
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<td>TKZS</td>
<td>Cooperative Agricultural Farms</td>
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<td>UDF</td>
<td>Union of Democratic Forces</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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CHAPTER 1

INTRODUCTION

1.1 Research Problem

Understanding how Bulgarian commercial producers buy capital equipment is extremely valuable to suppliers who hope to develop new selling and retention strategies in an emerging agricultural marketplace. This information is also beneficial to researchers who are concerned about various factors that influence and drive economic decisions on Bulgarian farms.

The fall of Communism abruptly ended collectivized farming and Agro-Industrial Complexes, paving the way for modernization, privatization, consolidation and new markets through European Union integration. With European Union (EU) integration came the rise of the Bulgarian commercial producer. As a result, new market opportunities exist in Bulgaria for suppliers of capital items.

Yet, over the last two decades, most research has focused on the small Bulgarian farmer. Who are the commercial producers in Bulgaria? What is the buying behavior of large farmers? How does the food and agribusiness value chain work in Bulgaria? To better understand these questions as well as the buying behavior of Bulgarian commercial farmers, the following research goals and objectives have been set:

• Provide a pilot study profile of farms owned and managed by commercial producers, including demographics, size, scope, technology, economic characteristics, attitudes and future plans.

• Develop a better understanding of the decision-making processes of commercial producers.
• Obtain up-to-date-information on high priority topics such as precision agriculture, specialty crop production, and contractual relationships.

• Assess the implications of the findings as they apply to market strategies of input suppliers.

• Assess whether a comprehensive study is warranted locally and regionally (such as Bulgaria, Romania, Central and Eastern Europe, etc.).

1.2 Research Question and Methodology

The primary research question is: How do Bulgarian commercial producers buy capital equipment? The 2013 Large Commercial Producer (LCP) survey contains insight centered on four main themes: the salesperson and information, loyalty, buying preferences and producer strategy (see Appendix A). For purposes of this study, only pertinent data as it relates to the research question was extrapolated from the survey.

This exploratory and descriptive research project utilized a mixed methods approach integrating qualitative and quantitative data using a convergent parallel design of agricultural commercial producers in Bulgaria. Quantitative data was collected from responses to the 2013 LCP survey by Purdue University’s Center for Food and Agricultural Business followed by interviews with eight Bulgarian commercial farmers. Each participant agreed to be surveyed and interviewed regarding the impacts of EU integration on their buying behavior for capital equipment.

1.3 Decollectivization and Privatization

On November 10, 1989, Tudor Zhivkov resigned as both Bulgaria’s head of state and
head of the Communist Party. Zhivkov became the First Secretary and head of state in 1954 and was largely responsible for the country’s economic and agricultural policies. His rule ushered in a period of unprecedented political and economic stability for Bulgaria, although this time was marked by complete submission to Soviet authority and directives.

During Zhivkov’s tenure from 1954 to 1989, Bulgarian agriculture was heavily steeped in a centralized Soviet style economy characteristic of output production, urbanization and industrialization (Becker, 2011, p. 1). Bulgaria followed the Soviet model of collectivized farming, which abolished private ownership, and was characterized by large-scale industrialized production, including the use of heavy applications of fertilizers and pesticides at the expense of the environment and overall sustainability (Yarnal, 1994, p. 67). In addition, Bulgaria was heavily dependent upon the communist trading bloc, known as the Council of Mutual Economic Assistance (CMEA) with over 65% of its total trade going through the CMEA (Becker, 2011, p. 2). The Soviet Union was Bulgaria’s most favored trading partner within the bloc accepting 76% of Bulgaria’s exports (Becker, 2011, p. 2).

With the collapse of central planning in Central and Eastern Europe (CEE), Bulgaria’s network and access to CMEA countries became neither sustainable nor profitable. Bulgaria witnessed the collapse of the Soviet Union through its very own export industry and GDP. Total exports as reported in 1991 declined 45% and total imports declined 33% from their 1988 numbers (Dobrinsky, 1995, p. 235). GDP followed a similar pattern declining 9.1% in 1990, 11.7% in 1991, and 7.7% in 1992 (Dobrinsky, 1995, p. 216). Not only did Bulgaria lose its major export markets, but the country also had to deal with the rising costs of imports, such as fuel and energy products. Bulgaria was no longer privy to Soviet subsidies for finalized goods and essential raw materials (Djankov and Hoekman, 2000, p.195). The Bulgarian agricultural sector
was not immune to the rapid changes going on politically, economically and socially. Thus, the fall of Communism abruptly ended collectivized farming and the Agro-Industrial Complexes and paved the way for privatization, modernization, new farm structure, and new markets through EU integration.

**Historical Background**

Prior to World War II, Bulgaria’s economy and institutions were dominated by agriculture, which made up roughly 65% of national income, 70% of the labor force, and almost all of the exports (Lampe et al., 1982, pp. 531-559). Per capita national output put Bulgaria at the low end of the European scale, although “massive rural poverty as found in Romania, Portugal, or southern Italy was avoided by equal distribution of landholdings among the peasants” (Jackson, 1991, p. 204). Bulgaria also differed from Romania, Hungary and Poland in that it lacked a hereditary landed aristocracy, and recent independence did not allow the small upper class of merchants and military officers the opportunity to acquire large land holdings (Jackson, 1991, p. 204).

The Communist Party came to power in 1944, but it took an additional four years to consolidate its power fully by eliminating its opposition, the strongest of which was the agrarian political movement (Crampton, 2009, p. 308). Initially, collectivization was resisted and accompanied by force and violence (Jackson, 1991, p. 204). In 1945, the Law for Labor Cooperative Agricultural Farms (TKZS) was passed to make way for peasant collectivization. Collectivization began in 1946 and was basically an attempt to reproduce the Soviet колхоз (collective) agricultural model of heavily centralized collectivist forms of land ownership. Originally implemented as a volunteer program with modest results (see Table 1), the policy was changed calling for a “forceful cooperation” of all farmers (Bachev, 2008, p. 2).
By the latter half of the 1950s, the communist leadership seemed intent on industrializing Bulgaria at the expense of farmers. Collective farms (TKZS) accounted for the greatest share in farmland, most kinds of livestock, and greatest Gross Agricultural Product or GAP (see Table 2).

A massive transformation program was launched where many rural and village residents migrated to cities for work. Private ownership of agricultural machinery was largely prohibited and state institutions controlled the distribution of inputs and most of the production (Meurs, 97, p. 9). The Bulgarian communists avoided the negative impacts on production output through mechanization and modernization. In fact, the use of machinery in place of village workers actually increased total output in the 1960s (Jackson, 1991, p.205). By the end of the decade, this process had been largely achieved and about 90% of the arable land was organized in over 3,000 state-led cooperatives, averaging 1200 ha. (Medarov, 2013, pp. 170-171). Cooperative members were given small “personal plots” and a limited number of livestock and poultry for their personal use (Bachev, 2008, p.3).

No other socialist country took centralization to the extreme like Bulgaria did (Swain, 2007, p.10). In 1970 and 1971, Bulgarian agriculture was organized into 56 state farms, and 744 producer cooperatives concentrated into 161 Agro-Industrial Complexes (AICs/APKs), directly controlled by the state (Swain, 2007, p. 11). These complexes were set up as regional associations in municipalities integrating all farms, TKZSs, DZSs – state farms, and MTSs - machinery stations (see Table 3). They were seen as a necessary “next step” to eliminate family farming (Jackson, 1991, p. 206). Most AICs were multi-faceted operations, involving food processing, agricultural services and marketing, and other activity (Bachev, 2008, p. 7). These huge complexes had enormous potential and resources to increase efficiency through centralized control, heavy investments and modernization, vertical integration, economies of scale, and risk
sharing and mitigation (Bachev, 2008, p. 7). Thus, AICs achieved progress in capital-intensive productions and high-tech areas such as cereals, sunflower, oilseed, greenhouses, modern irrigation and the use of chemicals and pesticides (Bachev, 2008, p. 7).

Nonetheless, the move to AICs was widely criticized by Bulgarian agricultural specialists. These specialists felt AICs eliminated the more self-regulating effects of the smaller, village-oriented cooperative farms and would ultimately effect production. Trifon Dardjonov believes the AIC is not the reason for the decline of the collective farm, but rather; it is a generational problem with the workers (Dardjonov, 1991, p. 11). In his opinion, the first cooperative farmers grew up in the conditions of private farming. He goes on to say, “even if they wanted to they could not do bad work” (Dardjonov, 1991, p. 11). Thus, the new generation of workers got their poor working habits under the conditions of socialism (Dardjonov, 1991, p. 11). In other words, the new generations didn’t have any ownership and commitment and therefore their work habits suffered as a result. Even when new technologies for plant growing and animal breeding were borrowed from advanced Western countries, the workers didn’t care to learn. As a result of poorly motivated and trained farm workers, agricultural outputs stagnated and export surpluses started to shrink forcing the gradual break up of AICs into much smaller TKZS in the latter half of the 1980s (Kopeva et al., 1994, p. 204).

The Politics of Decollectivization

In June 1990, the former communist party, the Bulgarian Socialist Party (BSP), won the first post-socialist elections. Nonetheless, they did not remain in power very long. Several opposition Union of Democratic Forces (UDF) politicians were convinced that the elections were illegal, thus forcing the socialist president to resign in July because of comments he made the previous December about rolling out the tanks (Swain, 2007, p. 5). This led to a coalition
(technically “cohabitation”) government in December, which included both BSP and UDF politicians. The coalition government remained in power until the scheduled elections in October 1991, with the primary task to create a new constitution and plan for the upcoming elections. Both of these tasks were accomplished, however; the UDF party split, becoming even more radicalized (Swain, 2007, p.5). Thus, for the UDF party, it was as if nothing had changed. To them, the new constitution was a “communist document” and the “cohabitation” government was a BSP government (Swain, 2007, p.5).

The “cohabitation” government introduced a new law on the use and ownership of agricultural land in the spring of 1991 which “reestablished the maximum restrictions on holdings of 1946, 30 hectares in Dobrudzha, 20 hectares elsewhere” (Swain, 2007, p. 5). The new law did not require the original land to be returned to the owners, but rather; it permitted the return of alternative or equivalent land. The August 1991 law of cooperatives was similar in that it permitted existing agricultural producer cooperatives, also known as collective farms to re-register as new ones (Swain, 2007, p. 5). The differences between the new and former socialist cooperatives is that membership is now voluntary, and members receive rent payments for their land to include dividends on cooperative profits (Swain, 2007, p. 7).

The more radicalized UDF, with the help of the Movement for Rights and Freedoms (MRF), the party of Bulgaria’s ethnic Turks and the Pomaks (Bulgarian Muslims) won the October 1991 national elections. The new government’s number one priority was the “decommunization of the country;” and as such alienated themselves and made numerous enemies in the process (Swain, 2007, p.5). Unfortunately for the UDF, the MRF abandoned them in October 1992 over their agricultural policy. In spring 1992, the UDF led government amended the land law so that, wherever possible, land should be returned in its “historic boundaries,”
regardless of a survey by the Ministry of Agriculture in 1992 showing land still intact in former borders amounted to less than 12% of all land nationwide (Drobrinka, et al., 1996, pp. 56-7). Thus, in the case of cooperatives, the emphasis shifted from transformation to liquidation.

**The Decollectivization Process**

In February 1991, the Bulgarian National Assembly passed the Law for Agricultural Land Ownership and Land Use. It was amended several times and in March 1992 the final version of the Ownership and Use of Farm Land Act was passed, followed quickly with Decree 74, Rules for Application of the Ownership and Use of Farm Land Act (Buckwell et al., 1993, p.493). Together these two legal documents make up the Farm Land Act. The Farm Land Act deals with five issues: agricultural land privatization, land settlement, transferability of property rights, liquidation of collective farms and distribution of their non-land assets, and institutions dealing with land ownership (Buckwell et al., 1993, p. 493). The main function of the Act is to return the land to the original owners or heirs before the collectivization in the late 1940s and 1950s (Buckwell, 1993, pp. 493-94). It also called for the forced liquidation of all state cooperatives and the distribution of their non-land assets to eligible owners (Buckwell et al., p. 494). Consequently, if the Farm Land Act were to be carried out literally, it would bring about a total reversal in farm structure from the highly structured and concentrated to previous unstructured farm conditions before World War II (Buckwell, 1993, p. 494).

The Farm Land Act established two boards at each cooperative: a Land and Liquidation Commission (Yarnal, 1994, p. 67). The Land Commission’s primary responsibility was to determine who was eligible to receive land, the amount of land each previous owner was to receive, and where the land was located (Meurs, 1997, pp. 11-12). The Liquidation Commissions replaced the old cooperative management and had two tasks. The first task was to sell off the
physical assets of the cooperative, such as machinery, animals, and auxiliary buildings. The second task was to oversee and manage the cooperatives until the decollectivization process was completed.

The Farm Land Act gave the Land Commissions and the Liquidation Commissions great freedom in how they carried out restitution and liquidation. As a result, the decollectivization process was unique and in the hands of these two boards at each of Bulgaria’s hundreds of cooperative farms (Yarnal, 1994, p. 67). There were three outcomes for Bulgarian cooperatives. First, the board could keep the cooperative farm intact as state owned and then allow individuals to rent the land. This allowed large farms and commercial operations to remain intact and to be passed on in the future. Second, the land could be returned to individuals but then a new cooperative was formed with the new landowners. This also kept commercial farming alive in Bulgaria. Third, the land and the assets were sold off to individual owners, decimating the former cooperative farm and dividing it into several parcels of land.

There were two categories of people who could acquire land through the Farm Land Act. The most important category consisted of former owners of collectivized land or their heirs. Ideally, these owners would get back the exact piece of land they were forced to give up to the local cooperative. Unfortunately, this was not possible in many cases. For instance, written documentation of land ownership may be lost, or land may have been seized by the central government for military facilities, construction of state buildings, or other purposes (Yarnal, 1994, p. 67). Other reasons include using farmland for urban development or the dumping of toxic waste from industrialization rendering the land useless (Yarnal, 1994, p. 67). Interestingly, the Land Commissions calculated a coefficient of reduction, which applied to all land claims, ultimately reducing each owner’s initial claim by a prescribed percentage (Yarnal, 1994, p. 67).
Also, although the Land Commissions were tasked to return the claimants their original land when possible, their primary goal was to be fair (Meurs, 1997, p.12).

