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- A case study of Chinese agricultural cooperatives

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Summary

There is an increasing number of agricutural cooperative management in acquiring more debt capital in order to compensate member equity and achived higher growth. At the same time, exposing the cooperative to higher financial risks indicate that the member interests are being replaced for other priority interests. Once the members do no have incentives to involve in cooperative governance due to their small investment correlation to the total capital base of the cooperative, they no longer consider themselves as real owners and consequently the free rider problem emerge. When the member perceived that benefits could also arrive from borrowed money and other capital sources instead of their own investing money, a decrease of their contribution as well as their less involvement in participate the governance of cooperative will occur. Inspried by the importance of member commitment and the great potentials of debt capitals, our prime focus of this study is whether the acquisition of debt capital has some influences on member commitment in agricultural cooperatives.

The empirical approach consisted of the theorical framework of the social capial theory, the property right theory and the agency theory. The data gathered from the phone interviews with seven representative managers of Chinese agricultural cooperatives and are used to test the hypotheses in which correspond to the aim. Debt capital's effects on member commitment are measured by five indicators consisted of members' willingness to invest, level of member control, superiority of members' interests, members' benefit from their cooperatives and level of social capital. The choice method is qualitative with explanation and example from cooperatives participated while the set of open-end type of question is used for the phone interview.

Based on interviews with cooperative members from Zhejiang province, we found that debt capital can have both positive and negative impacts on level of member commiment by influencing cooperatives' financial performance, members' willingness to invest, member control, member interests and level of social capital in cooperatives.

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1. Introduction

1.1 Problem Background

Agricultural cooperative is a special form of private business that is important for a big number of farmers around the world. By bonding farmers together, such cooperatives have helped farmers to stand up to large business corporations, which has improved farmers' wellbeing. During the modernization of agricultural cooperatives, these member-driven organizations have been facing all kinds of challenges from powerful competitors and unstable markets. In order to survive such an increasingly harsh environment, agricultural cooperatives are eager to acquire more capital and grow larger. As a result of these changes, remaining ownership and control in the hands of the cooperatives' members and therefore keeping the members committed becomes a new challenge for the managements of the agricultural cooperatives (Royer and Rogers 1998; Cook and Chaddad, 2000 Karlsson).

According to Dunn (1988), cooperative businesses should be controlled by the members of the cooperative. Such member control has been one of the most fundamental principles that cooperatives, including agricultural cooperatives, needed to follow in order to ensure that members' interests will be prioritized. Concerning the ownership and organizational structure in cooperatives, obtaining a well functioning and democratic member control has been a tough task for all cooperatives. Agency theory explains that this problem could be a consequence of information asymmetry, which has been a common phenomenon among cooperative businesses.

In recent years, an increasing number of managements of agricultural cooperatives have started to acquire more debt capital in order to compensate member equity and achieve higher growth. Considering the risk-averse nature of farmer members of agricultural cooperatives, exposing the cooperative to higher financial risks indicates that the members' interests are being sacrificed for other higher interests. At the same time, we have seen many cases where cooperatives have failed in maintaining a well-functioning democratic member control system. As Nilsson (2009) has shown, in line with the classical organizational psychology, such undermined member control leads to weakened commitment towards the cooperative among the members.

In many cases, members simply do not have incentives to participate in the governance of the cooperative once their investments only account for a very small part of the total capital base of the cooperative. The members no longer see themselves as real owners of the cooperative. Consequently, the cooperative will face more free-rider problems when the members believe that they can be benefited from using the borrowed money or other capital sources instead of investing their own money in the cooperative. In turn, such a decrease of member contribution of capital has resulted in even less power for the members to participate in the governance of the cooperative.

Based on this background, it could be assumed that acquisition of debt capital might have some negative influences on member commitment in agricultural cooperatives. In order to learn more about such a relationship, an empirical study containing seven agricultural cooperatives is conducted in this thesis. The aim of this study is to explain how acquisition of debt capital influences the level of member commitment in agricultural cooperatives.

1.2 Problem and Aim

1.2.1 Variables

Our aim in this study is to explain how debt capital influences members' commitment to their agricultural cooperatives. The dependent variable that will be investigated in this study is level of member commitment in agricultural cooperatives. The independent variable that we chose to focus on in our study is debt capital, which we believe is a strong variable that has interesting influences on members' commitment to their cooperatives. Certainly, except the amount of debt capital, the level of member commitment in a cooperative can be affected by other factors such as characteristics of members, cooperatives and industries. These characteristics are not considered in this study.

1.2.2 Problem analysis

Agricultural cooperative

A co-operative is a collectively owned and democratically controlled enterprise that individuals can join voluntarily in order to improve their economic and social conditions. An agricultural cooperative, also called in China a "farmer specialized cooperative", is a cooperative that is specially engaged in producing agricultural products. Every person who is able to use a cooperative's services has right to join the cooperative, independent of gender, social or political factors. All members of a cooperative are supposed to control the organization by participating in decision-making and setting policies. A cooperative should also be organized in a democratic manner so all members have to contribute to the capital basis of the cooperative and therefore have control over it. Another feature that characterizes cooperatives is the independency of the organization and its self-help nature by which the cooperative should be controlled by the members. Such democratic control of members exposes to higher risk to be undermined once the cooperative joins contracts with other actors such as governments or external capital providers (ICA, 1995).

Agricultural cooperatives, as all other types of businesses, need capital to finance their operations and investments. Because of the characters of such member-driven cooperative business organization, capital acquisition has always been a tough problem. Agricultural cooperatives without enough capital are not able to provide good services to members or to grow in modern market economies. Traditionally, agricultural cooperatives have been relying mainly on equity capital provided by the members, such as member shares, member fees and income from market sale. Nowadays, capital from non-member financiers has become much more crucial for the cooperative. Sources of such external capital include for example investor owned companies, grants from government, other donors or debt capital from banks and private financiers.

Capital formation in cooperatives

"The difference in objectives between cooperatives and IOFs stemming from the dissimilarity in ownership structure suggests a number of distinctions in both the business and the financial strategies of cooperatives." (Condon; Cotterill; LeVay; Parliament, Lerman, and Fulton; Staatz 1987) Business activities and operations in an agricultural cooperative can be

financed by equity capital or debt capital, or a combination of these two forms of capital. Capital formation in cooperatives is regarded as a means of increasing member participation and control" (COPAC, 1995).

The sources where cooperative can obtain capital from can be divided into two categories, internal and external. External capital formation arises when cooperatives recived debt or equity from sources outside of the cooperative such as government, non-member investors, cooperative banks, commercial banks etc. Equity capital is the risk capital, or net worth of the organization and it represents the members' ownership in the total assets of the organization. In balance sheet terms, equity is total assets less total liabilities. Cooperative equity comes in two forms, allocated and unallocated. Allocated equity is assigned proportionally to members and unallocated equity is not.

Traditionally, most cooperatives raise equity capital by requiring members to make direct investments in the cooperative business. It is most often used when a new member joins the cooperative and he or she has to make a purchase of equity carrying a voting right. Members' financial contribution in the form of direct investment is also needed for acquiring additional member equity when the cooperative needs to strengthen its financial condition. Such member equity could also be seen as a demonstration of member commitment. Sometimes, there are also possibilities to allow non-members to make direct investments as a way to supplement member equity. These investments, usually in the form of preferred stock, often pay a favorable dividend, but do not usually provide a voting right. Additionally, equity capital can also be raised by income surplus generated from selling outputs.

It is desirable for the cooperatives to have a larger share of equity capital compare to the amount of debt capital in the cooperative. A strong member equity base is an important factor that indicates that the cooperative is financially strong and it gives the members more power to control the operation of the cooperative. Unfortunately, members in agricultural cooperatives have very often difficulties to make investments that are large enough to obtain an adequate equity base in their cooperatives. Even though there are other methods that may be used to obtain equity such as retaining earnings; it is common that agricultural cooperatives suffer from starving equity basis.

Shortage of equity in cooperatives will have undesirable influences on financial performance and growth in the cooperatives (Schrader, 1989). In order to meet the cooperatives' capital needs, cooperatives may try to use an increased portion of debt capital to compensate for the shortage of equity capital. Debt capital refers to the money borrowed from a lender that the principal and interest need to be repaid at a certain time. A large proportion of debt in the capital structure represents high financial risks for any business, including cooperatives. Failure in paying back the borrowed money can lead to that lenders taking over control of the cooperative. Considering the fact that many farmer-members join cooperatives to reduce risks of their farming activities, an acquisition of debt capital might make members worried and suspicious whether their cooperative is still working for the members' interests. Additionally, a large debt results in high interest costs, which negatively affect the profitability of the business (Peterson and Cobia, 2000). Members' interests might be neglected when trying to pay back the loans and interests.

However, although both banks and private financiers in many cases provide the cooperatives opportunities to borrow money, not all cooperatives fulfill the requirements for the loans in the form of collaterals, personal guarantees or historical profits. A number of previous studies concluded that cooperative firms tend to have little debt capital (Lerman, 1993). Such behavior could be attributed to that the lending institutions usually feel uncomfortable with the cooperatives' ownership structure. In fact, many investor-owned firms also have the same problems when trying to borrow money or obtain higher owner (member) equity. The solution that they often use is to obtain equity from investors outside the firm. Traditionally, such non-member equity has not always been considered by cooperatives and potential investors as an appropriate capital source for cooperatives.

When a cooperative uses capital generated by members and retained earnings as its primary capital source, the cooperative does not face any problems with debt risks of not being able to pay back the money. On the other hand, it has been suggested that a capital accumulation of very much internal capital and very little debt capital could lead to unnecessarily high capital cost. An overuse of institutional capital, which refers to the collectively owned non-refundable capital, could also result in emergence of perverse incentives (Murray, 1983). However, Mcbride (1986) claims that there are many examples of successful agricultural cooperatives using a well-balanced mixture of member equity and debt capital.

Debt capital in cooperatives

Based on the effects that different capital sources could have on the performance of the cooperatives, there is a qualitative dimension of different types of capital. The quality of certain type of capital source is determined by the so-called "cooperative power" which indicates such capital's ability to strengthen member participation and control in the cooperative (COPAC, 1995). According to Von Pischke (1993), those forms of capital that are attached with conditions and terms that demands a strong member commitment should be perceived as capital of high quality.

Generally, capital from internal sources such as revolving fund has better quality than debt capital and other external capital since the members are involved as investors and no influences from non-members financiers. According to Eze (1990), the more involved the members feel they are in the development of the cooperative, the easier for the cooperative organization to achieve efficiency. Unfortunately, most forms of loans from banks and private financiers will give the lenders either formal or informal power to influence the decision-making in the cooperative. As a consequence of that, at the same time as the debt capital helps the cooperative to enlarge investment, the member control and participation in the cooperative will be weakened.