The second group of people to acquire land was those people who did not originally own any land on the cooperative, but who worked on the cooperative for at least five years. The more years worked, the more land the worker would receive. It was also possible to own land on more than one cooperative. Workers often claimed land on both the cooperative farm where they worked and another where their family had previously owned property (Yarnal, 1994, p. 67). In most cases, these “double claimants” were always ethnic Bulgarians; those workers who gained land through working on a cooperative farm were usually Bulgarians of Turkish descent or Roma (Yarnal, 1994, p.67). Bulgarians of Turkish descent or Roma had a difficult time due to discrimination and racism.

The restitution process of collectivized and nationalized farmland was complex and extremely time consuming. Due to the complexity of the process, it lacked standardization and took a lot of resources to carry out, taking almost 10 years to complete. Thus, there was a danger that farmlands would become fragmented and result in a decline in production levels (Mathijs et al., 2004, p. 74).

A significant consequence of centralization was that upper management and professionals/experts were few in number, and were concentrated at the Agro-Industrial level, not decentralized within the villages (Swain, 2007, p. 11). Most of these professionals and top-level managers lived in towns rather than villages, and they were more likely to have close ties with various marketing channels as a result of vertical integration that characterized the AICs (Swain, 2007, p. 11). Additional fall-out from restitution and privatization was limited or no access to agricultural machinery. As with most neo-Stalinist countries, Bulgaria had abolished
machinery stations (MTS) in the late 1950s and early 1960s and sold the equipment to the cooperative farms (Swain, 2007, p.11). In the AICs, new machine and tractor stations were created as part of modernization. Unfortunately, access to machinery, a key factor for success in post-socialist farming, was not guaranteed (Swain, 2007, p. 11). Swain goes on to say that this “situation had more in common with the situation in Romania where Stalinist machine and tractor stations had been retained throughout the socialist years” (2007, p. 11).

Another significant consequence of extreme centralization was that wages paid to cooperative laborers were not competitive with other sectors of the economy (Swain, 2007, p.11). As a consequence, most of those employed full time on the cooperative farm were often ethnic minorities, such as Turks, Pomaks, and Roma, who were excluded from cooperative privatization (Swain, 2007, p.11). In addition to the exclusion of minorities from the restitution process, there were also a limited number of reasonably skilled young people in a position to receive useful cooperative assets and begin farming at a moderate scale (Swain, 2007, p.12).

It is clear that the fall of Communism in Bulgaria seriously impacted collectivized farming. First, Bulgaria lost its major export markets and simultaneously had to deal with the rising cost of imports as part of its transition to a market economy. Second, the eventual victory of radical decollectivizers resulted in a politics of liquidation rather than transformation. Indeed, new structures emerged, yet in “many areas the revolution was ‘domesticated’ as albeit much less well-endowed co-operatives were recreated, not least to defend the rather more marginalized rural populations that had emerged from socialism’s highly centralized AICs” (Swain, 2007, p. 24). Third, the restitution process was complex, varied in implementation regionally, took a lot of resources to support it and took a long time to complete it. Its implementation resulted in fragmented ownership, with many farmers lacking the capital to boost production. Unfortunately,
this has significantly affected Bulgaria’s position as an exporter of traditional agricultural goods. Fourth, top managers and professionals, who came from the AICs were able to position themselves in ways to influence the restitution boards to keep cooperatives intact and later to come out on top as viable commercial producers during pre-accession and with EU membership in 2007. Fifth, markets and prices were eventually liberalized with little or no support to farmers from the state. However, the fall of Communism in Bulgaria paved the way for EU accession; opening the door and providing numerous channels to further develop (if not restructure) its agricultural industries as it is provided with more open access to export markets and capital investment opportunity.

1.4 EU Integration, CAP and Bulgarian Agriculture

Accession of Bulgaria into the EU in 2007 and the introduction of the Common Agricultural Policy (CAP) has significantly influenced the way Bulgarian agriculture is both pursued and carried out, as well as how it encounters regional and global challenges and opportunities. Over the last decade, Bulgaria’s agricultural market has experienced dynamic growth and diversification. Despite the significance of this topic in regards to European integration and enlargement, especially those CEE and New Member States (NMS) of 2004 and 2007, there is a limited amount of research dealing with the impact of EU accession on Bulgaria. But what has been the impact of EU integration on Bulgarian agriculture? What role has the CAP played and has it made a difference in moving Bulgaria towards convergence?

This question is significant for several reasons. First, there isn’t much available literature dedicated to this topic nor is there sufficient or complete statistical economic and societal data. The most current and up-to-date research by Csáki and Jámbor (2013,) analyzes the impact of
EU accession on NMS’ agriculture as well as identifies underlying factors behind different country performances. Results suggest that accession has had both a positive and negative impact on Bulgarian agriculture. Second, agriculture plays a significant role both economically and historically in Bulgaria making it an attractive emerging agricultural market. Third, research suggests Bulgarian farmers are more dependent on subsidies and the policy than peers in other member states and may escalate concern about re-alignment of the CAP between Old and New Member States (Majewski et al., 2011, p. 55). Fourth, additional research and analysis of Bulgarian accession on its agricultural sector may be extremely useful in regards to further integration of regional candidate/applicant states such as the former Yugoslav Republic of Macedonia, as well as other potential applicants/neighbours such as Ukraine and other Eurasian and Central Asian countries because of similar post-soviet historical, political and cultural contexts.

The available research and data is limited and does not allow for a thorough analysis and evaluation of the CAP on all stakeholders involved. Nevertheless, accession has had both positive and negative effects on Bulgarian agriculture and the current challenges associated with reform for all member states continues into the next programming period of 2014-2020.

This remainder sub-section 1.4.1 is divided into four parts. Part one is a literature review discussing the existing literature and works on the impact of EU integration on Bulgarian agriculture. 1.4.2 discusses the major reforms to CAP in the last two decades and identifies and assesses those policy factors behind Bulgaria’s agricultural performance. 1.4.3 looks at specific economic indicators in an attempt to analyze post-accession developments as well as evaluate the quality of post-accession economic research. 1.4.4 offers concluding observations on the impacts of EU integration and the CAP on Bulgarian agriculture.
1.4.1 Literature Review

The recent literature and research dedicated to European enlargement and Bulgarian agriculture is limited in scope and reach. Much of the existing research evaluating pre-and-post accession agricultural performance focuses on the 2004 and 2007 accession of the twelve new Member States. Using economic data and policy analysis, Csáki and Jámbor (2009) analyzed the impact of the first years of EU accession on NMS agriculture and concluded the EU accession had had an overall positive impact. Kiss (2011) echoed the above conclusion and added that accession had created an incentive for NMS agriculture but also had a negative effect due to increased competition in the enlarged market. Csáki and Jámbor (2013) took a more comprehensive look at accession of NMS and concluded that EU accession had a significant impact on NMS agriculture but not a beneficial one collectively. In other words, the enlarged EU increased farmers’ incomes but did not help them withstand competitive pressures, nor did it address the large number of small farmers (< 2 hectares) and the significant rural-urban income gap. Member states also realized their accession opportunities differently, primarily due to initial conditions and pre-and-post-accession policies. Lastly, there has been limited progress in regards to convergence between the EU-15 and NMS post accession.

Gorton et al. (2009) analyzes the policy transfer of European Union agricultural and rural policy to the NMS and details why the CAP is not targeted effectively at these new member states. Instead of an integration policy of mutual support and adaption, the European Union implemented a process of policy penetration, leading to a mismatch of the CAP and the real rural development needs of the NMS. Thus, it was the responsibility of the NMS to adjust to the
European Union rather than mutual adaptation by both parties. This translated to a missed opportunity for reforming the CAP into an appropriate pan-European policy. The unwillingness of the EU to take into account different underlying historical and socio-economic conditions of rural areas in NMS had ultimately led to the implementation of a policy that could not adequately meet its objectives in an enlarged Europe.

Swain (2013) echoes Gorton’s conclusions as well as explores some of the ambiguities inherent in applying a model of Western European agriculture to the very different agrarian structures and cultural differences of Central and Eastern Europe. Swain believes EU policymakers failed to recognize the ‘European model of agriculture’ was one that had what he referred to as a “weak pedigree” on much of the European continent; they also neglected to think through the implications of extending a model of subsidies on the assumption of a family farm norm to a region where it scarcely existed in NMS because of large-scale communist era collectivization (Swain, 2013, p. 385). Swain also reasserts Gorton et al. (2009) and concludes that EU policymakers expected CEE farmers to adjust to Western European norms and mores rather than investigate the consequences of extending a subsidy system to structures for which it was not designed. Nonetheless, western agricultural exceptionalism (Daugbjerg et al., 2012) has managed to reach Bulgaria and manifest itself in and through its current agricultural policies and commercial producers.

1.4.2 The Common Agricultural Policy

The Common Agricultural Policy (CAP) has its roots in the 1950s when Western Europe was recovering from the Second World War. As one of the oldest policies of the EU, the CAP is
strongly anchored to the European integration project. It emerged as a result of years of fighting and a mounting fear that food supplies could not be guaranteed. As a result, the focus of the early CAP was on encouraging better agricultural production and ensuring that Europe had a viable agricultural sector, as well providing European consumers a stable supply of affordable food.

Established in 1962, the CAP was viewed as a necessary partnership between agriculture and society, between Europe and its farmers. This partnership has evolved over time and can be separated into three phases: phase one focused on getting Europe out of a food shortage (post WWII) to abundance; phase two focused on necessary reform to meet dynamic changes linked to integration, sustainability and the environment; and phase three focused on expanding the role of farmers in agricultural development beyond just food production.

So just what is the CAP? In layman terms, the CAP is a set of rules or regulations, mechanisms, laws and practices adopted by the European Union to provide a common and unified policy on agriculture, to regulate production, trade, sale and processing of agricultural productions among Member States. The main principles of the EU's agricultural policy can be summed up as follows (EC, 2011, p. 2):

• As a single market, it must be possible to exchange agricultural products between the EU countries freely and without barriers.

• Community preference, according to which agricultural products produced in the EU take precedence over products imported into the EU from third countries and according to which the EU's agricultural products must be protected from fluctuations on the world market and products imported at low prices from third countries.

• Financial solidarity, which means that all expenditure on the common agricultural policy must be financed via the EU budget.

There were several objectives of CAP as defined in Article 33 of the Treaty of Rome of 1957. First, to increase agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimization of the factors of
production, in particular labor. Second, to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earning of persons engaged in agriculture. Third, CAP was established to stabilize markets of agricultural products and ensure the availability of supplies of agricultural commodities and the raw materials for agricultural industries. Lastly, to ensure ultimately that supplies reach consumers at reasonable prices.

Today’s CAP has evolved into a complex, multifunctional policy, supporting market oriented agricultural production throughout Europe, while impacting living and vibrant areas, and environmentally sustainable production. Although the initial objectives of the CAP have not changed over the years, the weight given to different objectives and priorities has changed drastically, and sustainability has risen to the top (EC, 2011, p. 6). Annual spending on agriculture and rural development together is running at about €55 billion, around 45% of the total EU budget. CAP spending peaked at 72% of the EU budget in 1984 and has fallen steadily since then (EC, 2011, p. 11).

In order to ensure sustainability, the CAP supports three underlying policy dimensions: producer prices, producers’ income, and rural development. These three dimensions are interconnected and as such, sustainability depends solely on the effective integration and collective implementation of these policies.

### 1992 MacSharry Reform

In 1992, under the leadership of agricultural commissioner Ray MacSharry, the EU passed a series of reforms, commonly known as the MacSharry reforms that shifted the emphasis of subsidies from product support to producer support. These reforms did not set a fixed price for agricultural products, instead the focus shifted to supporting farmers through direct payments. These payments (referred to as coupled direct payments) were linked either to fixed areas (or
fixed yields), or to the number of animals. What led to this important change was that ultimately product support led to overproduction. Because European farmers were isolated from market signals as a result of guaranteed fixed prices for certain products, the previous policies incentivized overproduction.

The MacSherry reforms were significant for a variety of reasons. First, these reforms began a transition process from price/market support policies to more direct income support schemes, as well as making the first significant move towards implementing decoupling – direct payments (Gorton et al., 2009, p. 1307). Second, significant cuts were made that guaranteed farm prices (particularly for beef, cereals, oilseeds, and sheep), closing the gap between internal and world market prices. It also introduced agri-environmental legislation and new subsides for good environmental practices with the hope of encouraging future “green” farming practices. Third, farmers were eligible to receive direct payments as long as they “set-aside” a certain amount of land and limit the number of animals per hectare (Scricciu, 2011, p. 129). Lastly, these reforms impacted CAP mechanisms, putting less emphasis on market support and more emphasis on farm income, shifting the burden of support from consumers to taxpayers. And as such, it aimed at weakening the link between production and farm income (Scricciu, 2011, p. 92).

**Agenda 2000 Reforms**

In the late 1990s, the European Commission put forth additional reforms (later known as the Agenda 2000 reforms) as current policies were confronted with emerging internal and external challenges. Internal problems included: a shift in consumer preferences and an emphasis away from quantity towards quality and food safety; greater competitiveness in agricultural products; and the overarching concerns for a cleaner environment with sustainable rural development. External problems included: world trade liberalization reforms within the
backdrop of the World Trade Organization (WTO) negotiations; the rise in global food demand; and the future enlargement and integration of several post-communist Central and Eastern European (CEE) countries and their respective markets.

The Agenda 2000 reforms introduced regulations pertaining to rural development that led to the creation of the “second pillar” of the CAP. With the introduction of the second pillar, a clear distinction was made between the first pillar focused on market intervention, production related subsidies, and direct income support; whereas, the second pillar focused strictly on rural development policy measures for member states. These new reforms represented a “step towards supporting the broader rural economy rather than agricultural production,” guaranteeing “farmers are rewarded not only for what they produce but also for their general contribution to society” (EC, 1999, p. 5).

In preparation for enlargement in 2004, Agenda 2000 initiated the Instrument for Structural Policies for Pre-Accession (ISPA) and Special Accession Program for Agriculture and Rural Development (SAPARD). These instruments were created for NMS to implement the majority of already existing EU measures rather than promoting national policy measures (Gorton et al., 2009, p. 1308).

The process of establishing operational SAPARD offices took too long to execute partially due to the lack of managerial and technical capacity of CEE national governments to implement CAP-like measures (Gorton et al., 2009, p. 1308). Thus, as delays continued, priorities shifted from implementing a broad set of rural development measures to focusing on creating viable paying agencies. Most of the attention was given to the creation and implementation for direct payments to farmers and food processors (dedicated to improve competitiveness) rather than to finance less important or administratively more complex rural
development measures, such as environmental issues (Gorton et al., 2009, p. 1309).

**CAP Reform 2003**

The CAP reforms of 2003 or the Fischler reforms (named after the EU agricultural commissioner at the time) were a major transformation of the CAP. The aim was to “decouple” the majority of all direct payments from production. In other words, farmers were no longer to receive payments related for a specific type of production. Instead, payments (known as the single payment scheme or SPS) were linked to entitlements based on the value of historical subsidy receipts (EC, 2011, p. 6). These reforms primarily addressed two issues: creating a more market-oriented, simplified and less trade-distorting agricultural support system and strengthening the rural development policy through modulation (transferring money from the first to second pillar of the CAP) of direct payments and making cross-compliance mandatory (Scriceciu, 2011, p. 93). Cross – compliance is a system where payments to farmers are linked to compliance with environmental standards; cross – compliance can also apply to idle land.

Overseeing the progress of candidate countries in meeting membership criteria was largely the responsibility of the European Commission, giving it greater influence on institutional development and policy-making in candidate countries than in existing Member States (Garzon, 2006, p. 18; Scriceciu, 2011, p. 83). Just like before in 1992, the European Commission exercised its dual role of initiator and negotiator of reform. The Commission used its agenda power to influence change beyond a mid-term review, putting forward a substantial reform package with the overarching goal of improving the efficiency and legitimacy of European agricultural policy. Garzon points out that “it [the European Commission] remained responsive to political constraints by accepting changes that would not radically affect the design of the policy but would ensure its social acceptability” (2006, p. 119).
Health Check in 2008

With European integration of Bulgaria and Romania in 2007, the European Commission assessed the implementation of the 2003 reforms with the goal of making additional changes to the existing reform process in order to prepare better EU agriculture to adapt and transition to a dynamic environment. This led to the Health Check of 2008 with the aim “to modernize, simplify and streamline the CAP and remove restrictions on farmers, thus helping them to respond better to signals from the market and to face new challenges such as climate change, water management and bio-energy” (European Union online, 2013). The reform included provisions to get rid of the supply-side management mechanism because of a rise in international commodity prices. Other pertinent measures included but were not limited to:

• Further decoupling of remaining member-state coupled payments (with the exception of suckler cow, goat, and sheep premia).

• Implementing additional modulation to help farmers face the new challenges of climate change, bio-energy production, water management and biodiversity safeguarding.

• For Bulgaria and Romania, the top-up option increased from 30 to 50 percent beyond the phasing – in level, enabling them to catch up with other EU members in five years – by 2011.

• 1 hectare to represent the minimum parcel size eligible for receiving direct income support – Bulgaria and Romania.

• Extended the Single Area Payment Scheme (SAPS) until 2013.

Nonetheless, these measures favored western European sentiments and concerns for rolling out the CAP in Eastern Europe rather than adapting the policy for its newest members.
1.4.3 Transfer of CAP to CEE Countries

After the collapse of Communist regimes, CEE countries were offered the possibility of future accession to the EU. However, two conditions had to be met to make this a reality. First, accession would be conditional on meeting criteria defined by existing Member States; and second, it was the responsibility of applicant states to adapt and conform to European policy structures and criteria.

Candidate countries did not have any real say in the implementation of European Union regulations. Thus, a large amount of European law, for which CEE countries did not contribute in any way to the preparation and/or decision-making, has been passed down at the national level, circumnavigating the normal legislative process (Gorton et al., 2009, p. 1310). In addition, the existing EU legislative corpus reflected the interest, experiences and problems of Western Europe and did not represent non-Member States. Agricultural policy was highly bureaucratic and consisted mainly of regulations.

Having the upper hand in accession negotiations, the European Union dictated the terms for the roll out of direct payments after accession in NMS at a lower initial rate. This was to alleviate the impact of the agricultural policy reform to the primary current beneficiaries of the CAP while ultimately limiting the cost to the European Union in rolling out the program to NMS (Gorton, et al., 2009, p. 1310). Unfortunately, NMS had no real influence in the negotiations and demonstrated how little input NMS had in the process. NMS states had no bargaining power and had to take whatever was offered in order to get any European Union resources. Direct payments were phased in from a base of 25% of the level of EU-15, increasing in increments of 5% per year thereafter. Additionally, NMS were permitted to top-up direct payments with national
funds, up to a maximum of 30% of the EU level. This top-up mechanism would allow the NMS to reach full parity with the EU-15 by 2010 rather than 2013. All NMS in 2004 and 2007 opted to pay top-ups to farmers (see Table 4).

**Impact of Pre-Accession Reform**

Even though plans for accession of CEE countries in 2004 and 2007 had influenced CAP reform since the early 1990’s, any efforts in reform centered on the implications of the EU budget and WTO commitments (Gorton et al., 2009, p. 1310). Accession did not trigger a review of the economic mechanisms for agricultural and rural policy. Instead, politics rose to the forefront and demanded accession countries to adjust to the European Union rather than take a mutually adaptive posture together. Instead of CEE countries adjusting to the economic mechanisms of rural policy, these countries had to deal with the lower rate of direct payments and implementing a complex administrative structure (Wegener et al., 2011, pp. 603-604).

The post-accession agricultural activity of NMS has been influenced by the previous decade of reform. Candidate countries including Bulgaria implemented very different policies that affected their agricultural performance differently after accession. In the case of Bulgaria, subsidies remained at a relatively low level with accession, which have provided visible incentives for production and improved Bulgaria’s overall position in the agri-food trade balance (Csáki and Jámbor, 2013, p. 336). More research from other sources is needed to better validate and confirm this claim.

Land and farm consolidation policies were implemented very differently and had different results for each country. Restrictive pre-accession land policies and the lack of land and farm consolidation, like those in Hungary, had negatively influenced the NMS to take advantage of the enlarged markets by restricting the flow of outside capital to the agricultural sector (Csáki
and Jámbor, 2013, p. 336). On the other hand, those countries with liberal land policies (i.e., in the Baltic States) allowed the agricultural sector to get more resources and leverage opportunities created by accession. Additional research and data is needed to evaluate land and farm consolidation policy and its impact on Bulgarian agriculture.

**Impact of Post-Accession Policies**

With difficulties in administering direct payments in NMS, acceding countries were offered the option to implement a simplified system of direct payments, known as the Single Area Payment Scheme (SAPS). Under this simplified system, farmers in NMS receive a flat rate, per hectare payment regardless of what is produced, as long as their land is maintained in good agricultural condition. Payment level is determined by a formula based on the total amount of direct payment funds available for a particular country in a particular year divided by the eligible utilized agricultural area. All of the NMS from CEE in 2004, except for Slovenia, have chosen SAPS. This option was also chosen by Bulgaria and Romania in 2007.

Total payments for agriculture have also played a factor in determining measurable outcome. In regards to NMS, Bulgaria and Romania spent a relatively high share of their GDP on agriculture (see Table 5). Farm income also increased in Bulgaria and other NMS as a result of CAP reform and accession (Csáki and Jámbor, 2013, p. 337). Unfortunately, it is difficult to evaluate how significant CAP reform and accession has been since each country is different and GDP increased respectively.

Survey data of selected NMS (Bulgaria included) after accession show significant differences in reaction of farmers related to CAP. The research reveals that Bulgarians and Polish farmers are more dependent on CAP and farm subsidies than other farmers from various regions throughout the European Union (Majewski et al., 2011, p. 55).
In addition to pre-and-post accession policy analysis, other indicators such as the significance of agriculture in a country’s economy, the agricultural output and productivity, and farm structures reveal much in regards to policy reform and execution.

**Role of Agriculture**

One way to examine the role and significance of Bulgaria’s agriculture is by the share of agriculture in GDP, which has continued to decline over the last decade. Prior to accession, Bulgaria had the highest role of agriculture in GDP among 2004 and 2007 NMA, at 14% in 2000 (see Table 5). After EU accession, shares decreased across the board, although Bulgaria and Romania had the largest reductions. This is primarily a result of significant GDP growth after accession (World Bank online, 2012). In 2010, share of agriculture was less than 7% in all countries analyzed. Nonetheless, agriculture is still a significant sector in the Bulgarian economy. EU accession has impacted the structure of agricultural production in Bulgaria and moved in a more extensive direction towards crop production, resulting in a decline in the animal husbandry sector.

Agricultural output is another key indicator for assessing the impact of accession. Agricultural output remained stable or increased slightly while livestock remained stable or decreased pre-and post – accession. Also, as a consequence of poor weather conditions, agricultural output in 2007 and 2009 was lower than in previous and post years (Csáki and Jámbor, 2013, p. 327). Similar conclusions resulted when analyzing agricultural output per/hectare in Bulgaria. While other NMS agricultural output per hectare increased significantly after EU accession, Bulgaria’s agricultural output per hectare remained stable and decreased slightly (Eurostat, 2013).
Closely linked to agricultural production performance is productivity. One way to examine productivity is to look at cereal yields. Although Bulgaria has slightly increased its cereal yields after accession it still lags significantly behind the EU-15 levels in productivity (Faostat, 2013).

Agricultural performance varied by country due to the differences in the distribution of land quality and quantity together with agricultural labor and capital. Thus, differences in various factors of production have a significant influence in a country’s agricultural activity and performance after accession.

Farm structure plays an important role in agricultural output and overall performance. In Bulgaria and many CEE countries, small farms are generally too small and farmers are inexperienced with limited resources, while large farms possess some traditional collective farming heritage with some inherited inefficiencies (Csáki and Jámbor, 2013, p. 334).

Prior to accession, large farms dominated land use in Bulgaria. In 2003, over 75% share of farms by Utilized Agricultural Area (UAA) were over 100 hectares, while in 2010 (last census) this number rose to 77% (Eurostat, 2012). Although this increase is not statistically significant, the slight increase in the number of large farms explains why agricultural output did not significantly change over time. Additional research into farm structure and agricultural output is warranted to validate this claim and to discover additional factors that kept agricultural output consistent before and after accession.

The restitution process of collectivized and nationalized farmland was complex and extremely time consuming. As a result, decollectivization led to fragmented farm structures and initially resulted in a decline in production levels (Mathijs et al., 2004, p. 74). These factors were not taken into account prior to accession. However, fragmented ownership did not automatically
mean fragmented operations (i.e., Hungary), although management problems did arise for large farms (Duval, 1999, p. 297). This was the case in Bulgaria and allowed the continuation of farming on a rather large scale with new diversified forms of farms but with an overall downsizing (Duval, 1999, p. 297).

**CAP Reform 2014 – 2020**

After three years of discussion and negotiations, the new agreement on CAP reform for the programming period 2014 – 2020 was reached in 2013. For the first time, the entire CAP was reviewed and assessed simultaneously by the European Parliament, acting as co-legislator with the European Council. The new CAP agreement still includes the two pillars, “but increase the links between them, thus offering a more holistic and integrated approach to policy support. Specifically, it introduces a new architecture of direct payments, better targeted, more equitable, and greener, an enhanced safety net and strengthened rural development” (EC, 2013, p. 1).

Because the agriculture sector is dynamic, it is difficult to know for sure how the new reforms will ultimately impact Bulgarian farmers. However, some broad points can be made in regards to the new reforms and Bulgaria’s implementation of direct payments. First, Bulgarian farmers will continue to receive direct payments (EC, 2013, p. 38). Second, up to 12% of the national budget for pillar I will be allocated to support products other than usual commodities (e.g. oil seed, grains), to include meat, milk, fruits, and vegetables (Valkanov, 2013, p. 17). Nonetheless, this 12% allocation for direct payments (coupled support) would not exceed the current levels for these other categories (Valkanov, 2013, p. 17). Third, the Bulgarian government will have the ability to transfer up to 15% of the total in Pillar II (rural development) to the Pillar I funds (EC, 2013, p. 4). This allows the Bulgarian government more flexibility in
administering CAP support but will most likely not be enough to keep up with the increasing land prices for rent each year (Valkanov, 2013, p. 18).

1.4.4 Conclusion

It is clear that Bulgarian accession in 2007 has had both positive and negative impacts on Bulgarian agriculture. First, EU accession and the CAP have brought a sense of security for Bulgaria and other CEE agriculture. This was evident during the years of the economic crisis (2008-10), in which national budgets under pressure might not have been able to subsidize agriculture to ease the impact of the crisis. Second, opening markets gave new opportunities to Bulgarian producers as well as increasing competitiveness, allowing Bulgarian consumers more choices of quality products. Third, the role of agriculture in Bulgaria has decreased in relation to its overall economy, while output and productivity remain constant. Nonetheless, accession has strengthened Bulgaria’s extensive methods of production. Accession has also led to an intensive modernization of the agricultural sector. Fourth, there has been a significant increase in farming income in Bulgaria and NMS, most likely due to agricultural subsidies (Csáki and Jámbor, 2013). Conversely, a major negative aspect of accession was the internal challenge of land reform and restitution. Although it is over now, its implementation resulted in fragmented ownership, with many farmers lacking the capital to boost production. This has significantly affected Bulgaria’s position as an exporter of traditional agricultural goods. Fifth, the rising agricultural incomes primarily benefit the landowners and top managers rather than the farm workers and other employees.
In regards to convergence, Bulgaria appears to remain in the distance. With the lack of harmonized support levels, the significant development impact of small farmers combined with a substantial rural-urban income gap, Bulgaria does not appear to be converging with other developed markets. Ultimately, accession has opened the door and provided channels to further develop (if not restructure) its agricultural industries as the country is provided with more open access to export markets and capital investment opportunities. Western convergence is probably neither a realistic outcome nor a viable measurement of success.

1.5 Conclusion

The fall of Communism in Bulgaria made way for a new democratic state, with a new constitution and government institutions, privatization, modernization, and ultimately for EU accession. Agriculturally, the restitution process of collectivized and nationalized farmland was complex, time consuming, and led to a fragmented farm structure. However, fragmented ownership did not necessarily mean fragmented operations (Duval, 1999, p. 297). Bulgarian accession opened the door by providing numerous channels to further develop (if not restructure) governmental institutions, policies, and its agricultural industries as it gained more access to export markets and capital investment opportunity. Even though Bulgaria and other CEE countries did not have any real input into the CAP implementation, forcing Bulgaria and other NMS to adapt and conform to European policy structures and criteria actually created a stable, agricultural sector. New membership ushered in layers of institutional accountability and transparency that did not exist before enlargement. Thus, with EU integration came the rise of new Bulgarian commercial producers, resulting in new market opportunities for suppliers of
capital inputs. This is what makes Bulgaria’s story different from others.