Except that, it is very likely that the non-member financiers will try to influence the decisions in a way that maximizes their own benefits which obviously violates the members' interests and therefore the cooperative principles. Such a degradation of member control in the governance of the cooperative will have negative impact on the members' commitment to the cooperative (Österberg and Nilsson, 2009). Thereafter, the mutual effect between member control and commitment will make the members even less engaged to spend time and efforts to involve in the governance of the cooperative and a vicious spiral arises (Bijman, 2011). Another type of external capital is grants and it is perceived as the external capital with lowest quality due to the high risk for creating cost inefficiency and dependency in the cooperative.

Member control and commitment in cooperatives

The level of member commitment indicates members' preference to maintain a member relationship with the cooperative and continue doing business with it when there are other business options available (Fulton, 1999). As mentioned before, agricultural cooperatives are formed to enhance farmer-members' wellbeing, which means that cooperatives have to provide services that are desired by the members. In order to achieve that, a democratic governance system is crucial in which members can control the cooperative and support those decisions that are beneficial for them (Bhuyan, 2007; Gray & Kraenzle, 1998). Once such member control is implemented and members start having influence on decisions, it is easier for them to be committed and supportive to the decisions made by managers of the cooperative (Nilsson, 2009). Level of member control in a cooperative can be the single most important factor that affects member commitment (Österberg and Nilsson, 2009). Together with other important conditions, member commitment in cooperatives needs to be maintained in order to achieve long-term success (Anderson & Henehan, 2005; Staatz, 1989).

Considering the fact that members can have different roles in the cooperative, a strong member commitment can be crucial in many different ways (Österberg and Nilsson, 2009). Committed members are more likely to use their rights to make sure that qualified candidates will be elected in the board and the management and the board performs at a high standard and serves the interests of the members. Members with high commitment are usually better at understanding decisions from the managers and therefore willing to support them.

As mention before, most agricultural cooperatives highly rely on their members' financial contributions as a crucial internal capital source. Hence, level of member commitment in cooperative will influence the internal capital formation and therefore the financial power of the cooperative (ibid). According to Reynolds (1997), those members lacking commitment to the cooperative are usually not committed to the decisions made by the board either and a lack of such support and understanding between members and the board will make the implementation of those decisions become more complicated.

Unfortunately, as agricultural cooperatives' business and member base grow larger, many cooperatives experience a decreased level of member commitment in their organizations (Bhuyan, 2007; Fulton, 1995; Lang and Fulton, 2004; Fulton and Giannakas, 2007). This trend is expected to be exacerbated due to rapidly increasing pressures on future economic performance. Members' commitment to their cooperative might be influenced by many different factors. For instance, the larger the members' investments in the cooperative, the greater commitment members will have toward their cooperative.

Member commitment could also be dependent on other characteristics of members such as age, education and communication with the organization. Characteristics of the cooperative such as type of cooperative, formation of capital base, debt to equity ratio, level of economic returns to farmer-members and how cooperative revolves equity also have systematic impact on the level of member commitment (Trechter, 2002). Despite an undermined member control, if an external capital formation can lead to higher economic returns to farmer-members, members' commitment to the cooperative may be positively influenced.

This dilemma will probably not occur if the cooperatives make sure that decision power over new investments would not be switched to debt providers. On the other hand, if the same level of control will be retained with the members after receiving funds from non-member financiers, they will not have confidence that their money will be spent well. Consequently, an organizational structure where a high member control is strictly prioritized will give outside financiers little incentives to invest money and will lead to unfavorable terms on outside equity compare to those faced by conventional firms (Hendrikse and Veerman, 2001).

Aim of the study

Member commitment in agricultural cooperatives has been a frequently discussed topic. A large number of studies have been conducted in this area. Capital formation of agricultural cooperatives has also been focused in many studies considering its importance for agricultural cooperatives.

In China, many studies have argued for debt capital's potential to stimulate the development of agricultural cooperatives in China. Debt capital has become more and more considered and promoted as one of the most important capital sources that can provide Chinese agricultural cooperatives with opportunities to improve their performances and achieve higher growth. However, despite such substantiated importance of member commitment and debt capital for cooperative businesses, we could not find any studies that explain how debt capital would affect member commitment in agricultural cooperatives.

The discussions above can be summarized into a more specified statement of the aim of this study:

The aim of this thesis is to clarify how debt capital in agricultural cooperatives affects member commitment in these cooperatives.

1.3 Approach

This study concerns whether debt capital has an influence on member commitment to the cooperatives. The background information provides the basic understanding of agricultural cooperatives in China and the theoretical framework gives the knowledge for an analysis of the finding from the interviews.

The empirical data in this study are gathered from interviews with representative managers of Chinese agricultural cooperatives. Data are used to test five theoretically derived hypotheses. After the data is analyzed in relation to the hypotheses conclusions are presented which correspond to the hypotheses and the purpose.

1.4 Value of the research

Much research has been focused on the difficulties, importance and approaches of external capital formation in general in agricultural cooperatives. With inspirations from these interesting studies, we hope that our research could improve the understanding of how the cooperatives´ member commitment could be affected by acquisition of debt capital in an agricultural cooperative. The findings could be useful for the managers and members in agricultural cooperatives once they face the question whether they should raise the level of debt capital in the cooperative. For those who have decided to do so, we hope that our findings could make it easier for them to prepare for the possible effects on the cooperative caused by the acquisition of debt capital. Additionally, the findings should also be valuable for outside actors, which provide debt capital to agricultural cooperatives such as commercial banks, cooperative banks, private lenders and government authorities. An improved understanding of debt capital`s effects on level of member commitment in the cooperative could enable these important outside actors to provide financial supports in a more sufficient way.

1.5 Structure of the study

This section provides a brief overview of the structure of this study.

Chapter 1 provides a formulation and an analysis of the aim and problem in this study and chapter 2 gives background information about the agricultural cooperatives in China. In the third chapter, the theories and the hypotheses will be presented followed by a discussion of the connections between them. The method of data collection and the test of the hypotheses will be discussed in chapter 4. Chapter 5 consists of a presentation and analysis of the empirical data followed by the chapter 6 in which the conclusions of this study will be presented and discussed.

2. Background information

2.1 The agricultural cooperative movement in China

Farmer cooperative organizations have been created quietly in rural areas in China since the 1980s and have started growing afterward. Chinese farmer co-operatives have been developing rapidly since the 2000s especially when the promulgation of Farmer Specialized Co-operative Law in 2007 (Xu and Wu, 2009). China has more than 150,000 agricultural cooperatives which consist of 38,780,000 members of which 34,860,000 members are farmers. These farmer cooperative members accounted for 13.8% of total number of national farmers in China (Ministry of Agriculture China, 2008).

Farmer cooperatives have been constantly increasing in number following the Law of Farmer Co-operatives was declared in 2007. In accordance with the National Industrial and Commerce Bureau's statistics, the number of registered farmer cooperatives was 440,000 by mid 2011 representing 20 million rural households. However, the number of farmer cooperatives will not yet stop growing considering the low persentage of the total population of farmers that has engaged in cooperative enterprises so far. According to taxation registration, cooperatives can be characterized as many types of firms, for instance, private partnership firm, co-operative-shareholding enterprises, limited liability companies, individual households, collective enterprises. Some scholars suggested that the real figure of cooperatives in China should be observed from the cooperative registrations (Yuan, 2001).

The development of Chinese farmer cooperatives has undergone three phases. During the mid of 1980s to the mid of 1990s, the establishment of household contract system and rural specialized households improved the technical and information services that were available to the farmers. Naturally, the cooperative professional organization has also established. In the late 80s to early 90s, Farmers have joined the market in accordance with an objective requirement of China's rural economic reform and development of market economy in which the professional association has provided member involved services, for instance warehousing and distribution (Ministry of Agriculture China, 2008).

The cooperatives in China have had a period of rapid transformation and development during the latest two decades. Cooperative businesses have been receiving more and more attention and support from the government and other public actors. As the cooperatives in many other developing countries, the cooperatives in China have been facing capital shortage problems during the transformation. This dilemma has constantly been a hinder for the cooperatives to grow and make greater contributions to the transformation of agriculture and rural developments in China. However, even though internally generated capital is often perceived as having higher quality than debt capital, previous research indicate that an increasing number of agricultural cooperatives in China have started making efforts to implement more modern and innovative strategies to mobilize capital from external sources to finance their activities and growth. However, managers in Chinese agricultural cooperatives have discovered the potentials and possibilities associated with debt capital sources. Additionally, political and economic efforts have been made to help cooperatives to overcome difficulties when borrowing money from banks. Hence, the proportion of debt capital in the total capital portfolio of agricultural cooperatives is expected to remain increasing.

In the late 1990s, China's agriculture and rural economy has experienced a new stage of development where the agricultural products have yielded a surplus after a long period of food shortages, difficulties in selling agricultural products and slow growth of farmers' income. Government solved such difficulty by supporting farmers to voluntarily engage in cooperatives and professional associations. These specialized cooperatives have been involved in various activities from fruits and vegetables, livestock, aquaculture, forestry, agricultural services, transportation, grain and oil crops, water reservation, resource development, and handicraft production (ibid).

After the declaration of Farmers' Professional Cooperative Law in October 31, 2006, the farmer cooperatives were constructed in accordance to the new law implying such things as the improvement of internal management, strengthening democratic, open up markets for agricultural products, and constantly improving the service features (ibid).

The concept of agricultural cooperative in China is the consequence of prolonged process of political and economic development to boost income and ensure food security for people. The government started off the policy with the commune system where later converted to collective system in which expecting farmer members to deliver food for the state. To meet the demand for freedom of action and decision making, the collectives gradually transformed into agricultural cooperatives (Prakash, 2002). The agricultural cooperatives in China can be divided into professional cooperatives and professional associations (Chinese Ministry of Agriculture, 2008). The most fundamental difference between these two types of organization is that the professional associations have to be nonprofit organizations.

2.2 Recent development in the agricultural cooperative movement in China

According to the development after China's market become more open and the reformation of institutional framework for farmers; Chinese government has improved the new version of cooperative development. Over the reform process in China, a continuous great change process has taken place in the rural economy and farmer cooperatives. Farmers have voluntarily joined the cooperative organization with the aim of developing the economy and operate under the basis of 'from the farmer, by the farmer and for the farmer' (Prakash, 2002).