1.6 Thesis Outline

This chapter has introduced the research problem, the question under examination, including a historical overview of Bulgarian farm structure, EU integration, the Common Agricultural Policy and Bulgarian agriculture. Chapter Two will provide a review of the relevant literature regarding industrial marketing, buyer-supplier relationships, and large commercial segments for agricultural capital equipment and expendable inputs. Chapter Three will introduce the methodology and Chapter Four will present the findings and discussion. Chapter Five will offer concluding remarks and summarize the implications of this thesis.
CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This literature review will include a review of the academic literature covering industrial marketing, buyer-supplier relationships, and large commercial producer market segments for agricultural capital equipment and expendable inputs.

Over the last two decades, Bulgaria’s agricultural sector has experienced dynamic growth and diversification. With privatization and modernization came consolidation and the rise of commercial producers. A primary implication with consolidation, first discussed by Kohls (1959) is that the remaining large farmers experience an increase in purchasing power. As a result, new market opportunities exist in Bulgaria for suppliers in capital items. Thus, understanding how Bulgarian commercial producers buy is extremely valuable to those suppliers who hope to develop new selling and retention strategies in an emerging agricultural marketplace. This information is also beneficial to researchers who are concerned about various factors that influence and drive economic decisions on Bulgarian farms.
2.2 Academic Literature

2.2.1 Industrial Marketing and Buyer-Supplier Relationships

With Bulgaria’s integration into the EU, the agricultural sector has been dramatically transformed, especially impacting the newly established commercial farmer. Yet, over the last two decades, most research has focused on the small Bulgarian farmer. The Bulgarian commercial producer is an important customer/segment for all agricultural suppliers, especially equipment manufacturers and dealers, financial institutions, seed and feed companies, and chemical companies. Thus, it is necessary to analyze the current literature surrounding the commercial producer and industrial marketing and buyer-supplier relationships.

As Bulgarian farming operations move away from consumer to commercial operations, there is a need for agricultural suppliers to adjust their marketing mix to support more business-to-business purchasing decisions facing commercial producers. But aren’t commercial producers both a business and a consumer? What are the implications from a marketing perspective?

According to the American Marketing Association (2013), “Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.” But does this definition include industrial marketing? Are industrial goods marketed the same way as consumer goods?

Corey (1996) defines industrial marketing as those goods and services unique to commercial enterprises, government agencies, and nonprofit organizations for use in the goods and services that they in turn produce (p. 1). In contrast, consumer goods are marketed to individuals and families for personal consumption and to wholesalers and retailers in consumer
good distribution systems. Corey makes the distinction between industrial and consumer marketing based on the intended consumers, but not in terms of products. Rangan and Isaacson (1994) add that in “industrial markets, goods are usually bought for processing and subsequent resale, whereas in consumer markets, goods are bought for their final consumption or use” (p. 1). They also make a distinction between industrial and consumer marketing not only by the type of customer in industrial markets, but also on the use of the goods purchased.

Although many products go both to consumers and industrial customers (i.e., computers, automobiles and trucks, furniture, etc.), it is clear that a large percentage of industrial products are for agricultural services, mining, construction, durable goods manufacturing, and nondurable goods manufacturing (Rangan and Isaacson, 1994). Robert Hass (1982) groups products sold in industrial markets into eight general categories: heavy equipment, light equipment, systems, raw materials, processed materials, consumable supplies, components, and industrial services. In retrospect, some of these categories have changed over time and now include products sold to consumers as well.

What are some distinct differences between business-to-business (B2B) and business-to-consumer (B2C) marketing? First, the demand for industrial products is usually driven by the primary demand for consumer goods (Rangen and Isaacson, 1994). Thus, consumer preferences, economic cycles, and social trends significantly impact industrial markets as a result of influencing consumer demand. Second, there tends to be more stakeholders involved in the complex decision-making process in industrial markets. Third, the sales and buying processes are more complex in industrial markets, and as such, there are several aspects of the industrial sale that actually make it easier to establish close vendor relationships in industrial markets (Rangan and Isaacson, 1994). On the other hand, this relationship can lead the buyer to become overly
dependent on suppliers. As a result, many industrial customers evaluate suppliers as candidates for long-term ongoing relationships.

The buying behavior or decision making of industrial customers is primarily influenced by economic factors related to price, quality, product-related services, and supply availability (Corey, 1996). Price is significant because it directly affects the price of the products they make. It’s also the only marketing mix element that produces revenue and profit. The goal of strategic pricing is profitability. Value means that differences in pricing across customers and changes over time reflect differences or changes in the value to customers. The quality of what the industrial customer buys directly affects its bottom line.

Economic factors appear to have a greater influence on industrial customers than consumers as it reflects profitability and bottom line. On the other hand, consumer-goods customers can also take economic factors into account but tend to include social and psychological factors as part of their buying process. Thus, effective marketing begins with an understanding of the customer, and in particular, all stakeholders who make buying decisions and how they are motivated and perceive value. It is also directly correlated to the way they see themselves being measured (Corey, 1996).

What do you do if your industrial product is equal to the competition but no better or worse in terms of price and specifications? In other words, your product is perceived as a commodity or “me too” product and is difficult to differentiate in a crowded market. Leer (1976) takes conventional industrial marketing at the time and goes “out of the box” to illustrate if your product is the same as others, then you need to differentiate it and your company through you and your service. By partnering with your customer as a consultant and assisting him/her in
growing and selling his/her business, even the most mundane industrial commodity can be aggressively merchandised, resulting in captured value.

But given the dramatic changes in the business environment over the last three decades, is there a blurring of the line between industrial and consumer marketing? According to Wind (2006), “Even as the field of industrial marketing has firmly established itself, the lines are beginning to blur between industrial marketing and consumer marketing (p. 475). At the core of this “fuzzing” of the line is new information technology (the internet, eBay, etc.), connecting consumer and industrial markets in ways only recently possible. Wind believes that as a result of this blurring of the line, a new business marketing model is necessary that expands buyers to stakeholders, takes into account the changing nature of relationships across companies, such as outsourcing and network relationships, recognizes new forms of relationships and empowered consumers, and understands that brand equity must span both industrial and consumer markets.

Although significant advances have been made in B2B marketing over the past few decades, companies are going to have to be more aware of consumers and the linkages between them. Thus, after surveying the industrial marketing literature, it appears the American Marketing Association’s definition of marketing concurs with Wind’s assessment that there is a blurring of the lines between industrial and consumer marketing and that agricultural firms may have to deploy marketing resources that encompass both in order to be successful.

What about buyer-supplier relationships? Long-term interactive relationships are critical to customer retention, additional purchasing decisions, customer satisfaction and loyalty. Flint et al. (1997) addresses the gap surrounding customers’ perceptions of value to change over time. In other words, are they concerned with what drives customers’ changing perceptions of value? To explore this phenomenon, they propose a conceptual model to describe how
customers’ perceptions of value change over time in industrial supply relationships. The model focuses on understanding trigger events that drive changes in three forms of value: values, desired value, and value judgments. A trigger event “is a stimulus in the customer’s environment that is perceived by the customer to be relevant to his/her goals, which results in some form of change in values (personal and organizational), desired value, and/or value judgments” (Flint et al, 1997, p. 165). Customer satisfaction in its simplistic form is a customer’s evaluation of a perceived product or service. Suppliers can observe and analyze how these events trigger changes in the customer’s perceptions of values so that they can take action in order to retain them. Unfortunately, this model has not been empirically tested and requires further quantitative and qualitative study.

Batt and Rexha (1999) evaluate the supplier-buyer relationship for potato farmers in Asia in the absence of a certified seed system. Having no guarantee from a third party that the seed tubers purchased are high quality, the farmer’s purchase decision may be influenced by the long-standing relationships they have established with suppliers. This relationship considers the farmer’s loyalty toward seed suppliers, trust, commitment and the perceived risks associated with switching suppliers. Dependence rather than a mutually beneficial exchange relationship makes a firm more susceptible to the power and influence of another; and as such, the more powerful entity may be able to demand more favorable terms of trade. An increase in dependency may occur when the outcomes from the existing relationship are actually better or perceived better than those available from alternative relationships. Ultimately, suppliers and buyers who trust one another tend to be more committed to the relationship. Suppliers who become closer to customers and better understand and satisfy customer needs, can achieve greater customer loyalty and higher repeat business.
Adams and Goldsmith (1999) focus on the formation of new business arrangements, such as strategic fuzzy alliances (SFAs) and the role of trust in business-to-business relationships. The motivation for this research was primarily to understand the role of trust in governance. Nonetheless, “much of transaction theory is devoted to the role of contracts and bureaucracies to offset agent opportunism, information impact, and transaction risk, yet empirically, trust-based governance structures exist and can perform quite well. Trust-based alliances reduce costs, increase efficiency, and allow flexibility necessary for success in a rapidly changing market place” (Adams and Goldsmith, 1999, p. 241). Fuzzy alliances have shared control, mutual trust and a positive reputation. Thus, in order for an SFA to exist one must: “1) have a strategic business relationship which is based on trust; 2) have a noncontract-based agreement; and 3) be in relationship with at least one other firm (Adams and Goldsmith, 1999, p. 230). Ultimately, success of trust-based alliances relies on knowledge and familiarity that match each firm’s expectations (Adams and Goldsmith, 1999, p. 243).

2.2.2 Large Commercial Segments for Agricultural Capital Equipment and Expendable Inputs

Currently, there has been very little research on buying behavior and customer segmentation of agricultural capital markets. The industrial market segmentation literature that addresses the agricultural capital equipment segment is a subset of the broader literature on industrial market segmentation and tends to focus on the various analytical tools and models to segment markets and how organizations deploy segmentation as part of their marketing tactics.

As a result of massive consolidation of production and privatization since the fall of communism in 1991, input purchasing lies in the hands of fewer and fewer Bulgarian farmers,
many of them considered commercial producers. Nonetheless, Bulgarian farmers are not a homogeneous segment and do not buy capital equipment or expendable inputs in the same way. They differ in a variety of ways including farm size, farm make up, educational background, age, location, social and economic considerations, risk management practices, motivation, product adoption, and so on. Segmenting farmers and defining their customer profiles are necessary actions agricultural input suppliers do in order to effectively market and sell their products.

In simple terms, market segmentation involves a three-step process of identifying particular consumer groups with different needs and wants, then dividing them into groups of potential customers or markets to target, and lastly promoting the benefits of the firm’s offering to respective target markets (Kotler and Keller, 2009). The goal is to link customers together in groups that are quite distinct from others yet show a great amount of homogeneity within the group in order for firms to develop an effective marketing mix and ultimately a competitive advantage (Purnomo et al., 2010).

Freytag and Clarke (2001) emphasize and outline new areas of segmentation in regards to the market spectrum: with simple market transactions at one extreme and complex relationship management at the other. They believe “relationship management needs a deep understanding of the customer’s characteristics, needs and future directions, whereas this same information would be too time consuming to collect and too comprehensive to use for the simple identification of similar customer needs and wants, as needed when segmenting for simpler market transaction situations” (Freytag and Clarke, 2001, p. 486). Thus, the role of segmentation is ultimately to identify the type of relationship customers require, and then to investigate and understand the specific needs and wants for each type of interaction. Unfortunately, their outline has not been
proven as a new framework in developing an industrial marketing segmentation model and only has general management implications.

Kohls (1956, 1959) is one of the first to study how farmers purchase capital equipment. For his research, he interviewed 201 farmers in Central Indiana in June 1955. Within the targeted county were approximately 25 different major machinery dealers handling 10 different major brands of farm machinery and many additional lesser brands. Within the immediate surrounding counties were 73 more dealers handling an additional four brands. The study was designed to find answers to the following questions: (1) How does a farmer go about buying machinery? (2) Does the farmer have marked brand and dealer preferences? (3) Why does a farmer choose a particular dealer from the many available to him or her?

He found that although capital purchases are quite large, farmers did not shop around among dealers much and that the majority of their purchases were done within five miles of their residence. Before making their capital equipment purchase, farmers consult dealers, neighbors, relatives and friends, have read some literature on the product and have usually seen a similar product on friends’ or neighbors’ farms. Price and product reasons were most important to farmers when choosing a specific dealer while dealer attributes ranked third. He also studied dealer and brand loyalty and found no socioeconomic characteristics to explain dealer and brand loyalty. However, he did find that brand and dealer preferences were positively related and that from his research findings, brand appeared to be the dominant factor.

Kool et al. (1997) was a European study that examined Dutch farmers’ buying processes for agricultural inputs. Extensiveness of the farmer’s buying process was defined as “the amount of information acquisition and evaluation of alternatives carried out by the farmer in order to prepare the purchase of a farm input” (Kool, et al., 1997, p. 302). Especially when buying
equipment, the more experienced and familiar the farmer was with the product, the quicker the farmer made a buying decision. As such, suppliers should highlight price, availability, brand recognition and knowledge. On the other hand, the less experienced and unfamiliar the farmer was with the product, the more slowly and more cautiously the farmer made a purchasing decision. Thus, suppliers should emphasize product performance, price in relation to product performance, and personal selling skills. The authors also found out that a personal relationship with the customer (farmer) decreases the evaluation of other alternatives and as such, suppliers who have personal relationships with the farmer have an advantage over other competing input suppliers. Both price and relationship appear to play a significant role in farm buyer preferences for capital equipment.

Gloy and Akridge (1999) used cluster analysis to develop a market segmentation of U.S. crop and livestock farms with annual sales in excess of $100,000. They found that farms with sales over $100,000, commonly referred to as commercial producers, represent the majority of agricultural expenses and input supplier revenues. Their research focused on expendable items such as feed, seed, and fertilizer rather than capital equipment. Their findings were based on data from the 1998 Purdue Large Commercial Producer Survey in which they identified four market segments: Balance, Performance, Price and Convenience.

In the study of Gloy and Akridge (1999), members of both the Balance and the Performance segments tended to be business buyers. The Balance segment was the largest group of commercial producers and tended to be savvy buyers and users of technology and the Internet. Even though they had the most favorable view of generic products, they generally did not purchase the lowest priced items. The Performance segment focused primarily on product performance factors while price was the next important feature. These producers were the most
educated producers and tended to believe that brands were not the same across products. They did not buy solely on price and required a high level of technical competence from their sales representatives.