The emergence and development of professional cooperative organization become gradually necessary during the changing from traditionally planned economic system into socialist marketing economic system. The reformation of marketing mechanism and procurement of agricultural products allowed the farmers to interact with market more easily. Further, such mechanism helps farmers adopt the new technologies faster, stocking of pre and post harvest to secure against risks, improve the production system to maximize resource and to raise income (ibid).

The process of development has now established more professional economic organization of farmers where they can earn higher income by the introduction of higher technology. The new forms of agricultural cooperatives after the reformation of the market maintain the autonomous rights of farmers where they can play various professional roles following their wills and becoming more professional. The organization structure and management is democratic and more independent in the decision-making processes. Cooperatives offer extended services required by farmer-members and profit distributed among members. Thus, all of these positive changes lead to an increased standard of living (ibid).

There are some major progresses and noticeable achievements made by Chinese farmer cooperatives and Government:

1) The establishment of the Law of the People's Republic of China on Farmers' Specialized Cooperatives in October 31, 2006 is the major change. The law allows the legal persons of farmer cooperatives to establish dominant positions in the market. The regulated organization and conducts ensure the members' democratic rights and their legitimate interests.

In order to ensure a smooth establishment of the new legal system, other legislations have been implemented such as "Regulations on the registration of farmers' specialized cooperatives by the State Council and the "Regulations on the accounting systems in farmers' specialized cooperatives in January 1, 2008 by Ministry of Finance (Ministry of Agriculture China, 2008). After the promulgation and implement of the Law, a good environment and development has been established among the agricultural cooperatives, which is the indicator of that China has entered the new stage of development following the new law.

2) The State Council has exerted the great effort to the construction and development of farmer cooperatives and gradually enhanced the policy support system. The central authorities have deployed the new series of development on the specific requirement and also set up the specific policy measurements to support the finance, taxation, credit, land, electricity, personal, and clear policy to respond the rapid growing of farmers' specialized cooperatives (ibid).

3) In 1994, the Ministry of Agriculture has carried out a demonstration program for farmer cooperatives allowing them to improve the democratic management through this trial study as well as providing the guidance for implementation of standardized industrial products and services. The program has been first launched in Anhui and Shanxi. Furthermore, 100 demonstration programs have been established in Zhejiang and other provinces during 2002-2003. From 2004 to 2008, 633 farmer cooperatives have implemented for the construction of demonstration projects supported by the Ministry of Agriculture under the Central Government. These demonstration programs were carried out in province, city, and county levels. The strong impacts of these demostration programs as well as the local policies have enhanced the cooperatives' capacity in production, technology, processing, warehouse, distribution and other services (ibid).

4) The farmer cooperatives differentiated more from other business forms in several ways: the operation of standardized production and unified service has enhanced the market position of cooperatives. The level of farmer income has increased through the adjustment of agricultural structure and the potential from internal organization. In terms of industrial management, the introduction of "one village one product" and "one product a community" has increased the bargaining position of farmers. The democratic management system has been strengthened under "one person, one vote" decision making among members. Overall, the farmer cooperatives strengthened their role as the leader of rural development in China (ibid).

5) Farmer cooperatives have enhanced their public recognition and reputation for past 50 years through the corporation with the Ministry of Agricultural. Various types of Chinese Media continued to promote the economic strength of cooperative organizations and its strong

reputation. The 5th China International Agricultural Product Trade fair in 2007 was the good example of the collaboration of 47 Chinese specialized cooperatives with both domestic and foreign merchants to stimulate the market demand and social expansion (ibid).

6) Concerning members' involvement of capital in their cooperative, the national regulations on cooperatives in China have no rigid requirement that members must own shares or other forms of financial contributions. Even though such regulations have been blamed for causing liability limitations, they have helped a big number of farmers with weak economic conditions to join an agricultural cooperative. Additionally, the national regulation does not require the cooperatives to have a minimum amount of capital in order to be registered.

Except the national regulation on agricultural cooperatives, which was implemented in 2007, many provinces have had different regulations on their local cooperatives. In some provinces that are more developed economically such as Zhejiang Province, the regulation requires that all members have to own shares in their cooperative and no less than 50% of the total shares must be owned by the members. In order to uphold the principle of democratic control in the cooperatives, another limitation that has been commonly used is that an individual member is not allowed to own more than 20% of the shares in the cooperative.

In order to face the scarcity of capital in rural parts of China, non-member capital has been promoted as another important capital source for the development of agricultural cooperatives. Non-member capital refers to capital such as loans, subsidies and donations. Both the local governments and central government have encouraged the involvement of non-member capital in agricultural cooperatives, not least by simplifying the cooperatives' application procedures of bank loans and other financial services. Furthermore, the newly implemented political directives have resulted in an increasing number of village banks that are more specialized in providing financial support to local cooperatives. In addition to that, agricultural cooperatives are also benefited from preferential taxation regulations.

Thanks to the lessons learned from international cooperatives and the national political reforms such as the implementation of the national cooperative law, agricultural cooperatives have transformed to one of the most successful enterprise forms in rural areas of China.

3. Theory

3.1 Property rights theory

Property rights theory was developed by Grossman and Hart (1986) and it is also referred to as incomplete contracting theory. Property rights theory is based on the assumption that no contracts can be perfectly complete because of asymmetric information which means that when some of the participants in a contract or transaction have certain information that is not accessible for other parties. According to Sykuta and Chaddad (1999:72), another argument for that no contracts can be perfectly complete is that individiuals' rationalities are affected by the limited information they have and their time limitations when making decisions. A property right is defined as the capacity to control or use a resource or asset and properly defined property rights are necessary for all kinds of cooperation (Demsetz, 1967). The core idea of property rights theory is that properly defined ownership could provide a solid foundation for the cooperative members to create, maintain and increase the assets of the cooperative. Cook (1995) claims that property rights are fundamental for cooperatives to reach sustainability and maintain a high level of member control in the organizations.

Theoretically, an individual member will only be interested and permitted to control the part that he or she has ownership of. It means that members' incentive and willingness to participate in the control of their cooperative is partly determined by the level of their ownership in the cooperative. However, the member owners of a cooperative wish to have the control over the cooperative based on the size of the share that they own in order to ensure that their personal interests will be prioritized in the best way. Unfortunately, although each member owns his or her own share of the total invested capital, the member has no right to control and make decisions over it (Nilsson & Björklund, 2003). Such vaguely defined property rights in agricultural cooperatives lead to a more complex decision-making process where members usually have different interests which cause conflicts and governance problems in cooperatives. Consequently, special expertise in handling intra-organizational conflicts is vital for cooperative managers in order to achieve internal stability among their members.

Compared to the small cooperatives with limited ability to get loans and simple organization structure; this problem might be more common in big and complex cooperatives where significant amount of non-member capital, such as debt-capital from banks or private lender, is involved. Once debt capital has been injected into the capital base of the cooperative, members' financial contribution, which indicates their ownership of the cooperative, will decrease relative to the increased total capital base. Consequently, members become less important financially and their incentives and also power to control the cooperative will also decrease which might in turn have negative impacts on member commitment. Additionally, when non-member capital lenders require and are given control over the cooperative, member control will be weakened even more. A low member participation in the governance of the cooperative leads to domination of managers in decision making processes in which the members' interests might not be the first priority (Burt & Wirth, 1990; Hind, 1997; 1999).

3.2 Agency Theory

When an individual or organization, the so-called "agent", acts on behalf of another who is called "principal". The conflict arises when the objective of the agent is different from the principle and also when the agents do not work for the interests of the principle but themselves (Alchian and Demsetz, 1972; Royer, 1999; Sykuta and Chaddad, 1999). All organizations in which ownership and control are separated will, more or less, have principal-agent problems since the principal and the agent have different interests (Cook, 1995). In a cooperative context, the principal can be the member and their board of directors is the agent (ibid). When the members who are also the owners and control the cooperative have different goals, the problem of principle-agent is likely to happen. The agent's responsibilities are normally described in the contract between the agent and the principal where it commands an agent to act in the principal's interests. Since the contract cannot be perfectly defined *"there are opportunities for shirking due to moral hazard and imperfect observability"* (Royer, 1999: 50).

The major point of agency theory is on incentive and measurement problems where the risk-sharing assumption can also not be ignored. Sykuta and Chaddad (1999:2) suggested *"most applications of agency theory focus on the incentive vs. risk- sharing trade-off of contracts aimed at aligning the interests of the agent with those of the principal."* Thus, this theory is very concerned with institutional structure of cooperatives since the manager (employed manager) may not represent the best interests of the principal (cooperative owner-member). The challenging point is, hence, to develop the ownership and capital structure for lowering the agency costs (Fama, 1980; Fama and Jensen, 1983).

The principal-agent problems further raise member dissatisfaction. Richards et al. (1998:32) argued that cooperatives have more experience of agency problems than investor own firms (IOFs) because of the lack of "capital market discipline, a clear profit motive, and the transitive nature of ownership." Since there is no market for cooperative equity, the monitoring from members of their mangers is likely to be less as opposed to investor own firms. Another difficulty for cooperatives is whether to design the incentive schemes to match with personal objectives of managers with those of cooperatives. Richards et al. (1998), using the data from a survey of cooperative members in Alberta, Canada, found out that managers mainly focus on the social role of cooperatives neither emphasizing the profit issue such as higher prices, return on equity, nor quality of service. These members seemed to be dissatisfied with their cooperative managers' performance.

According to the agency theory, there are several problems that are likely to arise when the ownership is separated from the governance of the business. One of the problems is called the free-rider problem, which refers to those situations when a person enjoys the benefits generated by common resources without making proportional contributions in order to create and maintain such resources. Since all the assets in cooperatives are collectively owned, every member has access to all the assets built up collectively. On the other hand, the members who quit the cooperative are not allowed to take those assets in the cooperative that these members have created. Such characteristics of cooperatives many times encourage the members to act as a free rider simply because members want to get as much benefits as possible from the cooperative while minimizing the level of their personal contributions.

In addition to that, the members of a cooperative and its management have in many cases different, sometimes contradictory, demands on the business. Such differences will cause the so-called horizon problem, which consists of pressure from the members in order to increase the current patronage refund rather than to make expensive investments for more long-term benefits. Horizon problems are difficult to avoid, especially for large cooperatives, because the individual members' planning horizon is dependent on a complicated combination of factors such as their age, experience, values, etc. On the other hand, management teams in cooperatives plan their strategies and decisions based on the time that they will be elected and employed. As long as the members and the managers have different time perspectives, the development of the cooperative will be inhibited since not all members' interests can be optimized.

3.3 Social capital theory

Like other types of capital, social capital is productive and makes it possible to achieve goals that would not be possible in its absence (Coleman 1990). Social capital consists of social networks and norms of reciprocity and trustworthiness (Putman, 2000). Social capital is important in all kinds of inter-personal and inter-organizational relationships because its ability to reduce the risks that the actors in a relationship would behave deceitfully.

The existence of social capital in a relationship can be indicated by the level of trust. Both in social life and business contexts, the more trust the partners have on each other, the easier it is to cooperate without having high transaction costs. There are different kinds of transaction costs. For example, the costs for reaching appropriate agreements between the parties involved and also the cost of monitoring another party in order to make sure that it acts according to the agreed contract (Malone, Yates, and Benjamin, 1987). In other words, an investment of financial capital might not lead to expected results if social capital is not strong enough (Nilsson, Svendsen & Svendsen, 2012). In addition to the ability to reduce transactional costs, social capital generates high decision flexibility, which in turn improves productivity and growth (Gabre-Madhin, 2001). According to Gilson (2003), the organizations with relatively high social capital are usually more efficient than those with low social capital.

"The cooperative spirit is widely accepted as the main force of the cooperative." (Dnes and Foxall, 1981). This can be interpreted as cooperative's social capital. Social capital may be regarded as another crucial production factor in agricultural cooperatives in addition to traditional ones such as human and physical capital (Coleman, 1988). The term "social capital" has been defined differently depending on the context in which the term is used. Considering that this study is focused on agricultural cooperatives, social capital is in this study defined as a set of resources such as values, norms, trust and loyalty that are accumulated over time in the cooperative through social relationships, which facilitates the completion of goals (Leenders and Gabbay, 1999).

Valentinov (2003) claims that agricultural cooperatives are much more dependent on social capital compared to other types of organizations. Agricultural cooperatives are designed as a network that connects and gathers farmers to better coordinate resources and achieve common goals. These farmer members are voluntarily gathered instead of running their own farms individually. Therefore, social capital will always be one of the keys to connect and maintain these individual farmers as a united entity working for common goals. Even though managers in an agricultural cooperative might achieve favorable short-term results by making their own decisions, the success is difficult to be maintained in the long run without the members participating in the cooperative system. An active member participation in the cooperative operation provides better opportunities for the management to build up close relationships, including loyalty and trust, with farmer members which in turn results in higher social capital.

Social capital can be important for agricultural cooperatives in different aspects. A high level of social capital in an agricultural cooperative means that the members are more likely to comply with agreements and trust each other, which in turn contributes to reduced transactional costs. A lack of trust between managers and members leaves the members no choices other than spending valuable resources on formal agreement and monitoring whether the managers are acting according to the contract. As an owner and investor of the cooperative, each individual member's commitment to the cooperative is based on the expectation and belief that he or she can benefit from the collective actions.

Unfortunately, it is not always easy for the cooperative members to feel completely confident about that their interests will be prioritized since most decisions will be made by a small number of managers. In order for the cooperatives to minimize such possible agency problems caused by information asymmetry, social capital in the form of trust, especially between farmer members and the managers or board, will be significantly important. Only after the trust has been built up among members, their commitment will be stimulated and maintained in the agricultural cooperatives. Without such trust and confidence in the management, the managers' decisions are less likely to be supported and member commitment could be negatively affected.

The level of social capital in a cooperative could also be indicated by the level to which farmer members are willing to contribute capital in different forms to the cooperative (Sexton and Iskow, 1988). Additionally, a good relationship and trust between members are the social capital that is highly necessary in order to avoid conflicts between members; since they all expect to benefit by the same collective actions as each of them may have different interests at the same time. When agricultural cooperatives operate to achieve long-term goals, social capital in the form of loyalty makes sure that the members remain supportive and committed when the cooperative facing temporary losses even without explicit contracts.

As has been mentioned before, the free-rider problem weakens the members' incentives to invest in their agricultural cooperatives. According to Paldam and Svendsen (2000), such free-riding problems could be reduced by building up strong social capital, which requires close communications and active participations between members and managers.

3.4 Theoretical conclusion

Based on the theoretical discussion above, following figures are constructed to illustrate the key elements of the theories and the theoretical conclusion. Each figure is followed by a description that explains the figure.

Property rights theory

Non-member Debt capital $\Uparrow$

$\downarrow$

Asymmetric information $\Uparrow$, Members' ownership $\Downarrow$

$\downarrow$

Member control $\Downarrow$

Figure 1: Illustration of theoretical conclusion based on Property rights theory

Based on the property rights theory, we assume that an increased level of non-member debt capital in agricultural cooperatives might lead to weakened member control considering increased asymmetric information and decreased member-ownership.

Agency theory

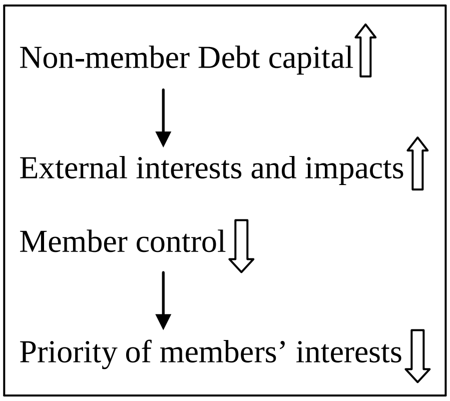

Figure 2: Illustration of theoretical based on Agency theory

When non-member debt capital increases, external lenders take over a bigger control of the cooperative and members have less control over their cooperative. It means that external interests will have bigger impacts on the cooperative and members' interest becomes a lower priority.

Social capital theory

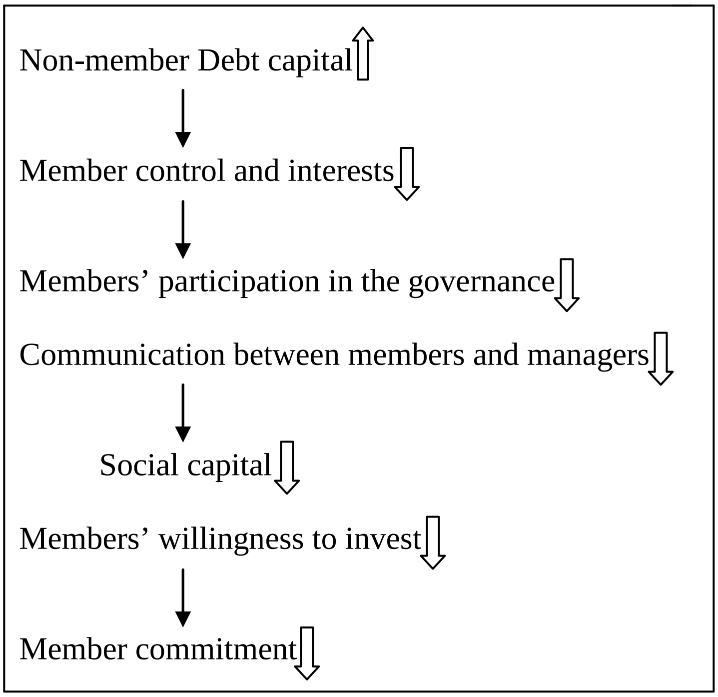

Figure 3: Illustration of theoretical conclusion based on Social capital theory

Once member control and priority of members' interests become negatively affected as the first two figures illustrated, level of social capital is likely to be weakened considering decreased member participation and communication between members and managers. As a consequence of that, members' commitment to their cooperative will be undermined.

3.5 Hypotheses

In accordance with the theoretical discussion and conclusion above, debt capital's effects on member commitment in agricultural cooperatives will be measured by five indicators including members' willingness to invest, level of member control, superiority of members' interests, members' benefits from their cooperative, level of social capital.

The following hypotheses are constructed based on the theoretical discussion and conclusion above:

Hypothesis 1

The more non-member debt capital an agricultural cooperative has, the less financial contributions the members will make to the cooperative.

As debt capital accounts for a bigger part of the total capital basis, the farmer members will perceive that their role as financiers has become weakened and less important for the cooperative. The member might prefer to enjoy benefits generated by borrowed money instead of taking more risks by investing their own money. Debt capital means in many cases higher risks for the agricultural cooperatives and these cooperatives are often said to be risk-averse (Hendrikse, 1998). In such situations, the members will be even more frightened of investing more money if they think that the repayment risks and other terms attached to the loans might lead to an increased uncertainty to the cooperative's long term success, especially for those members who joined the cooperative to reduce the risks of his or her overall agricultural operation. Whether the members think that the debt capital will be used to finance risky projects and strategies such as market integrations (Nilsson 2012) also influence the level of members' concern caused by the debt capital. Additionally, an increased level of influences from non-member lenders might also lead to weakened incentives for the members to invest as a result of the members being more uncertain that their interests will be the main priorities of the cooperative.

Hypothesis 2

The more debt capital an agricultural cooperative has, the more benefits members will get from their cooperative.

An increased level of financial capital gives managers extra financial strength so more investment opportunities could be considered. As the cooperative grows, the members might be more satisfied considering the benefits generated by a bigger scale of business, improved services and increased incomes. Such an increased level of satisfaction has positive impact on the social capital in the cooperative.

Hypothesis 3

The more non-member debt capital an agricultural cooperative has, the lower is the level of member control (participation) in the cooperative.

In order to provide desirable services and improve the members' wealth, it is very important that the members actively take part in the governance of the cooperatives (Bhuyan, 2007; Gray & Kraenzle, 1998). As the financial capital grows bigger, the management tends to make the control over the cooperative even more centralized to the CEO and managers. Consequently, the members will have more difficulties to present their interests in the governance of the cooperative. In addition, property rights theory says that a member is only interested to care about the part that he owns. Once each member's investment in the cooperative accounts for a smaller part of the total capital basis, the members' will have less motivations to spend time and resources to practice member control by actively seeking information, electing qualified directors and attending meetings. Thus, the more debt being involved the lower is the level of member control in the cooperative.

Hypothesis 4

The more non-member debt capital an agricultural cooperative has, the less the cooperative will be perceived as working for the interests of the members

As a consequence of the influences from debt capital providers and members' weakened incentives, an increased non-member debt capital undermines the members' control of the cooperative. Without being able to influence the decisions, the members lose their incentives and motivations to actively share and participate in the governance of the cooperative. In turn, the power to make decisions will be increasingly concentrated on the non-member financiers and management in which the members' interests might not always be prioritized or understood in the first place.