In addition, the Price segment placed a great deal of weight on price factors when selecting an input supplier. This group also ranked personal factors low placing little value in working relationships when choosing their supplier and were the least likely to prefer to buy from only one supplier. Producers in this segment were also interested in increasing their use of generic products in the future. Members of the Price segment make purchases primarily for economic reasons.

Furthermore, the Convenience segment was the smallest segment and placed a great deal of importance on convenience and location factors. These producers tended to be older individuals operating smaller farms, not computer savvy, and preferred to buy products from one supplier. They were even willing to pay more to buy from a locally owned supplier. Members of the Convenience segment are highly reliant on local influences and are generally relational buyers.

In the same study of Gloy and Akridge (1999), to address sales representatives directly, survey members were asked to think of the best agricultural sales representative they personally knew. On the survey, they were given thirteen characteristics and asked to check three characteristics that best described this salesperson’s best attributes/characteristics. All segments marked honesty as the most important characteristic of a sales person. Members of the Price segment marked the ability to bring the best price more often than members from the other segments. Balanced members found familiarity with their farm operations significantly more than did members of other segments and Convenience members were more likely to desire a
sales representative that called frequently but were less concerned with the salesperson’s technical competence.

Alexander et al. (2005), an extension of the work of Gloy and Akridge (1999), used cluster analysis to show that the commercial producer market has changed. It identified five distinct segments instead of the four reported by Gloy and Akridge (1999), Balance, Performance, Price, Convenience and Service buyers. The research used survey data collected during the 1998 and 2003 Commercial Producer Projects conducted by the Center for Food and Agricultural Business at Purdue University. The findings show that commercial producers in the Balance and Performance segments can best be described as business buyers, while producers in the Price segment tend to be economic buyers, and producers in the Convenience and Service segments can best be categorized as relational buyers. However, the study also revealed along with the identification and the increase in the new Service segment was the rapid decrease in size of the Convenience segment. Both Convenience and Service buyers highly value their relationship with the salesperson, although the relationship for Convenience buyers has intrinsic value, the relationship for Service buyers is valued for technical prowess and expertise (Alexander et al., 2005, p. 131). The study also found the most important salesperson characteristic was honesty followed by a high level of technical competence and good follow up and service.

Walley et al. (2007) is a United Kingdom (UK) study using data from a survey of farmers and farm contractors to assess the significance and influence of brand on the industrial purchase decision, specifically the UK tractor market and to differentiate the major tractor brands according to their respective image among the surveyed farmers and contractors. Since much of industrial marketing has focused on organizational buying behavior, buyer-seller relationships,
and industrial segmentation, this study set out to add to the limited research relating the role of the brand name in industrial purchase decisions. The results show that brand name was the most important buyer decision factor and ranked higher than price, dealer proximity, and dealer follow up and service. Other findings include that brand loyalty is strong among tractor buyers, and for most customers price is not the most important purchase factor.

Harbor et al. (2008) uses data from the 2003 Commercial Producer Project conducted by the Center for Food and Agricultural Business at Purdue University to explore the prevalence and determinants of brand loyalty for capital items among commercial producers in the United States. The results suggest, unlike previous studies, that demographic variables are not the strongest indicator of brand loyalty. The data show that producers who attended high school but did not finish and those who produce corn and soybean increased the likelihood of brand loyalty towards capital equipment. Other factors that tend to increase capital brand loyalty include producers who value information from media sources and who believe that significant differences exist across all capital-input brands. The results of this study in regards to brand loyalty are unique and are not adequate for universal application. Further statistical research may be necessary to draw more definitive conclusions and even these results may be context specific.

Roucan-Kane et al. (2011) use cluster analysis in order to identify four buying behavior segments of U.S. commercial producers who purchase capital equipment: Balance, Price, Performance and Balance buyers. Their research used phone survey data collected during the 2008 Large Commercial Producer Project carried out by the Center for Food and Agricultural Business at Purdue University.

The research shows a variety of findings in regards to buying decisions of capital items. First, they identified four distinct market segments for capital purchases among U.S. crop and
livestock commercial producers. They believe dividing the marketplace based on the four segments will help firms put together the right marketing mix and use their resources to highlight aspects of the value bundle that are most meaningful to the targeted segments. Second, the Balance segment represents the majority of farms from the study and this group favors customer service relative to the other segments. This allows marketing departments to tailor offerings that may uniquely resonate with this specific group and farm shows tend to be the best venue for reaching Balance buyers. Third, Price and Performance segments tend to be larger, younger and more educated and like to get their information from websites. Fourth, traditional means of providing information and price does not play a significant role in purchase decisions for any of the segments. Additionally, customer service was ranked first or second for all but the Performance segment. Lastly, Balance buyers are the most likely to say they are brand loyal, while price buyers are the least likely to report they are brand loyal which is consistent with Harbor et al. (2008). Consistent with Walley et al. (2007) and Harbor et al. (2008), producers in general consider themselves to be brand loyal for capital inputs.

Feeney and Berardi (2013) use a cluster analysis and a multinomial logit model to segment the seed input markets to analyze the buying behavior of farmers and predict segment membership for seed purchases based on farmers observable and attitudinal variables in Argentina. The primary goal was to identify distinctive market segments for Argentine farmers purchasing seeds and grouping them according to their buying behavior. This study follows Gloy and Akridge (1999) and Alexander et al. (2005) very closely in order to identify four natural clusters or segments: Performance, Price, Balance, and Convenience buyers. What is unique about this study is the combination of the two methods for segmentation and a non-U.S. research context.
The results of this study differed from Alexander et al. (2005) for U.S. farmers in a variety of ways. First, demographically, Argentine producers tend to be younger than U.S. farmers, college educated, with future growth expectations. In addition, Argentine producers also tended to be more brand loyal and less price sensitive than their American counterparts. Second, the research uncovered four distinct segments while the U.S. study identified five segments. Whereas the Balance segment is the largest U.S. buyer, for Argentine producers buying seeds the Performance segment is the largest. Third, regarding salespeople attributes and characteristics most valued, Argentine farmers value more “technical competence” while American producers value “honesty.” Unfortunately, this research does not address cultural differences and/or differences in norms and mores that may attribute to the research findings and would be extremely useful to agricultural input firms.

The Themes Report (2013) is the latest Large Commercial Producer Survey (LCP) surveying the buying behaviors of more than 1,600 commercial farmers and ranchers every five years by the Center for Food and Agricultural Business at Purdue University. The 2013 survey focused on corn/soybean, wheat/barley, cotton, fruit/nut/vegetables, dairy, hog and cattle producers across the United States and contains insights from four main themes the center’s research team has observed – information and the salesperson, loyalty, buying preferences and producer strategy.

In regards to capital equipment, the following results were observed. Using the loyalty ladder framework from Das Naranyandas’ 2005 article, “Building Loyalty in the Business Market,” the loyalty ladder revealed an overall stronger loyalty to capital brands for both crop and livestock producers. When considering capital loyalty by information intensity, a trend similar to seed loyalty surfaced. Producers with higher information intensity expressed higher
loyalty to capital brands and dealers, but then were most likely to switch for a price savings. In addition, producers exhibited strong loyalty for local dealers and retailers even when producers indicated strong brand loyalty, especially for capital equipment and seed. Mid-size producers were more likely to be price-sensitive groups, while large producers were more to identify in the Performance segment. Lastly, managing people is a much more significant issue for American large producers and should be carefully considered since 20 percent of large producers surveyed stated it was the most important factor to their success. Managing people and the role of leader/CEO is another area of significance worthy of future research in relation to buying behavior, information intensity, and collaborative buyer-supplier partnerships for capital equipment and agricultural inputs.

2.3 Conclusion

The literature illustrates the various trends and reveals the gaps in regards to industrial marketing and commercial market segments for agricultural capital equipment and expendable inputs. First, brand name and brand equity seem to be the most important buyer decision factor to commercial producers when purchasing capital equipment, ranking higher than price, dealer proximity, and dealer follow up and service. In fact, producers generally consider themselves to be brand loyal for capital equipment. Second, trust among buyers and suppliers positively impacts loyalty, relational commitment and repeat business. This was also confirmed by those studies that included an evaluation of sales people which found the most important salesperson characteristic was honesty followed by technical competency and good follow up and service. Third, the literature identifies four primary buying behavior segments of commercial producers
who purchase capital items: Balance, Price, Performance and Convenience buyers. Unfortunately, these buying segments have only been identified in the U.S. for capital equipment and additional research abroad is necessary to assess the applicability on a regional or universal scale. Fourth, price and relationship play a significant role in buyer preferences for capital equipment. Although this varied by segment, it is unknown how much customers value particular relationships. Lastly, the literature makes it very clear that economic factors have a greater influence on industrial customers than consumers as it relates to profitability and the bottom line.

The purpose of this thesis is to better understand and assess how Bulgarian commercial producers buy capital equipment. In order to do this assessment, I will draw on the conclusions from the existing literature and compare them with the findings from the surveys and interviews of Bulgarian commercial producers from the pilot study.
CHAPTER 3

METHODOLOGY

3.1 Research Design

This exploratory and descriptive research project uses a mixed method approach integrating qualitative and quantitative data in order to minimize the various weaknesses and biases associated with different research methods (Creswell, 2014, p. 14). The primary goal of exploratory research is to uncover ideas and insights to better understand the research problem while the major objective of descriptive research is to gather information that provides answers to research questions (Hair et al., 2010, pp. 76-77). Thus a convergent parallel mixed method was chosen so that quantitative and qualitative data could be converged or merged in order to provide a more complete and comprehensive analysis of the research problem (Creswell, 2014, p. 14). Such methodology allows the researcher to collect both forms of data at approximately the same time and then integrate the information in the interpretation of the overall results.

3.2 Data

This study uses data from two sources: responses to Purdue University’s Center for Food and Agricultural Business Large Commercial Producer (LCP) Survey of 2013 (with permission) and in-person interviews. Data were collected from seven Bulgarian commercial farmers with operations near Svishtov in northern Bulgaria, located in the Veliko Tarnovo province. Data was also obtained from a small organic apple farmer near Karzdzhali in the eastern Rhodopes.
located in the Kardzhali province. Although this study is limited by from a small sample size and is restricted geographically to two provinces, it provides current insight and benefit for agricultural input suppliers as well as uncover information beneficial to researchers who study the various factors and behavior that drive economic decisions on Bulgarian farms. Participants responded directly to questions from the rigorously pretested LCP survey instrument followed immediately by open-ended interview questions. Thus the study balances a small sample size with high quality responses.

From the twenty-nine questions of the survey administered, nine questions addressed demographics (Appendix A, questions 1, 2, 4, and 23-28) while nine questions were used to address the buying behavior of Bulgarian commercial producers for capital equipment (Appendix A, questions 6, 9, 13, 15, 16, 18-21). The remaining questions addressed farm management and operations, using paid consultants and hiring out various services, and financing.

The interviews used eight open-ended questions: 1) Tell me about yourself, your background, farm experience and what is your current role on the farm? 2) How has farming changed (positive or negative) since Bulgaria joined the European Union in 2007? How has this opened up new markets for you? For others? 3) What changes do you expect over the next five years for you and your farm operation? For Bulgarian farming in general? Why? 4) What role does EU subsidies play in your farm operations? How will this change over the next five years and what impact will it have on you operation? 5) What things take the most of your time in your day-to-day operations? How do you spend your time? 6) How do you stay current in farm practices and technology? What sources of information are most important in order to stay current and for your management and purchasing decisions? 7) What role do other commercial...
farmers play in regards to your farming, operations, technology and buying and selling decisions? 8) What factors influence your decision to buy and/or switch seed? New and used capital equipment? Fertilizer? Why? Do you own or lease equipment? How is your equipment maintained?

For consistency, Bulgarian farmers were classified according to the categories designated in the 2013 LCP survey: mid-size, commercial and large producers – see Table 6 in Chapter 4 (Widmar, 2014, p. 3).

The survey asks questions with many sub-category answers that respondents are asked to rate based on its importance to them as they made management and purchasing decisions. Most questions used a Likert scale, asking respondents to rate their answer from 1(not at all important) to 9 (very important). Aggregate scores were used to determine the most important and least important sub-categories dealing with information sources, brands, salesperson attributes and activities, price, product performance, and dealer/retailer relationships.

Commercial producers were introduced to the researcher by staff from the D.A. Tsenov Academy of Economics in Svishtov and given the opportunity to participate in the survey and interview. Each participant was given a brief description of the study, translated into Bulgarian as well as a verbal invitation and explanation. Those willing to participate signed an interview consent form before beginning the survey and the interview. The LCP survey was checked by a Bulgarian linguist for translation errors then given to each participant in person. A translator assisted with cultural differences and misunderstandings on the survey and with the interview process. Neither the researcher nor the translator redirected or prompted the participants in any way. This insured the integrity and authenticity of their responses, with the occasional exception of forgetting the question or asking for the question to be repeated.
3.3 Ethical Considerations

Throughout the entire research process, it was essential to assure the confidentiality of participants, completed surveys and interview transcripts. In accordance with the University of Illinois’ ethical guidelines, permission to carry out this research project in Bulgaria was received from the Institutional Review Board (IRB). All the steps to assure confidentiality of participants’ responses (audio and in survey form) were included in the IRB application. In addition, all the procedures in place for conducting research abroad were followed. All participants allowed the researcher to record the interview for archiving and transcription.

3.4 Data Analysis

As with most convergent mix-methods design, the challenge comes with determining the best way to converge or merge the data (Creswell, 2014, p. 222). In this study, the researcher chose a side-by-side comparison to merge the survey with the interview data. In the side-by-side comparison, the researcher first reports the quantitative statistical results and then discusses the qualitative findings, such as themes, patterns or categories that either validate or invalidate the results (Creswell, 2014, p. 222). Effectiveness using the convergent approach comes from the quantitative soundness in its construction and the qualitative validity of triangulation for each respective database (Cresswell, 2014, p. 223). However, threats to validity include unequal sample sizes, the use of incomparable and difficult to merge findings, and not following up on conclusions with divergent themes (Cresswell, 2014, p. 223).
CHAPTER 4

FINDINGS AND DISCUSSION

4.1. Survey Data

Producer Demographics

In accordance with the seven targeted commodity groups from the 2013 LCP survey, respondents were asked in question 1 whether or not they were primarily a livestock or crop producer and question 2 asked them to report the units, decares (converted to acres) they farm and/or head they had of each commodity. From their response, it was determined which commodity was most significant to the producer’s operation and labeled respectively. After designating a respondent by enterprise, the operation was then placed into one of the designated size categories – mid-size, commercial or large. Table 6 shows the size category ranges for each commodity. Each respondent was assigned a single enterprise and a single-size designation.