Additionally, the management of the cooperative might need to reconsider and adjust the operation and strategy of the cooperative in order to make repayments and follow other loan covenants. Such concerns and changes might be, at least interpreted by the members, restricting the managerial flexibility and sacrificing the interests of the members. Also, a stronger capital basis might also arouse the management's ambition to expand the business instead of offering the members better payments and services.

According to Staatz (1987) and Hendrikse (1998), most of the members invest in agricultural cooperatives to reduce the risks in their farming activities. Considering the risks embedded in the cooperatives' acquisition of debt capital and fast expansion, the members who involve in the cooperative to reduce the risks would not be committed to the management's decisions. These risk-averse members will think that the goals that the management works for are totally contradictory to their own interests.

Hypothesis 5

The more non-member debt capital an agricultural cooperative has, the less social capital this cooperative will have

The amount of social capital is dependent on the level of trust, member participation, relationships and other social factors. As it has been mentioned before, an increased portion of debt capital might have, in different aspects, negative effects on the involvement of members in the governance. A lack of such member participation and involvement blocks one of the most important communication channels that should be used to exchange opinion and information in order to achieve higher social capital in the form of understanding and trust between the members and the managers. Except that, the trust between the managers and the members might also be suffering considering the increased risk that other interests will be prioritized over the members' interests. For those members who joined the cooperative in order to reduce the risks of their overall farming activities, their trust and commitment to the management would be seriously damaged if they perceive the acquisition of debt capital as unacceptably risky.

4. Methodological issues

4.1 Choice of method

In order to test the hypotheses in the previous chapter, the empirical data used in this study was collected via phone interview method in April 2012. The interviews were carried out with seven cooperatives from Zhejiang province, China.

The choice of method that we could use in this study such as Internet survey and online questionaire was limited by a low usage of Internet and other computer based communication tools among the managers and farmers in rural areas of China. Due to the time and budget limitation, the phone interview method was used to collect qualitative data. We believed that a qualitative method, which means more explicit explanations and examples, would help us to better understand the topic that our study is focused on. Although the phone interview does not provide the same quality of empirical data as the face-to-face interviews, the authors do believe that the data collected via this method was important to this study.

4.2 Selection of interviewees

Initially, our supervisor, Jerker Nilsson, introduced us to a Chinese Professor from Zhejiang Province, China. Later, we were in touch with him via email. A Chinese professor futher introduced us different types of external capital that are commonly used by Chinese cooperatives and kindly provided us the list of 18 Chinese agricultural cooperatives from Zhejiang, China. The list consisted of names of the cooperatives, contact persons, and their phone numbers. These cooperatives were contacted via phone (Skype) and asked for an interview with one of their managers and a member representative.

After contacting all 18 cooperatives, managers from seven cooperatives were willing to be our interviewees but none of them provided us possibility to interview a member representative from their cooperatives. Seven other cooperatives rejected our interview, neither with the managers nor with the members. Unfortunately, we were not able to contact with four cooperatives because of invalid contact information. The reasons that the managers gave us for why interviews with members were denied were that the absolute majority of the managers in the cooperatives are also members of it. In addition, most of these managers are engaged in highly identical farming activities as members without managerial duties. The managers from all seven cooperatives were confident that they had deep insights and understandings about their members' standing points and therefore able to represent their members in our interviews. However, we suspected that the lack of information from non-manager members might make our results less reliable and representative and because of that, we made several changes and reformulated some of the interview questions. These changes mean that the managers were not only asked for answering our questions based on their own views but also what they think the members' opinions are. By doing so, we hope that we can, to a certain extent, compensate the lack of information from non-manager members.

4.3 The interviews

Each of our five hypotheses, as presented in chapter 3, is tested by a set of open-ended questions. Some of these open-ended questions are expected to provide answers that can be used in the analysis of more than just one hypothesis. Without changing the purpose of the questions, these 5 sets of questions were mixed and asked in an order that we thought would be least inconvenient for the interviewees to give more explicit answers. Despite this, we would not be surprised if some of the managers chose to avoid sharing the information that would negatively affect the reputation of their cooperative. All the phone interviews were made in Chinese Mandarin and were implemented with a question guide containing short questions about the background of the cooperative and more open-ended questions concerning debt capital and member commitment. The original question guide for the interviews is found in the fifth chapter and the appendix.

Each interview lasted for about 30 minutes. In the beginning of the call, interviewees were informed about the aim of the thesis as well as an introduction about ourselves. In addition, each interviewee was asked for permission for recording their responses. Out of seven cooperatives that were willing to participate in our study, five did not mind that their names would be mentioned in the paper. So, five agricultural cooperatives will be referred to by using their names and two other one as cooperative A and B. All seven cooperatives are listed in Table 1. Two mobile phones have been used as voice recorder. Most of the calls have been made during office hour 15.00-16.00 on weekdays (+7 GST time) in China. After all the interviews, the recorded answers were translated by the same author into English and further used for discussion and analysis in the following chapters.

Table 1: Names of interviewees, positions and name of their cooperatives

Qi Long Li	Manager	Fu Yang Hu Yuan Chicken Cooperative
Xue Sheng Wang	CEO	Hang Zhou Ban Shan Fruit Cooperative
Gen Fa Wang	Manager	Jian De San Du Saffron Cooperative
Chong Gen Zhang	CEO	Tong Xiang Dong Jia vegetable Cooperative
Liu Sheng Yan	CEO	Jia Xing Wan Hao vegetable Cooperative
Manager A	Manager	Fruit and vegetable Cooperative
Manager B	CEO	Vegetable Cooperative

4.4 Summary

In this study, we used a qualitative approach in the collection of empirical data. We made phone interviews with seven agricultural cooperatives from Zhejiang province in China. During the interviews, we used a question guide containing short background questions and open-ended questions. The interviews were made with chief executive officers and, in three cases, other top managers in the cooperatives.

All the interviews were made in Chinese Mandrine and each interview lasted for about 30 minutes. Two of our seven intervees required to be anonymous when presenting their answers in this thesis.

5. Empirical findings and analysis

5.1 Introduction

This chapter includes a presentation and analysis of the empirical findings from the interviews as described in Chapter 4. The presentation and analysis follow the same structure and order as the five hypotheses listed in Chapter 3. Firstly, each of the hypotheses will be once again declared and briefly explained followed by a presentation of the interview questions that were used to test the hypothesis. After that, the answers from the different cooperative managers, which are relevant to connect to the hypothesis, will be presented and analyzed. In the end of each section that concerns one hypothesis, whether the hypothesis was supported by the empirical data or not will be discussed. Bases on the analysis of the interview answers, a summary of the results from the five hypotheses will be presented in table 2 in the end of this chaper.

5.2 Hypothesis 1

The more non-member debt capital an agricultural cooperative has, the less financial contributions the members will make to the cooperative.

This hypothesis concerns the relationship between members' willingness to invest capital in the cooperative and the cooperative's acquisition of debt capital. It was assumed that the members would be less willing to invest in the cooperative once the cooperative starts using debt capital. The interview questions that are asked to test this hypothesis are:

1. What are the incentives for the farmers to join your cooperative?
2. Are there any members being concerned about that the cooperative might have difficulties to make repayments and fulfill other terms of the loans?
3. Do the lenders' influence on the cooperative business affect the members' willingness to make financial contributions to the cooperative?
4. How do you think the cooperative's dependence on the members' investments has changed after acquiring debt capital?
5. How often have the members made investments in the cooperative compared to the time without debt capital?

Most interviewees claimed that their cooperative became much less dependent on the capital provided by the farmer members after the acquisition of debt capital. The loans are much larger than the member capital in the form of member shares and member fees. Two interviewees even said that their cooperatives' businesses would not be affected if some members want to quit the cooperative and withdraw their shares from the cooperative. Only one of the cooperative's representative that were interviewed still raises funds from their members regularly and there have not been significant changes concerning members' attitudes towards investing in the cooperatives. One comment that was frequently mentioned by the interviewees was that the loans became easier and easier to get once the relationship with the lender was established.

"From the members' perspective, the acquisition of debt capital made us released from the pressure that we have to collect enough capital all by ourselves. Most of our members have very limited resources and some of them can barely afford fertilizers and pesticides during the peak seasons. (Qi, 2012)"

"Before investing, the members must know that their investments will be taken good care of and can generate profits for them in the form of a yearly bonus. Also the members have to see that the cooperative is developing in the right direction. Debt capital was the key for us to achieve that. (Xue, 2012)"

"The biggest reason that many of our farmers invest in our cooperative is that they will get an attractive amount of year-end bonus based on the shares they have in the cooperative. (Chong, 2012)"

All the cooperatives that we interviewed claimed that the member investment was very low already before the involvement of debt capital, which explains why the cooperatives needed loans in the first place. As one of the interviewees said *"the capital collected from the members is far from enough to buy all our members' products." (Manager B, 20120).* The majority of the members in his cooperative has made very limited financial contributions to the cooperative simply because their economies do not allow them to. Four of our interviewees commented that the government during recent years has made it relatively easier for the cooperatives to acquire debt capital as a part of the effort to encourage and support the agricultural cooperatives to intensify their role as engines that lead the farmers to a wealthier life.

"Except a very small amount in the form of member fee that every member must pay when they join the cooperative, only about 30% of our 1600 members have made additional investments in the form of shares of the cooperative. Sometimes, members had to borrow money to be able to invest in the cooperative. As a manager of the cooperative, we always keep in mind our role and try to benefit as many farmers as possible in a concrete way, including those members without the opportunity to contribute to the cooperative financially." (Liu, 2012)

Three interviewees claimed that the influences from the lenders have caused some inconveniences among their members. Two of these cooperatives borrow money from private lenders who are relatively rich and well established in their respective villages. Even though compromises are sometimes necessary, the members of these cooperatives seem to understand the importance of the borrowed money. The influences from the lenders were not considered as a big problem that harms the members' commitment to the cooperative given that the members have enough trust on the managers and the borrowed money enable the members to make more profits. Other cooperatives claimed that the lenders' involvement has not caused any unwished reactions among the members. Despite the existence of different opinions from the members and lenders, the managers in these cooperatives have been trusted by both groups and succeeded to make decisions that are best for the members.

"It is true that our members sometimes do not have the same opinions as the lenders. But it is also true that the members now can make more profits from their vegetables and other benefits generated by the borrowed money. Anyway, I have heard stories about disputes between members and managers mostly as a result of the members' suspecting and being uncertain about the lenders intensions. What I think is that a close and trustworthy

relationship with our members and lenders is enough to minimize dissatisfaction caused by disagreements between the members and the lenders." (Chong, 2012)

Three of our interviewees told us that they have never had problems with the amortization of the loans. Such good performances from managers was mentioned frequently as another important factor that creates and maintains the level of members' trust in the management, despite the possible risks and uncertainties attached to different decisions such as taking loans. In other words, the increased risks caused by the usage of debt capital would not affect the members' engagement in the cooperative business as long as the risks can be outweighed by the members' hope for higher economic returns and their trust on the managers.

"Of course we have to consider the lenders' opinions when making decisions. These financiers have very close relationship with the cooperative and sometimes they do not even require interests for the loans. We all appreciate their help and we can understand that they can have their opinions in order to make sure that we can pay back the money." (Qi, 2012)

"Even before the acquisition of debt capital, we had a hard time to make all our members happy simply because they did not always have completely the same view on every decision. What has been very important is that not only the managers but also the board members are very competent and, more importantly, respected among local farmers." (Gen, 2012)

"Our cooperative has never had problems with paying back the money since we started borrowing so we no longer think there are big risks with the existing level of debt capital." (Xue, 2012)

"I think there will always be some members feeling less satisfied than others no matter external lenders are involved or not, but as long as the members have enough trust in the managers, the members' engagement in our cooperative would not be undermined." (Manager A, 2012)

We could find details from almost all the seven interviews that partly support our first hypothesis concerning debt capital and the members' willingness to invest in the cooperative. In accordance with the agency theory, we found indications that the external lenders' influences on the cooperative resulted in more severe principal-agent problems which means that the members had decreased power to monitor and influence the cooperative. Different from what has been discussed in the agency theory, such increased principal-agent problems have not been specifically mentioned by the interviewees as the main cause of the significantly decreased member investments in their cooperatives. All the interviewees mentioned that their members have very limited resources to contribute member capital to the cooperative. The answers indicated that there is a common understanding of the members' tough economic situations and therefore an acceptance of the members' free-rider behaviors among the cooperative managers. These cooperatives try to live up to the expectation from the society and the government as a tool to enable the members to have higher incomes, including those with no money to make investments in the cooperatives which, according to the agency theory, could be considered as free riders.

In line with the social capital theory, it seems like social capital in the form of trust and personal relationship between the managers and members has an important role. The members' hope for higher incomes and their trust in the managers eliminate their fear that the lenders' influences would harm the interests of the members. According to the social capital

theory, a suspicion among the members that their interests are being suffered will weaken productivity in the cooperative.
Additionally, five of seven interviewees agreed that debt capital have led to higher risks for their cooperative. However, the interview answers did not show that the members became more uncertain to cooperate with their cooperstive because of the increased risks. The reason to this could be found in the social capital theory which says that a high level of trust between the members and the managers makes it easier for the members to be committed to more risky decision.

5.3 Hypothesis 2

The more debt capital an agricultural cooperative has the more benefits members will get from their cooperative.

Hypothesis 2 concerns the relationship between debt capital in agricultural cooperatives and its ability to generate more benefits to its member. It was assumed that the usage of debt capital in agricultural cooperatives will lead to improved performance and therefore increased benefits to their members. The interview questions that are asked to test this hypothesis are:

1. How has the acquisition of debt capital contributed to the financial performance and results of the cooperative?
2. How has the members been benefited by the acquisition of debt capital so far? Give examples.

As we expected before the interviews, the responses from all seven cooperative managers indicate that the debt capital has given the cooperatives much stronger capital basis, which open up for new business opportunities. According to our interviewees, the loans used to be mainly spent in areas such as marketing, factory buildings, and purchase of members' products and members support.

Many of the interviewees emphasized the importance of investments in marketing. Some of them also shared the understanding and awareness that their increased expenses in the marketing will in many cases have indirect and relatively slow effects on the members' incomes. Even though it has been mentioned that some members used to have a less optimistic view on the actual effects of such types of long-term investments, the majority of the members share the view that the investments in different marketing tools and activities are necessary for a sustainable growth of their cooperatives.

In most cases, the acquisitions of debt capital in these seven agricultural cooperatives have generated more direct and concrete benefits to the members. By using debt capital, the cooperatives have been able to pay higher prices to their members. Four of the interviewees mentioned that they always try to buy their members' products for higher prices than what other buyer would offer them. In other words, the members can increase their income simply by selling their products to their cooperative rather than other buyers. Even though the acquisition of debt capital cannot give any guarantees that the cooperatives will always have a positive result at the end of the year, the members can still be benefited considering their cooperatives' stable purchases and high payments for the members' products. Such advantages will be extra clear and important for the members when the demand and prices in the market become unstable.

In addition, as the number of members grows fast in many cooperatives and considering that these members normally have very limited capital to invest in the cooperative, the cooperatives have to find capital from other sources to be able to pay for the increased trading volume from the members. Without acquiring additional capital, the cooperative would offer the members a lower price for their products or restrict the number of members, which would cause dissatisfaction among the members. One of the managers also said that a part of their debt capital has been used as microloans to the members who cannot afford farming inputs.

"For instance, the price that the cooperative pays for the members' peaches has increased from 0.8 Yuan to more than 2 Yuan in a short period of time." (Xue, 2012)

"The members know that the cooperative always offer them higher prices than if they sell in the local market." (Liu, 2012)

"Except that we offer a price that our members are satisfied with, we have plans to take out a bigger part from the profits to return to our members based on their trade with the cooperative." (Qi, 2012)

"Based on my experiences, what our members are attracted to is firstly, a reasonable and relatively stable price for their products and a high repatriation of profits in the end of the year. As you can see all of these require more capital for the cooperative. I know many cooperatives being forced to restrict the number of their members because these cooperatives would not be able to afford the costs of a significantly increased trading volume from the new members." (Managr B, 2012)

"Thanks to the loans from the local cooperative bank, we could build our own cold storehouse. For a cooperative like us, selling fruits or vegetables, having our own cold storehouse is very important." (Manager A, 2012)

We can claim that our second hypothesis has been supported by the answers from the interviewees. Debt capital in these seven cooperatives has had important effects on the members' increasing incomes and it allows the cooperatives to benefit farmers even more. The debt capital has also helped the cooperatives to improve their long-term competitiveness. An increasing income has been mentioned many times by our interviewees as the best possible achievement that would make the members satisfied with the cooperative. Such satisfaction generated by the debt capital made the members more loyal to their cooperative which, according to the social capital theory, significantly strengthens the members' commitment to their cooperative. In turn, the concrete profits to the members also minimize the principal-agent problem which is, according to the agency theory, common among cooperatives.

Additionally, an increased social capital in form of members' loyalty to the cooperative is essential for the management to optimize the benefits from the debt capital (Nilsson, Svendsen & Svendsen, 2012).

5.4 Hypothesis 3

The more non-member debt capital an agricultural cooperative has the lower is the level of member control participation in the cooperative.

Hypothesis 3 concerns how the level of member control would be affected by involvement of debt capital in agricultural cooperatives. Our assumption was that the involvement of debt capital in agricultural cooperatives would lead to decreased level of member control. The interview questions that are asked to test this hypothesis are:

1. How engaged are the members when it comes to seeking information, attending meetings and express their opinions? Compare to before debt, why?
2. How much can the members influence the decisions now, compared to when no debt capital was involved?
3. What are the members' views of the risks that are attached with the debt capital of your cooperative?
4. Do the lenders give their opinions and advices about the operation of the cooperative? How does the management handle them?
5. Except the possible influence from the lenders, are there any changes in the operation or strategy in order to adapt to the terms attached to it (e.g. repayment and interests)?
6. Do the members have opinions about how to use the borrowed money?

Even though the interviewees have not directly pointed out any big changes on the level of member control after the acquisition of debt capital, there were many comments that we found interesting.

Six of our seven interviewees claimed that the lenders used to have suggestions and opinions about the cooperatives' operation and strategies. Normally, the lenders do not have the formal right to involve in the governance of the cooperative but it is still very common that the lenders become involved in one or another way. The level of the lenders' involvement seems to be higher in those cooperatives with private lenders and most of the interviewees in these cooperatives had a positive attitude about it.

Except one interviewee who refused to follow the lenders' advice, all other interviewees claimed that they have been willing to think over and discuss about the lenders' suggestions. They did not have anything against following the lenders' advice as long as the suggestion can be beneficial to the members and supported by the member representatives in the board. One of the interviewees further explained that even though the private lenders might not always be experts in what the cooperative is doing, they are still relatively successful actors in the village. In other words, many of the lenders' advices have been very innovative and constructive, especially when it comes to marketing, accounting, sales or other areas in which the agricultural cooperatives in China usually have limited knowledge and experiences.

"Of course we have to consider the lenders' opinions when making decisions. These financiers have very close relationship with the cooperative and sometimes they do not even require interests for the loans. We all appreciate their help and we can understand that they can have their opinions in order to make sure that we can pay back the money." (Gen, 2012)

"These lenders are all rich and very well-established people in our local society. From a manager's perspective, it is of course important to keep a good relationship with these rich

and influential people, at least for the interests of the cooperative. But of course, the managers would not do anything that is harmful for our members. We and many of our close relatives are also members of the cooperative." (Chong, 2012)

Considering the fact that almost all of our interviewees have shown a clear understanding and acceptance of lenders' right to give comments and advice to the cooperatives, these are reasons to believe that the lenders' influence in the governance of the cooperatives might be taking over a part of the controlling power from the members. The size of such redistribution of controlling power is dependent on how much the lenders try to involve themselves in the affairs of the cooperative and also how the managers handle the lenders' attempts to become involve. However, whether such influences from the lenders would harm the members' interests will be discussed in the section dealing with the fourth hypothesis.

In addition to the private lenders, four of the cooperatives we interviewed acquired debt capital from local financial institutions such as cooperative banks or commercial banks. In recent years, these financial institutions have become very important tools used by the government to encourage and supervise the development of agricultural cooperatives in China. A big series of reforms in the cooperative banks and commercial banks have to different degree facilitated and regularized capitalization in Chinese agricultural cooperatives.

Instead of actively influencing the cooperatives' decisions as we discussed about the private lenders, the financial institutions are involved more as regulators who have formal rights to monitor the cooperatives' operations and economic situations. For the cooperatives who have borrowed money from these banks, such monitoring means that the managers of the cooperatives have to regularly submit their account records and other reports to the banks about their economic status, governance structure and other important issues. An inability to provide such information and fulfill the requirements would lead to rejection from the banks or suspended payments of the loan until the failures have been corrected. One such area that the banks use to keep an eye on is the cooperative's routines of democratic member control. All the interviewees whose cooperatives have borrowed money from local financial institutions mentioned the lenders' formal requirements that a democratic member control needs to be practiced and it has to be reported regularly.