For this study, there were three producers who had both livestock and crops, while there were four producers who had either/or corn and wheat crops. One producer had 350 sheep, which was not one of the targeted commodity groups from the LCP survey. The producers were designated appropriately based on either their head count or the size of their corn/wheat/barley operations.

Questions 1, 2, 4 and 23-28 asked respondents for demographic information. Beginning with their age and education level, respondents were given age ranges to select from: 18-24, 25-39, 40-54, 55-69 and 70+. Figure 1 shows the proportion of respondents in each category. There were no respondents in the 18-24 category. One respondent marked 25-39, three respondents
marked 40-54, two respondents marked 55-69, and one marked 70+. Education level was based on the highest attained level of education the respondents have completed. Figure 2 shows the distribution of education by operation size. Two respondents indicated they were high school graduates, three respondents indicated they graduated from a four-year college, and two earned graduate degrees.

Lastly, respondents were asked what their gross farm sales were in 2013. To make this question easier for Bulgarian producers, the amounts were changed to Leva instead of dollars. One Leva is approximately the equivalent of .70 dollar and .51 Euro. Thus 1.44 Leva equals 1 U.S. dollar and .75 Euro. Figure 3 shows the distribution of respondent’s answers converted from Leva to U.S. dollars. One respondent marked less than 100,000 Leva (converted to dollars), one respondent marked 100,000-499,000 Leva, two respondents marked 500,000-999,999 Leva, and three respondents marked 5,000,000 Leva and over.

Demographic information is important for several reasons. First, demographics are a way to segment markets. From a consumer perspective, demographic segmentation includes age, gender, income, and so on. However, when segmenting business markets, demographic information includes industry type, size of organization, and geographical location (Kotler and Keller, 2009, p.129). As Bulgarian farming moves away from consumer to commercial operations, there is a need for agricultural suppliers to adjust their marketing mix to support more business-to-business purchasing decisions by commercial producers. Second, the previous research makes it clear that distinct groups of farmers/customers exist (Gloy and Akridge 1999; Alexander et. al., 2005; Roucan-Kane et al., 2011). Thus for agricultural input suppliers, segmenting farmers (target marketing) and defining customer profiles are absolutely critical to effectively market and sell their products. Third, consumer wants, preferences, and usage rates
are often linked with demographic variables (Kotler and Keller, 2009, p. 128). Lastly, demographic variables are specific, easy to measure, and span cross-cultural contexts.

The Salesperson, Information and Media

Question 15 asked respondents to rank the importance of the following five attributes of a salesperson in regards to purchasing all expendable outputs using a scale of 1-5 in order of importance: is honest, is a friend, knows my operation well, represents my interests, and has a very high level of technical competence. Three respondents chose honesty as the most important salesperson attribute. Using aggregate scoring, respondents ranked the five attributes of a salesperson in the following order of importance: is honest, represents my interests, very high level of technical competence, knows my operation well, and is a friend.

Although this question is not specifically addressing capital input suppliers, it is addressing all major expendable input suppliers and how farmers/customers perceive them. Honesty is an important element for trust to form between two parties. Previous research indicates that suppliers and buyers who trust one another are more committed to the relationship, suppliers can become closer to customers, leading to better understanding, satisfying customer needs, gaining greater customer loyalty and repeat purchase decisions (Flint et al., 1997; Batt and Rexha 1999; Adams and Goldsmith, 1999). The second most important sales attribute across all producers was “represents my interests.” This complements the “is honest” response and makes it clear that suppliers doing business with Bulgarian commercial producers must be trusted and committed to the relationship rather than someone who has only technical expertise or is just a personal friend.

Question 21 asked respondents to rank the importance of the salesperson’s activities using a scale of 1 to 9. The top six categories from most important to least important across all
producers are: provides good follow-up service, brings me the best price, calls me frequently, brings me innovative ideas, is a consultant to my operation, and helps me feel confident about my purchase decisions. Two mid-size producers and two commercial producers indicated that “provides good follow-up service” is the most important salesperson activity while all producers who responded to question 21 listed it as a very important activity. The least important categories of sales activities across all producers are: provide relevant/timely information and provides access to resources. Two respondents marked all activities as very important (9), two respondents marked all activities as very important (9) except “calls me frequently” and “provides relevant/timely information,” and one respondent did not mark any salesperson activities.

This question is important as a complement question to 15 in relation to the character and trustworthiness of the salesperson. It appears that good service is an important component related to honesty, trust, and commitment to the buyer-seller relationship. The responses seem to support a supplier focus on the customer, although the respondents seem to already have information and are not interested in supplier input resources. Previous research has even included “service buyers” as a distinct segment (Alexander et. al., 2005).

Nonetheless, it is not clear if all the respondents understood some of the listed activities or if there may be a cultural/geographical difference regarding some of the sales activities and/or expectations.

**Information and Media**

Question 9 asked respondents to rank how important various information sources are in relation to their management and purchasing decisions using a scale of 1-9. Across all producers, the number one information source for their management and purchasing decisions
was the manufacturer representative, followed closely by other farmers, lenders and local dealer technical support. Two commercial producers felt local dealer sales staff was the most important information source while two mid-size respondents felt they were the least important. Other categories viewed as most important and least important across all producers include independent, paid consultants and other business service providers.

Question 13 asked participants to rank the importance of media sources for receiving information about management and purchasing decisions using a scale of 1-9. Six respondents agreed that the number one media source was farm shows followed closely behind by field days, dealer or retailer meetings, farmer publications and subscriber email newsletters. All producers indicated some website activity and one respondent ranked social media as very important.

These two questions are extremely important in identifying whom or what information sources influence commercial producers’ management and purchasing decisions. The responses to question nine demonstrate how important the manufacturer representative and other farmers are as trusted, viable sources of information. This would also connect to service and availability. Question 13 also demonstrates how informed the respondents are through the use of the Internet, websites, and farm publications; however, they still prefer experiential learning and information gathering through farm shows, field days, and dealership or retailer demonstrations and meetings. This information is particularly useful for marketers’ advertising and media campaigns in support of the sales efforts.

**Brand Loyalty**

Loyalty was a theme throughout the LCP survey and question 18 asked respondents to indicate how strongly they agreed or disagreed with the statement that they are loyal to a certain set of products or brands across all expendable inputs, including capital equipment. All the
respondents indicated they would do more business with their current brand or brands of capital equipment. Four respondents indicated they would endorse their current brand of capital equipment to their neighbors as well as try other capital inputs other than this brand. Two respondents who indicated they would do more business with their current brand also indicated they are loyal to their current brand and two others indicated they would switch to another brand for a 10% savings. One respondent indicated switching for a 5% savings and one respondent indicated a willingness to help the brand’s company develop new products and services.

This question is significant because it is assessing the impact of brand name and brand loyalty on the purchase of all major expendable inputs, particularly capital equipment. Previous research evaluating the significance of brand on purchasing capital inputs demonstrates that brand name was the most important buyer decision factor, brand loyalty is strong among tractor buyers, and demographic variables are not the strongest indicator of brand loyalty (Walley et al., 2007; Harbor et al., 2008; Roucan-Kane et al. 2011). However, for this study, the respondents appear to have strong loyalty to their current brands of capital equipment but not an overall loyalty to the brand itself. In fact, their responses were surprising in that over half of them are willing to try other products than their current brand. This may indicate that Bulgarian commercial producers are innovators or early adopters on Rogers Innovation Adoption Curve and willing to try or use other machinery (Kotler and Keller, 2009, p. 199). For input suppliers, this means there is opportunity to establish the brand name, build brand loyalty, sell additional machinery, and capture more market share.

**Dealer/Retailer Relationships**

Question 6 asked respondents when selecting a dealer or retailer for expendable inputs (capital equipment, seed, crop protection, chemicals, animal health, etc.) to rank the following
attributes (1, 2, or 3) in order of importance: services provided, information provided, and people who work for the dealer or retailer. Six participants indicated that “information provided” was the most important attribute to them. In order of most important to least important, respondents indicated the following: information provided, people who work for them, and service provided respectively.

The results of this question were surprising for two reasons. First, previous research demonstrated that “services provided” is a critical factor commercial producers consider when making purchasing decisions of capital equipment (Alexander et al., 2005; Roucan-Kane, 2011). Second, the least important salesperson activity across all producers in question 21 was “provides relevant/timely information.” This seems to contradict the high ranking for “information provided” in this question.

Question 19 asked respondents if they agreed with eight specific statements from which they primarily purchase specific expendable inputs including capital equipment. When it comes to those dealers/retailers from whom respondents primarily purchase capital equipment, there are mixed results across all producers. Three participants indicated they would do more business with this dealer/retailer, endorse the dealer/retailer to their neighbors, as well as try products from other dealers/retailers. Two respondents indicated they would switch to another dealer/retailer for a 10% savings. No one indicated they would switch dealer/retailer for a 5% savings. Two respondents indicated they would help this dealer/retailer develop new services and product offerings, two respondents indicated they are loyal to this dealer/retailer and one respondent indicated a willingness to invest this dealer/retailer.

This question had very similar results to question 18. There doesn’t appear to be a strong brand or a strong dealer/retailer loyalty among the respondents. It appears to follow the previous
findings in Kohl (1956, 1959) that price and product reasons are more important to producers when choosing a specific dealer while dealer attributes ranked third. Thus, dealer/retailers have an opportunity to differentiate themselves, try different integrated sales/marketing and service models in order to capture greater market share, retain more customers, generate more repeat purchases, and build the brand name and brand equity.

Question 20 asked respondents to agree or disagree using a scale of 1-9 with six statements regarding dealers/retailers. Five respondents strongly agree there are significant differences that exist in the quality of services between dealers and retailers and in the quality of information they receive from different dealers and retailers. One respondent strongly disagrees that significant differences exist in the quality of information he receives from different dealers and retailers. In addition, two respondents strongly agree that their relationship with the sales people is more important then the relationship they have with the company the sales people represent. Two respondents indicated they strongly agree that significant differences exist between generic expendable products and branded products. One respondent strongly agrees knowing more about his expendable products than the dealer or retailer and one respondent strongly disagrees to knowing more about his expendable products than the dealer or retailer.

This question complements the previous question and shows that commercial producers do not perceive “all dealers and retailers to be equal.” Only two respondents acknowledged significant differences between generic and branded products. The results to this question and the previous questions related to dealer/retailer relationships appear to support previous findings that no socioeconomic characteristics explain dealer and brand loyalty (Kohls, 1956, 1959; Harbor et al., 2008).
Question 16 asked respondents to rank these attributes – price, product performance, and dealer/retailer relationship in order of preference (1, 2, or 3) for the following purchases: seed or feed, crop protection or animal health, fertilizer and capital equipment. When it comes to capital equipment, five respondents indicated price as the number one purchasing attribute. In the order of importance when purchasing capital equipment, price was the most important followed by performance and then dealer/retailer relationship. Three of the four mid-size producers indicated price as the number one attribute when purchasing capital equipment. In addition, three respondents across all producers marked price as the most important attribute and had a bachelor’s degree or higher.

The results to this question are significant as it relates to survey questions 19 and 21. In these questions, price appears to play a factor in influencing commercial producers to switch to another product or another dealer/retailer. Mid-size farmers, especially those who have livestock and crops, tend to be more price sensitive when purchasing capital equipment. Consistent with previous industrial marketing research, price appears to be a factor for all producer respondents when making capital equipment purchases and a factor that suppliers need to keep in mind with their offerings (Corey, 1996).

4.2 Interview Data

4.2.1 Findings: First Question Data

The first question was open-ended asking participants to talk about themselves, to share about their farming background, experience, as well as their current role. Responses varied by
participant, size and scope of their farm operations, their role and responsibilities, life stage, age, generation, social class, etc.

The demographic questions from the survey were very specific and did not completely overlap with this corresponding open-ended question. Nonetheless, merging the data sets did confirm much of the demographic data and was an easy transition for participants in switching from the survey to the interview. Even though it was not a clean merging of the demographics, both sets of data made it possible to analyze participants as consumers and businesses simultaneously as a way to further segment producers.

Based on the farmer categories defined by the 2013 LCP study, the sample interviewed and surveyed included four mid-size producers, two commercial producers and one large producer. The small organic apple producer shared useful information regarding organic farming in Bulgaria, its research connection to the Bulgarian agricultural universities, and local consumer attitudes and behaviors towards organic produce. He also provided significant historical background and anecdotal information but did not provide useful data in relation to the buying behavior of capital equipment. As a result, this participant was not included in the study.

4.2.2 Findings: Second Question Data

This question asked participants how farming has changed positively and negatively since Bulgaria joined the European Union in 2007 and how this has opened up new markets. The results from the second interview question showed a unanimous consensus among all participants that Bulgaria’s joining the EU in 2007 has primarily been very positive for them and
for Bulgarian farmers in general. They believe that without subsidies from the EU, many farmers could not buy necessary capital equipment to keep up with consolidation.

In the early years of EU Membership, the direct payments to farmers covered around 50% of the total cost of capital equipment making it possible to buy new equipment faster and obtain new technologies in order to become more effective. It also easily covered the rent price for land. However, over time, the rent for land continued to increase and now subsidies cover approximately 60% of the rent price.

From a negative perspective, joining the EU did not include a substantial subsidies program for livestock. Subsidies primarily rewarded large-scale grain production. As a result, large operations have evolved encompassing many villages where the people living in those villages could use the land for their own use. This is not the case anymore. Subsidies were given rewarding large grain operations that negatively impacted Bulgaria’s village life and the people that resided in them. Additionally, more and more land is being cultivated each year making it harder and harder to find uncultivated arable land.

This question was not aligned with variables from the quantitative data but provided significant background information and validated previous research related with EU integration, agricultural policy, and the deployment of subsidies. It also validated the role EU subsidies played in farm consolidation, land aggregation, and the increase in farm income.

4.2.3 Findings: Third and Fourth Question Data

Question three asked participants to predict any changes to their operations and to Bulgarian farming in general over the next five years and why. Question four asked more
specifically how direct payments from the EU impacted their farm operations and how it will change over the next five years.