"Our capital basis had a dramatic increase after receiving loans from the bank. We faced pressures from both the lender (cooperative bank) and the board that the cooperative had to adopt more clear and regularized routines of democratic control in order to make it easier for the members to participate in different decision making processes." (Qi, 2012)

"After acquiring debt capital from the banks, what we have seen is that more members became more curious and interested in the governance of the cooperative. Except the supervision by the bank, also the farmer members started suggesting more organized governance routines and practices." (Liu, 2012)

"We need to submit notes and accounting book every quarter to show how we have used the money." (Manager B, 2012)

However, even though we could not find anything that indicates the financial institutions' direct participation in the governance of the cooperatives or direct influences on their decision making, many interviewees emphasized that the banks had power to reject the cooperatives' loan application if they did not like the cooperatives' plan about how to use the loans.

“In our case, the credit cooperative has large power to influence how the cooperative uses the borrowed money. We needed to describe our plan in detail in our application for loan how we want to spend the money and it happens sometime that we adjust our plans to make sure that our application will be approved.” (Manager B, 2012)

For some of the cooperatives that we interviewed, it seems like acquisition of more capital have had a positive effect on members’ willingness to participate in the governance of their cooperative.

“As the size of our cooperative grew, my personal view is that the members have become more curious about the cooperative.” (Xue, 2012)

All of our interviewees claimed that debt capital gave them more hope about the future and they were all expecting a faster expansion of the cooperatives’ business. The details from their comments about their future ambitions and expansions revealed another very interesting consequence that debt capital can cause on level of member participation in agricultural cooperative: As the cooperatives’ capital basis grows larger, the managers have now possibilities to further develop and expand the cooperative. Such expansion and growth means that the cooperative have to start making more complicated decisions in those business areas that the managers, even less for the farmer members, have never been involved in before. It might be increased needs of marketing activities, extended cooperation with supermarket chains, vertical or horizontal integrations and so on. Considering the high complexity that use to be connected with these issues and the Chinese farmers’ low educational level, it is very likely that the farmer members will experience an inability to understand the problems, even less the solutions, and therefore not being able to influence the decision making processes as much as he or she did in the past when problems and decisions were much easier to grasp.

“In the very beginning stage of our cooperative business, we had less members and a small capital basis. At that time, the decisions were of very simple nature and all the business were done locally without being involved in any unfamiliar issues.” (Qi, 2012)

“Before our business became serious, we didn’t have to work with more complex issues such as marketing, branding, distribution management or market integrations simply because we did not see any need of that and would not be able to afford it either.” (Gen, 2012)

“Our capital basis now is so much stronger than before we started acquiring loans from others and this allows us to expand the business which means that more and more of those more complex issues have become absolutely necessary and affordable for us.” (Manager A, 2012)

Regardless of whether the debt capital came from private lenders or institutional lenders, debt capital caused increased influences from the debt providers and more asymmetric information which decreased the members’ control of their cooperative. Debt capital also led to a more complex capital structure and therefore a more vaguely defined ownership of the cooperative which, according to the property rights theory, would also decrease the level of member control. Additionally, the level of member capital which indicates the members’ ownership of the cooperative decreased significantly in relation to the strenthened capital base. According to the property right theory, such a perception of a shrinked ownership weakens the members' incentives to control their cooperative.

Compared to the private lenders, the acquisitions of debt capital from institutional lenders such as cooperative banks or commercial banks had less negative impacts on the members' control of their cooperative. Except the banks' role as regulators who can monitor the cooperatives' major activities, level of member control in cooperatives might also be weakened considering financial institutions' right to disapprove cooperatives' original plans of how to use the loans. Considering the Chinese farmers' low managerial skills, member control also decreased when managers spent the borrowed money on quick expansions involving much more complex problems and decisions. However, this type of negative impact on member control has a more direct relation with cooperatives' quick expansions and increasingly complicated business activities rather than debt capital itself.

In addition to the negative effects, it can be expected that acquisition of debt capital from financial institutions will also have certain positive impacts on the level of member control. The reason is that all agricultural cooperatives that want to take loans have to accept and follow the financial institutions' supervision and requirements for how democratic governance should work in agricultural cooperatives. On the other hand, the actual size and results of such positive influences should not be exaggerated or excessively generalized considering such formal regulations from the banks, as many other formal regulations in China, might not always be followed as they were once expected to.

5.5 Hypothesis 4

The more non-member debt capital an agricultural cooperative has, the less the cooperative will be perceived as working for the interests of the members.

Hypothesis 4 has a connection with the third hypothesis. It concerns whether members' interests would be less prioritized after acquisition of debt capital. Our assumption was that the more debt capital a cooperative has, the less the members' interests will be prioritized. The interview questions that are asked to test this hypothesis are:

1. What are the members' biggest interests in your cooperative?
2. Do the debt providers give their opinions and advices when the management is making important decisions? How do you handle it?
3. How has the management's ambition to expand the cooperative changed after receiving debt capital?
4. Have you noticed any changes (strategically or managerially) in the operation of the cooperative since the involvement of debt capital? How have the members interpreted and reacted to these changes?
5. Is one of the incentives that made the members joining the cooperative that it might reduce the risks of the farmers' overall farming activities?
6. Do you think that the debt capital increases the risks that the cooperative is exposed to?
7. Which activities have been financed by debt capital?

As discussed in the analysis of hypothesis 3, debt capital can have both positive and negative influences on level of member control in agricultural cooperatives. Similarly, debt capital's effects on member interests' superiority in cooperatives should also be evaluated from different perspectives in order to reach more comprehensive conclusions.

Acquisition of debt capital has allowed the cooperatives to have higher ambitions to expand their businesses, which means that their businesses became more and more complex. As the cooperatives have to be involved in more complicated problems and decisions, the members in these cooperatives are no longer able to have the same influential role in the decision-making processes as they had before. In other words, the control of the cooperative will be more concentrated in the hands of the managers who use to be considered as more capable to handle more difficult business challenges.

According to Gray (1998) and Bhuyan (2007), such a decreasing level of member control might increase the risk that members' interests would be less prioritized. However, this statement concerning the relationship between member control and priority of members' interests was only partly supported by our interviewees. Their answers indicated as long as the expansion is driven by the individual member's interests, decreased member control might not always mean that member interests will be more ignored or less prioritized.

However, lenders' influences on members' interests should not be underestimated either, especially if the debt capital is provided by private lenders. Even though our interviewees did not give any concrete examples of any conflicting interests between their members and the lenders, they emphasized that it is up to the managers to make sure that all the decisions should be made based on the members' interests. As we mentioned before, it is more common that private lenders try to involve themselves in the cooperatives' decision-making process. The members' interests could be violated if the managers cannot handle the lenders' influences in an appropriate way in which the members' interests can be protected. In the long run, such a skift of control from the members to the lenders and managers could, according to the agency theory, deepen the principal-agent problem in which the managers' ambitions gradually recede from the members' interests

When it comes to debt capital from financial institutions, negative impacts on the superiority of members' interests might be much more limited. Thanks to the financial institutions' constant supervision of the cooperatives' operations including their democratic governance situation, the internal system and routines for member control and participation might be even more transparent and regularized than before. In other words, even though debt capital from financial institutions will also cause more complicated business activities that are difficult for the members to influence, the members will at least have better platforms where they can declare their interests and remind the management what should be prioritized. Under such circumstances, managers' awareness and understanding about their members' true interests would probably not be negatively affected despite decreased level of member control.

According to the agent theory, some of the answers also indicated that the debt capital has caused a bigger horizon problem among the managers and members in some cooperatives. At the same time as the managers started spending the borrowed money for the cooperative's long-term expansion, some of the members still prefer to get more money in the end of the year instead. The horizon problem could also arise considering that the debt capital gave the managers a new planning horizon based on the repayment plan which might not always match the members' plans and therefore interests.

The reason that a part of the members' control shifted to the managers after acquiring more debt capital was that the members' started having difficulties to understand the increasingly complex business problems and decisions. Considering that the members' biggest interest used to be increasing their incomes, it does make sense that the control of the cooperative becomes more concentrated on those people who have relatively more competences and therefore bigger opportunities to make the expansion as beneficial as possible for the members. From this perspective, a shift of controlling power from the members to the managers could in some cases be good for the members' interests.

In addition to that the managers are more capable to make good decisions, some special factors make the managers more reliable to work for the members' interests. First, the majority of the managers in these seven cooperatives are also members and these managers used to have very similar farming activities at home as all other members. Second, it is very common that once one of the family relatives joins a cooperative, many of the other relatives will follow. In a country as China where family harmony, social connections and personal reputation are very important, an involvement of the managers' family members and relatives in the cooperative further increases the incentives for the managers to make decisions that are best for their members.

Considering all these special characteristics that we found in the interviewees' answers, it is more likely that these managers will understand the members' interests compared to if the managers were more professional in doing business but without local connections. These special characteristics of the Chinese agricultural cooperatives might, to a certain extent, alleviate principal-agent problem and horizon problem in which the understanding of members' interests has a key role. However, even though it is important to have an understanding about farmers' interests, it will be more and more difficult to run the cooperative business without professional management skills and experiences.

"All the managers in our cooperative are also members in the cooperative and many of them are also living on the same farming activities as our other members. In order to have a leader role in the village, it's very important to have local connections with both farmers and authorities. However, I partly agree with those experts who have said that agricultural cooperatives in China should hire more professional and competent managers, but I am afraid that it will take a very long time to achieve that." (Liu, 2012)

"Most agricultural cooperatives do not have resources to have professional managers with a good education and experiences. What we and many other cooperatives in this area do is that we try to find candidates from our members or the members' relatives. For example, if some member has a relatively good education or is good at using computers, then that person might be suggested as a candidate for secretarial duties or as accountant. If someone has connections with local authorities and is good at making relationships, then he can do the marketing. This is also how we used to select the board members." (Manager B, 2012)

"It is not easy to find people with enough competences and experiences among the local farmers, especially when the cooperative's requirements on its managers keep increasing as the business grows larger." (Gen, 2012)

"Different from other cooperatives, our members are not only represented by the board members. We adopted a system in which every ten members will have one member representing them in the routine meetings that will be arranged every month. The intension

was of course that our members could be more informed about the business and that it will be easier to speak out for them. But of course the loan from the cooperative bank was not the only reason that we started doing like this. As our cooperative's business became more serious and the capital grew much larger, we had to have a more standardized and structured democratic governance system." (Chong, 2012)

Considering the risks that used to be connected with debt capital and most farmers' risk-averse nature, we also assumed that members' interests might have been overlooked when cooperative managers make decisions to acquire debt capital. The single biggest interest for the members when they join the cooperatives is to increase incomes. In accordance with Hendrikse (1998), none of the interviewees denied that borrowing money from external financiers might cause higher risks for the cooperative and therefore the members. But, as it has been mentioned in the analysis of the first hypothesis, the members are not worried about the risks since they have trust on the managers that they are capable to handle the risks. Such behavior of the members confirms one of the core ideas of the social capital theory that the members will support and be commited to the managers' decisions only when they trust on the managers. Additionally, a majority of the interviewees seem to share the opinion that this kind of risk-taking has been absolutely necessary in order to have enough capital to prioritize some of their members' biggest interests, not least when it comes to increasing their incomes and minimizing risks of their farming activities.