The commercial and large producers feel things will continue to be positive for them and for Bulgarian farmers over the next five years. Subsidies will remain the same for the grain producers but more support will be given to livestock and the traditional Bulgarian vegetable sector. However, there is concern among them in complying with the “green” components of CAP. It also appears that the Bulgarian government supports commercial and large grain producers in using their subsidies and profits to increase animal, vegetable and fruit production. Three participants indicated if there were subsidies for these other sectors like vegetables, farmers would produce them.

Nonetheless, there is some concern from mid-size producers that the situation will only get worse. For two of the mid-size producers, they feel the gap between large and medium size operations is getting bigger and bigger and that the mid-size farmer cannot effectively compete in the current and future market. There seems to be some fear that the commercial and large producers will continue to absorb smaller operations, amass more land and ultimately put the mid-size farmer out of business.

This open-ended question did not overlap with any survey questions and therefore did not merge the data sets. Nonetheless, this question was of particular interest as it relates to CAP changes, competition, and future markets. Overall, the participants were optimistic about their operations over the next five years except for one mid-size farmer who focused on competition and inequity issues between producers.

Another area of interest that surfaced with this question was the need to revive traditional agricultural markets, particularly livestock, vegetables and fruit. Those participants with
livestock and crops together stated that support for livestock is slow but getting better year after year. Nonetheless, the vegetable and fruit markets lagging way behind were not subsidized when implementing CAP in Bulgaria. The participants validated the premise that the Bulgarian agricultural sector had to adjust to a Western program rather than creating and contextualizing the existing CAP for Bulgaria and other CEE countries.

4.2.4 Findings: Fifth Question Data

This question asked participants what activities take up most of their time in their day-to-day operations and asked how they spend their time. Four participants said they spend their daily time managing people, attending various meetings, and carrying out administrative and financial duties. Two participants spend most of their time overseeing farm operations and training others. Two of the four mid-size producers have many hired workers and local managers running the day-to-day operations. Four participants also have their children working with them in various areas of the operation. Most of the commercial and large farmers have several people supporting their operations to include accounting, administration, purchasing, etc. Nonetheless, all the participants spend regular time out in the field or working directly with livestock during the week.

This question directly overlaps the LCP survey. Question 17 asked respondents to mark a single category that takes most of their time (only mark one). Those categories are: managing land, equipment, and facilities; managing production, marketing/prices; controlling costs; managing people, or other. It also triangulated question 29 asking participants to describe their biggest farming operations management like yours over the next five years. These questions are
important but don’t clearly converge the data. However, how producers spend their time directly impacts equipment suppliers in several ways. If producers primarily run the day-to-day farm operations, then suppliers need to find out what features and benefits are most important to them regarding capital equipment. In this situation, producers are both business managers and consumers. If commercial producers have farm managers and laborers working their operations, suppliers may need to sell several stakeholders. In this situation, the commercial producer is a business owner purchasing machinery and is more likely to focus on how it impacts his/her operational bottom line rather than on personal preference.

This information was also useful for background and anecdotal findings. For instance, previous research demonstrates urbanization that took place over the last twenty-five years resulted in low numbers of young people/children farming in Bulgaria. However, from this study, this does not appear to be the case. With the rise in commercial producers, it appears that more and more children are returning/staying home and working on the farm in various roles, to include farm operations, agronomy, bookkeeping and accounting.

With privatization and an aging farmer population, participants also expressed concerns about passing on the farms to their children and grandchildren. As more and more children return to their rural roots, this issue will become less and less a concern. Perhaps this is the beginning of a new generation of Bulgarian commercial farmers.

4.2.5 Findings: Sixth and Seventh Questions Data

The sixth question asked participants how they stayed current in farm practices and technology and what sources of information are most important in regards to their management
and purchasing decisions. The seventh question took it a step further and asked what role other commercial farmers play as an information source and how it impacts management and purchasing decisions.

The answers to question six varied based on demographics such as age, education and farm size. The three youngest participants indicated they get their information primarily from the Internet while four participants emphasized using the Internet. All participants value farm shows, field days or dealer meetings as a very important way to get information concerning capital equipment and other expendable inputs. Three participants who indicated they use the Internet also graduated from four-year universities or have graduate degrees.

From the interviews, it does appear that other farmers are an important source of information but the role and importance varied from participant to participant. Other farmers tend to be a good source regarding new products and technology; however, not one participant indicated a strong “farmer influence” when making capital equipment purchasing decisions. Six participants belong to a national or local farmer’s association, which is another source of information and connection for producers.

Question six did not directly overlap with survey questions while question seven directly overlapped with survey questions. Both of these questions together connect to the aim of this research and reveal how marketers should reach and inform potential capital input customers. Demographic information plays a significant role in determining what media and information platforms are most appropriate and have the greatest reach. These two interview questions together merged the data sets and validated the preferred media and information sources from survey question 9 and 13 as manufacturer representatives, farm shows, field days, the Internet
and farm publications. It appears that well-educated producers tend to be more informed and active users of the Internet.

4.2.6 Findings: Eighth Question Data

The last interview question encompasses those factors that influence the participant’s buying decisions for expendable inputs, particularly focusing on capital equipment. It also included how producers finance and maintain their machinery. Key terms that surfaced during the interviews as important attributes when buying capital equipment include reliability, durability, quality, price, established brand, availability, relationship, service, and how it contributes to the bottom line.

Prior to the fall of Communism over 25 years ago, the majority of farm machinery came from the Soviet Union. Since then, Bulgarian producers have been using more and more capital input from Western Europe and the United States. When it comes to combines, four participants have German made Claas. These participants either have colleagues in Germany or a German relative to help make these purchases. Claas combines are perceived as having excellent quality and durability, parts don’t wear out as fast as others, and they have excellent service in Bulgaria.

Claas, Fendt and John Deere are preferred lines for quality, durability, reliability, and service. Most participants had capital equipment from multiple suppliers. Some participants believe Fendt is more sophisticated and more difficult to operate due to its computer system, while John Deere is durable and simpler to use and operate much like the former Russian machines. Five participants indicated reliability, durability, and quality as the most important factors when purchasing capital equipment. Four participants emphasized service as a significant
factor in the buying decisions and one participant mentioned that buying one brand for all their capital equipment is easier to support and service and influenced his purchasing decision.

Only one participant indicated dealer/retailer relationship as a significant factor in purchasing capital input as well as how the capital purchase contributes to the overall bottom line. This participant comes from an expendable input supplier background rather than farming. Only one participant indicated that the equipment had to come from an established brand. Even though there was not much discussion during the interviews about brand name and brand equity, all participants had different perceptions, opinions, values and experiences with name brand capital equipment.

From all the responses, there does not appear to be a dependency on capital input suppliers. In fact, participant responses were consistent with individuals who believe the outcomes from existing relationships with capital input suppliers are in their favor. In other words, market power favors the commercial producer rather than the supplier making it a buyer’s market as opposed to a seller’s market. This question merged both data sets and validated this finding regarding participants’ attitudes and buying behavior of capital equipment.

Almost all of the participants indicated performance and quality are more important in their buying decision than price. Only one mid-size producer indicated price was the most important factor in purchasing capital equipment. One participant indicated availability and the inability to wait a year for the new machinery was the reason they chose one brand over another.

Participants’ responses overall were consistent with the Performance buyer (Gloy and Akridge, 1999; Alexander et. al, 2005; Roucan-Kane et al., 2011). First, the participants focused primarily on product performance while price was the next important feature or concern. Second, they described themselves and identify as businesses. Third, they were more educated and liked
to get their information from websites or the Internet. Lastly, they believed that brands were not the same across products although this factor alone did not appear to be significant enough to influence their purchasing decisions. However, participant results differed from the previous research findings in that they were relatively older than younger and educated as a group, and they did not indicate a need for high-level technical competence from their sales representatives as a factor in buying capital equipment.

Equipment usage also came out as a factor in purchasing capital equipment. Four participants shared annual hourly usage for combines and tractors. According to those participants, they run combines somewhere between 120-500 hours a year while tractors last anywhere from 6,000 to 9,000 hours overall. Bulgarian producers tend to keep their equipment and use it as long as they can before replacing it. According to one participant, “Bulgarian farmers use their combines and tractors 2-3 times more hours per year than other farmers in Western Europe and perhaps the United States. Bulgarians do not have the luxury to get new machines often.”

All the participants own their equipment and have both used and new equipment. None of the participants lease any machinery and all financing and subsidies contractual work goes through the local banks. In regards to service and maintenance, participants service what they can and have dealer/retailers service their capital equipment as needed.

This question merged both sets of data regarding the purchase, attitudes and buying behaviors associated with capital equipment. After analyzing the data, there appears to be a contradiction concerning price. When answering question 16, five respondents indicated price as the number one purchasing attribute followed by performance and then dealer/retailer relationship. Yet, during the interviews only one participant stated that price was the most
important factor. Most participants emphasized quality, durability and reliability as more important than price. During the interviews, six participants indicated they would pay more for capital input if it were perceived as better quality, longer lasting, and reliable. However, this does not appear to support the quantitative results from the surveys, which participants completed before the interview.

Another area of contradiction was service. When answering survey question six and ranking attributes when selecting a dealer or retailer for expendable inputs including capital equipment, respondents indicated from most important to least important: information provided, people who work for them, and service provided. However, when interviewed, four participants indicated service as a significant factor in purchasing machinery.

The interview question allowed for additional responses that the survey questions did not address or did not allow the respondents to write in or add anything, such as the annual and lifetime usage rates of capital equipment. From the interviews, it appears that Bulgarian commercial producers use their machinery more than Western commercial producers and this plays a major role in their management and purchasing decisions. The previous research does not address the usage rates of capital equipment nor make it a factor regarding producers’ management and purchasing decisions. Thus, when assessing commercial producers’ buying behavior of capital equipment cross culturally, equipment usage is another important factor that should be taken into consideration.
4.2.7 Other findings – Impacts of Decollectivization and EU Integration

During the thesis research, additional information surfaced that is significant to the aim of this research and recorded here for future reference. First, with decollectivization and privatization after the fall of Communism, rent seeking became an issue for former farmers and their heirs, who were now working outside of the agricultural sector and would not return after the granting back of old lands. Second, the distribution of land between two types of owners posed a serious problem for those wanting to do small subsistence farming and those wanting to do moderate to large-scale commercial farming. As a result, getting necessary funds to farmers was slow, inconsistent, and a complicated process of farm consolidation at the local and national levels of government. Third, during the restitution and privatization process, top management and professionals were able to use their influence and prestige to keep cooperatives together and acquire and rent significant land as EU integration paved the way for many of them to become commercial producers. Fourth, the direct payment system over the last programming period (2007-2013) developed the grain and oil seed sector at the expense of the other traditional sectors, such as animal breeding, vegetables, and horticulture. It also allowed for a few large producers or agricultural firms to buy and rent large concentrations of land. Fourth, the majority of direct payments went to commercial grain producers and will continue to go to the commercial producers of grain during the new CAP programming period (2014-2020). Lastly, the Bulgarian agricultural sector is highly regulated by EU law with several layers of control/accountability and requires producers to be extremely transparent with all aspects of their operations. Without transparency, producers do not get any subsidies.
4.2.8 Discussion Limitations

This research study had three primary limitations: lack of sufficient rigor necessary for qualitative and quantitative research, a small sample size, and the use of a U.S. designed survey rather than a contextualized survey specific for Bulgarian producers. Beginning with the issue of rigor, more time and effort should have been made in the planning sequence of this research project in order to identify and implement appropriate research design and strategies. While this project initially employed a mixed method approach integrating qualitative and quantitative data, the convergent side-by-side design was identified and brought in to the study much later in the process. The interview questions deployed were designed to triangulate both EU integration/historical background along with survey questions related to the buying behavior of capital equipment and other expendable inputs.

The second limitation was the small sample size consisting of eight people. The initial goal was to give the 2013 Purdue Large Commercial Survey to more Bulgarian commercial producers throughout Bulgaria to obtain a more representative country sample and to obtain statistical significance in the quantitative findings. This is not meant to diminish the value of this exploratory study using both surveys and face-to-face interviews, but greater numbers, especially for the quantitative data would have enhanced the results.

The last limitation concerns the use of the 2013 Purdue LCP survey with Bulgarian commercial producers. Initially, the goal was to assess Bulgarian commercial producers’ buying behaviors for expendable inputs and compare them to U.S. commercial producers. Unfortunately, the scope of the Purdue LCP survey was too great for this research project. Thus, it was later narrowed to the buying behavior of commercial producers for capital equipment.
Additionally, the Bulgarian commercial producers who participated had never taken a survey ranking things from most important to least important, requiring explanatory help with some questions. This made the survey a longer and arduous process for some and may have impacted how producers ultimately responded to questions.

4.3 Conclusion

As Bulgarian farming becomes more commercialized, there is a need for agricultural suppliers to adjust their marketing mix to support more business-to-business (B2B) purchasing decisions by producers. The current market power also favors the commercial producer making it a buyer’s market rather than a seller’s market. The previous research makes it clear that distinct groups of farmers/customers exist (Gloy and Akridge 1999; Alexander et. al., 2005; Roucan-Kane et al., 2011). Thus for agricultural input suppliers, segmenting farmers (target marketing) and defining customer profiles are absolutely critical to effectively market and sell their products. Additionally, consumer wants, preferences, and usage rates are often linked with demographic variables (Kotler and Keller, 2009, p. 128) as well as easy to measure and span cross-cultural contexts.

The media and information sources preferred by all producers are farm shows, field days, farm publication, the Internet, dealer/retailer demonstrations/meetings and manufacturer representatives. It also appears that well-educated producers tend to be more informed and active users of the Internet. Other farmers are an important source of information but the role and importance varied from participant to participant. Farmers tend to be a good source regarding new products and technology but not a strong influence when making capital equipment purchasing decisions.
Previous research evaluating the significance of brand on purchasing capital inputs demonstrates that brand name was the most important buyer decision factor, brand loyalty is strong among tractor buyers, and demographic variables are not the strongest indicator of brand loyalty (Walley et al., 2007; Harbor et al., 2008; Roucan-Kane et al. 2011). However, for this study, the respondents appear to have a strong loyalty to their current brands of capital equipment but not an overall loyalty to the brand itself. Thus, participants have different perceptions, values and experiences with name brand capital equipment.

Most participants indicated quality, durability and reliability and service are more important in their buying decision than price and dealer/retailer relationship. However, this does not appear to support the quantitative results from the surveys in which participants completed before the interview. Participants wanted quality, reliability, durability (performance) and good service when buying commercial equipment but they are also price sensitive.

Lastly, it appears that Bulgarian producers use their machinery more than Western commercial producers and this plays a significant role in their management and capital equipment purchasing decisions. The previous research does not address the usage rates of capital equipment nor makes it a factor regarding producer’s management and purchasing decisions of capital equipment. Thus, when assessing commercial producers’ buying behavior of capital equipment cross culturally, equipment usage is an important variable input suppliers must consider.
CHAPTER 5

CONCLUSION

When buying capital inputs, Bulgarian commercial producers have a strong loyalty to their current brands of capital equipment but not an overall loyalty to the brand itself. Because they have different perceptions, values and experiences with name brand capital equipment, the current market favors the commercial producer making it a buyer’s market rather than a seller’s market. Producers indicated preferences characteristic of the Performance buyer segment wanting quality, reliability, durability, and good service when buying commercial equipment but they are also price sensitive. The media and information sources preferred by all producers are farm shows, field days, farm publications, the Internet, dealer/retailer demonstrations/meetings and manufacturer representatives. Other farmers are also a good source regarding new products and technology but not a strong influence when making capital equipment purchasing decisions.

These findings are significant and have several implications for input suppliers. First and foremost, agriculture is always changing and in order for agribusinesses to stay one step ahead of their customers, they need to understand the current situation and capture insights, especially from emerging agricultural marketplaces. Second, the agricultural equipment industry is continuously changing in order to respond appropriately respond to the world demand for food and the efficient production required to produce it. Third, the majority of previous research has been limited to the U.S. and is not in keeping with the global nature of agriculture and agribusinesses. Lastly, understanding how commercial producers buy capital equipment is
extremely valuable to suppliers who hope to develop new selling and retention strategies to capture more market share.

This pilot study has been a first step in better understanding the decision-making processes and motivation regarding how Bulgarian commercial producers buy capital equipment. In fact, it has not only sought to address the gap in the literature, but has strived to uncover data which could inform agricultural input suppliers as to who these commercial producers are, what they value, and additional topics that could have future business and research implications. It is hoped that this research will be the impetus for others to examine further the commercial producer as the driver of Bulgarian agriculture.

Western capital equipment suppliers are relatively new to Bulgaria and have not had as much time to fully develop brand name and brand equity from both industrial and consumer markets. Further comparative research globally will help input suppliers better understand and become more aware of the cross-cultural ramifications, identity, and contextual issues associated with commercial producers/farmers and their purchasing decisions of capital equipment and expendable inputs. Additionally, further research segmenting producers will allow marketing departments to tailor offerings that will uniquely resonate with specific sub groups. This will be especially important with the next generation of commercial producers.
Table 1: Evolution of TKZSs in Bulgaria

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Average size (ha)</th>
<th>Cooperated peasants (000)</th>
<th>Cooperated Land (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1944</td>
<td>110</td>
<td>240,9</td>
<td>7</td>
<td>0,6</td>
</tr>
<tr>
<td>1946</td>
<td>480</td>
<td>359,6</td>
<td>41</td>
<td>3,7</td>
</tr>
<tr>
<td>1948</td>
<td>1100</td>
<td>265,8</td>
<td>124</td>
<td>7,2</td>
</tr>
<tr>
<td>1950</td>
<td>2501</td>
<td>862,2</td>
<td>502</td>
<td>51,1</td>
</tr>
<tr>
<td>1956</td>
<td>3100</td>
<td>1034</td>
<td>911</td>
<td>77,4</td>
</tr>
<tr>
<td>1958</td>
<td>3290</td>
<td>1061,5</td>
<td>1244</td>
<td>93,2</td>
</tr>
<tr>
<td>1960</td>
<td>932</td>
<td>4266,2</td>
<td>1256</td>
<td>98,4</td>
</tr>
<tr>
<td>1970</td>
<td>744</td>
<td>4394,8</td>
<td>na</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: National Statistical Institute  
*Personal plots of coop members included  
(Table taken from Bachev, 2008, p. 2.)

Table 2: Share of different farms in total agricultural resources and GAP in 1960 (%)

<table>
<thead>
<tr>
<th>Indicators</th>
<th>TKZS</th>
<th>DZS</th>
<th>Personal Farms</th>
<th>Private farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Agricultural Product</td>
<td>72,6</td>
<td>6,8</td>
<td>19,7</td>
<td>0,9</td>
</tr>
<tr>
<td>Farmland - total</td>
<td>79,9</td>
<td>6,6</td>
<td>8,0</td>
<td>5,4</td>
</tr>
<tr>
<td>Arable Land</td>
<td>82,4</td>
<td>5,9</td>
<td>8,5</td>
<td>3,3</td>
</tr>
<tr>
<td>Permanent crops</td>
<td>74,4</td>
<td>4,8</td>
<td>18,9</td>
<td>1,9</td>
</tr>
<tr>
<td>Natural meadows</td>
<td>75,3</td>
<td>11,3</td>
<td>9,8</td>
<td>3,5</td>
</tr>
<tr>
<td>Grassland and pastures</td>
<td>70,6</td>
<td>10,2</td>
<td>0,2</td>
<td>19,0</td>
</tr>
<tr>
<td>Cattle</td>
<td>67,1</td>
<td>5,7</td>
<td>23,9</td>
<td>3,3</td>
</tr>
<tr>
<td>Buffalos</td>
<td>30,1</td>
<td>1,5</td>
<td>64,8</td>
<td>3,6</td>
</tr>
<tr>
<td>Pigs</td>
<td>54,5</td>
<td>7,7</td>
<td>35,2</td>
<td>2,7</td>
</tr>
<tr>
<td>Sheep</td>
<td>63,2</td>
<td>5,5</td>
<td>29,9</td>
<td>1,4</td>
</tr>
<tr>
<td>Goats</td>
<td>4,9</td>
<td>0,5</td>
<td>91,5</td>
<td>3,2</td>
</tr>
<tr>
<td>Poultry</td>
<td>38,9</td>
<td>2,5</td>
<td>55,6</td>
<td>3,0</td>
</tr>
<tr>
<td>Bees</td>
<td>17,4</td>
<td>1,6</td>
<td>77,2</td>
<td>3,8</td>
</tr>
</tbody>
</table>

Source: National Statistical Institute  
(Table taken from Bachev, 2008, p. 2)
### Table 3: Evolution of APKs and other agrarian organizations in Bulgaria

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>APK</td>
<td>170</td>
<td>152</td>
<td>143</td>
<td>268</td>
<td>296</td>
<td>298</td>
<td>303</td>
</tr>
<tr>
<td>TKZS</td>
<td>679</td>
<td>281*</td>
<td>78*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DZS</td>
<td>156</td>
<td>91*</td>
<td>50*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialized enterprises</td>
<td>154</td>
<td>702*</td>
<td>1862*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brigades of New Type</td>
<td></td>
<td></td>
<td></td>
<td>3750</td>
<td>1535**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average size (ha)</td>
<td>30063</td>
<td>30800</td>
<td>32833</td>
<td>18084</td>
<td>16256</td>
<td>15718</td>
<td>2423***</td>
</tr>
<tr>
<td>Employed persons</td>
<td>30063</td>
<td>30800</td>
<td>32833</td>
<td>18084</td>
<td>16256</td>
<td>15718</td>
<td>2423***</td>
</tr>
<tr>
<td>Share in Gross Product:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture (%)</td>
<td>79,2</td>
<td>76,1</td>
<td>75,0</td>
<td>77,5</td>
<td>74,9</td>
<td>71,8</td>
<td>67,2</td>
</tr>
<tr>
<td>Industry (%)</td>
<td>14,5</td>
<td>16,7</td>
<td>16,9</td>
<td>16,5</td>
<td>17,3</td>
<td>17,5</td>
<td>16,7</td>
</tr>
<tr>
<td>Construction (%)</td>
<td>2,4</td>
<td>2,7</td>
<td>3,6</td>
<td>3,9</td>
<td>3,6</td>
<td>5,0</td>
<td>3,9</td>
</tr>
<tr>
<td>Others (%)</td>
<td>3,9</td>
<td>4,5</td>
<td>4,6</td>
<td>4,2</td>
<td>4,2</td>
<td>5,6</td>
<td>11,0</td>
</tr>
<tr>
<td>Agrarian organizations</td>
<td>na</td>
<td>358</td>
<td>352</td>
<td>477</td>
<td>532</td>
<td>536</td>
<td>2101</td>
</tr>
</tbody>
</table>

*sub-units of APK; **with status of basic economic organizations; *** for Agrarian organization
Source: National Statistical Institute; Trifonov et al., 1989, p. 37 and p. 40
(Table taken from Bachev, 2008, p. 8)

### Table 4. The roll out of direct payments for farmers in accession States – 2004 and 2007

<table>
<thead>
<tr>
<th>Year</th>
<th>% of EU-15 CAP direct aid</th>
<th>% plus top-up payments (maximum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>2005</td>
<td>-</td>
<td>30</td>
</tr>
<tr>
<td>2006</td>
<td>-</td>
<td>35</td>
</tr>
<tr>
<td>2007</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>2008</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>2009</td>
<td>35</td>
<td>60</td>
</tr>
<tr>
<td>2010</td>
<td>40</td>
<td>70</td>
</tr>
<tr>
<td>2011</td>
<td>50</td>
<td>80</td>
</tr>
<tr>
<td>2012</td>
<td>60</td>
<td>90</td>
</tr>
<tr>
<td>2013</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>2014</td>
<td>80</td>
<td>-</td>
</tr>
<tr>
<td>2015</td>
<td>90</td>
<td>-</td>
</tr>
<tr>
<td>2016</td>
<td>100</td>
<td>-</td>
</tr>
</tbody>
</table>

(Table taken from Srieciu, 2011, p. 86)
Table 5. Share of agriculture in GDP in NMS 2004 and 2007 (%)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2004</th>
<th>2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>13.56</td>
<td>10</td>
<td>5.6</td>
<td>4.9</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>3.89</td>
<td>3.2</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Estonia</td>
<td>4.82</td>
<td>3.9</td>
<td>3.1</td>
<td>3.5</td>
</tr>
<tr>
<td>Hungary</td>
<td>5.4</td>
<td>4.9</td>
<td>4</td>
<td>3.5</td>
</tr>
<tr>
<td>Latvia</td>
<td>4.6</td>
<td>4.4</td>
<td>3.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Lithuania</td>
<td>6.35</td>
<td>4.7</td>
<td>3.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Poland</td>
<td>4.96</td>
<td>5.1</td>
<td>4.3</td>
<td>3.5</td>
</tr>
<tr>
<td>Romania</td>
<td>12.51</td>
<td>14.3</td>
<td>8.8</td>
<td>6.7</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>4.47</td>
<td>4.1</td>
<td>4.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Slovenia</td>
<td>3.3</td>
<td>2.7</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>EU-28</td>
<td>2.31</td>
<td>3.6</td>
<td>2.8</td>
<td>2.4*</td>
</tr>
</tbody>
</table>

*Note: Includes Croatia – admitted to the EU in July 2013. Otherwise – EU 27

Table 6. Farm Size – Category Breakdowns

<table>
<thead>
<tr>
<th>Category</th>
<th>Mid</th>
<th>Commercial</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn/Soybeans (acres)</td>
<td>300-1,499</td>
<td>1,500-4,999</td>
<td>5,000+</td>
</tr>
<tr>
<td>Wheat/Barley (acres)</td>
<td>700-3,499</td>
<td>3,500-6,999</td>
<td>7,000+</td>
</tr>
<tr>
<td>Cotton (acres)</td>
<td>200-1,099</td>
<td>1,100-2,999</td>
<td>3,000+</td>
</tr>
<tr>
<td>Fruit, Nut, and Vegetable (acres)</td>
<td>138</td>
<td>250-2,349</td>
<td>2,400+</td>
</tr>
<tr>
<td>Dairy (head)</td>
<td>40-199</td>
<td>200-1,090</td>
<td>1,100+</td>
</tr>
<tr>
<td>Finished Hogs (head)</td>
<td>800-3,999</td>
<td>4,000-27,999</td>
<td>28,000+</td>
</tr>
<tr>
<td>Feeder Pigs (head)</td>
<td>3,300-16,499</td>
<td>16,500-41,999</td>
<td>42,000+</td>
</tr>
<tr>
<td>Finished Cattle (head)</td>
<td>150-799</td>
<td>800-6,999</td>
<td>7,000+</td>
</tr>
<tr>
<td>Feeder Cattle (head)</td>
<td>250-1,249</td>
<td>1,250-6,999</td>
<td>7,000+</td>
</tr>
</tbody>
</table>

(Taken from Widmar, 2014, p. 3)
Figure 1. Survey Respondents: Age

Figure 2. Survey Respondents: Education by Size
Figure 3. Survey Respondents: Gross Farm Sales
REFERENCES


Clemens L. (2014). In March 2014, I conducted a series of interviews with Bulgarian commercial farmers as part of a pilot study in the Svistov and Kardzhali regions.


Gray, A.W., 2008. The Role of Price in Producers’ Input Purchase Decisions. Purdue University, West Lafayette, Indiana


APPENDIX A: QUESTIONNAIRE FOR PARTICIPANTS OF THE SURVEY

The questionnaire used to gather some of the data that has been presented in this thesis may be found in the supplemental files named LCP_2013_En.pdf and LCP_2013_Bg.pdf. The file LCP_2013_En.pdf is the Purdue Center for Food and Agricultural Business Large Commercial Producer Survey from 2013. The file LCP_2013_Bg.pdf was the survey translated to Bulgarian.
APPENDIX B: INTERVIEW QUESTIONS FOR PARTICIPANTS OF THE SURVEY

The interview questions used to gather some of the data that has been presented in this thesis may be found in the supplemental files named Interview_Questions_EN.pdf and Interview_Questions_BG.pdf. The file Interview_Questions_EN.pdf is the interview questions created to validate some of the survey data. The file Interview_Questions_BG.pdf is the interview questions translated to Bulgarian.
APPENDIX C: PARTICIPANT RESPONSE TRANSCRIPTS TO THE INTERVIEW QUESTIONS

The interview data presented in this thesis was transcribed from audio interviews into English and may be found in the supplemental file named Transcripts.pdf.