"I think a very common view among our members is that it could be even more risky for them if they invest their own money in a cooperative instead of just being a member in a cooperative that has debt capital." (Qi, 2012)

"Everything can be a risk, without taking these risks (debt capital) that we know we can handle; we will have much more limited opportunities to help our members to eliminate the risks that can be much more problematic for them." (Qi, 2012)

"Talking about reducing risks, one of the strongest incentives for the farmers to join our cooperatives is that we can provide our members a much more stable and favorable price for their products. Our cooperative always tries to pay higher prices than the market price. Last year when the market price for vegetables was very low, we still offered our members a protection price for their deliveries, which was much higher than the market price." (Manager A, 2012)

"The worst thing that can happen to a farmer is to see all the vegetables he has grown rotting in the field when the farmer cannot find anyone to buy them. Farmers can be protected from this kind of risks by being a part of a cooperative. For instance, our members can always sell their vegetable to us as long as they do not exceed the amount that we inform them in advance. It also means that our members do not need to spend time and money on finding buyers themselves; the cooperative has more resources and will do it for them, the farmers can focus on what they do best instead." (Liu, 2012)

"There is no doubt that debt capital itself means higher risks, but a significant part of this money is used to help our members to reduce their risks. One of the important services we provide our members to reduce their risks is that we actively search for the most up-to-date market information and professional forecasts. These materials will all be shared with our members so they can make better decisions, for example which types of vegetables they should not grow in order to avoid excessive supply in the mark." (Chong, 2012)

“Every time we have experienced high instabilities in the market, we will have more farmers who would like to join our cooperative.” (Xue, 2012)

However, we found that the hypothesis 4 is partly supported. It might be argued whether all expansions are good or necessary for members’ personal interests. If usage of debt capital only causes increased financial risks or/and decreased member control but no or disproportionally little additional benefits to individual farmers, debt capital might be, in such cases, considered as having negative effects on members’ interests and therefore decreased commitments to their cooperative.

5.6 Hypotehesis 5

The more non-member debt capital an agricultural cooperative has, the less social capital this cooperative will have

Our last hypothesis concerns the relationship between debt capital and social capital, which is another type of capital that is important for agricultural cooperatives’ performances. The amount of social capital is indicated by the level of members’ trust on managers, member participation, relationships and other social factors. Our assumption was that the more debt capital an agricultural cooperative has, the lower the social capital is in this cooperative. The interview questions that are asked to test this hypothesis are:

1. How has the debt capital affected the level of financial risk that the cooperative is exposed to?
2. Why did you join the cooperative? Is it important for you that your membership in the cooperative can help you to reduce the risks of your overall farming activity?
3. Have you adjusted your way of working with your cooperative and your own farm business after the increase of debt capital and the risks it causes?
4. How do the communication routines work in your cooperative? How is the relationship between managers and members? Compare to when debt capital was not available
5. Do the members have opinions about how to use the borrowed money?
6. How much can the members influence the decisions now, compared to when no debt capital was involved?

According to the social capital theory, the amount of social capital in agricultural cooperatives is dependent on the level of trust, member participation, satisfaction, relationships and other social factors. As we have seen in the analysis of other hypotheses, debt capital seems to have very different effects even when it comes to social capital.

We can find details from the interview answers indicating that debt capital could have some negative effects on social capital in agricultural cooperatives. For example, based on the answers we discussed in previous discussions, the debt capital is usually used to finance the cooperatives’ expansions, which means that the business and decisions will become more and more complex. Consequently, the level of member control in many cooperatives decreased because of members’ inability to understand the business and decisions as they once did.

Except that, we also discussed in hypothesis 4 that the the members' control of their cooperative have, in varying degrees, decreased caused by the external lenders' involvement.

According to the social capital theory, the members' participation in the control of the cooperative creates an important platform for the members and managers to communicate with each other and therefore build up social capital in form of close social relationship and trust (Paldam and Svendsen, 2000). In other words, a weaker member control will, in the long run, negatively affect the level of the social capital in the cooperative. The social capital theory also explains that the social capital might also be undermined if the management underprioritizes the members' interests which has been discussed in hypothesis 4.

Communication between managers and members is a key factor that determines the amount of social capital in agricultural cooperatives. Effective communication routines provide important platforms on which members and managers can exchange opinions and information with each other and thereby build up close relationships. A more blocked communication channel makes it harder for managers to gain social capital in the form of understanding and trust between the members and the managers. All our interviewees claimed that communication between managers and members is highly important but five of them also said that the communication routines have not been updated after the acquisition of debt capital.

Considering the increasingly complex business that these cooperatives are engaged in, due to their debt capital, we have reasons to believe that the members in these cooperatives will have an increased need of information and communication in order to have a chance to grasp the cooperative's business. In other words, the members' decreased ability to understand and influence the cooperative's business requires improved communication routines from the management which can be used by the managers to inform and explain and, by the members, to express their interests.

In the longer perspective, debt capital's negative impact on social capital can be worse if the communication routines do not adapt to the more complex business. The members will simply feel that they do not know what is going on in their cooperative and the managers and members will be further away from each other in their relationship. According to the social capital theory, such a weakened social realtionship increases the risk of both principal-agent problem and free-rider problem in the cooperative. However, managers in cooperatives might be, for a short time, able to satisfy their members despite a concentrated control of the decisions. But according to the member control principle such member satisfaction could be difficult to maintain over a longer period of time without allowing members to participate.

"The communication between our managers and members has been following same routines for long time. Our managers will make most decisions; member meetings will make only big decisions." (Xue, 2012)

"Debt capital has not affected the communications between the managers and members in our cooperative." (Gen, 2012)

Member trust is another measure that indicates level of social capital in agricultural cooperatives. Members' trust in their managers might be undermined if they experience that their cooperative no longer consider members' interests as first priorities. As we discussed before, debt capital from private lenders can have negative impacts on members' interests considering lenders' involvements in the decision making processes. It is up to the managers to handle the influence from the lenders so members' interests would not be violated and therefore lose their trust in the management.

Three of the interviewees said that most borrowed money is used to buy their members' products. In such cases, debt capital enables the cooperatives to have enough money to pay to their member, which means immediate benefits to the members. The member satisfaction generated from such concrete profits will result in higher social capital in the cooperatives. On the other hand, four other interviewees said that their debt capital has been mainly used for more long-term investments. Considering that most cooperative members regard an increased income as their most important goal, their trust and relationship to the management might be damaged if the debt capital is used on more long-term investments instead of generating short-term benefits to the members.

"For example, a part of our loans has been used to fulfill the requirements for, in the future, applying for the certification so called "Chinese famous brand", what I can say is that not all our members were convinced that this is a necessary expense for our cooperative. (Liu, 2012)"

"Our member-invested capital is far from enough to pay our members when they, sometime in very short period, all want to sell their grapes to us. (Manager A, 2012)"

Table 2: Summary of the results of the hypotheses

Hypotheses	Summary the results
1) The more non-member debt capital an agricultural cooperative has, the less financial contributions the members will make to the cooperative.	Partly Supported
2) The more debt capital an agricultural cooperative has the more benefits members will get from their cooperative.	Supported
3) The more non-member debt capital an agricultural cooperative has the lower is the level of member control participation in the cooperative	Partly Supported
4) The more non-member debt capital an agricultural cooperative has, the less the cooperative will be perceived as working for the interests of the members	Partly Supported
5) The more non-member debt capital an agricultural cooperative has, the less social capital this cooperative will have	Partly Supported

6. Conclusions

Our aim in this study is to explain how debt capital influences members' commitment to their agricultural cooperative. Based on the theoretical discussion and conclusion, we selected five key elements from the theories to measure debt capital's impact on member commitment and they were member control, social capital, superiority of members' interests, members' benefits and members' willingness to invest in the cooperatives. Five hypotheses were formulated based on these five indicators in order to find out how debt capital affects member commitment in agricultural cooperatives. Based on the analysis of the empirical data and hypotheses in the previous chapter, the conclusions will now be presented in order to reach the aim of our study.

According to the interviewees, the main characteristic features of debt capital that can affect member commitment in agricultural cooperatives are: influences from lender, financial risks and enlargement of capital basis. These factors can have both positive and negative effects on level of member commitment in agricultural cooperatives.

Influences from lenders

All seven interviewees confirmed that their cooperatives have been, in different ways, influenced by their lenders. It seems like private lenders can have more negative effects on member commitment than institutional lenders such as commercial and cooperative banks. The private lenders' influences on cooperatives are normally based on their personal interests instead of the members'. Such influences from private lenders might, according to the social capital theory, damage members' commitment in the form of trust to their cooperative since part of members' control over the cooperative will be shifted to the lenders. On the other hand, the size of the members' dissatisfaction about their decreased control was much more limited than what we expected. The answers from the interviewees indicated that the member commitment in Chinese agricultural cooperatives is more dependent on the members' trust in their managers and the personal benefits that the members can get from the cooperative.

In addition, influences from private lenders might undermine the superiority of members' interests and it increases the risks that members' commitment to the cooperative will be weakened. However, such negative effects on member commitment might be avoided or reduced if the managers are able to handle the influences from the lenders in a proper way so they would not be violating members' interests.

Except private lenders, debt capital from financial institutions seems to have much less negative impacts on member commitment. Most of their influences on cooperatives might be perceived as positive for member commitment in agricultural cooperatives. Before approving the loans, most of these financial institutions such as commercial or cooperative banks, will have requirements on the cooperatives, not least when it comes to the democratic governance system in the cooperative. Even after the approval of the loan, the cooperatives will be monitored and supervised by these institutional lenders, which means that the managers of the cooperatives need to do regular reports to the banks about the cooperative's operation. In the long run, financial institutions' influences on agricultural cooperatives might be helping them to build up more sufficient and regularized democratic governance routines with higher member control and participation.

Increased financial risks

The interviewees agreed that debt capital, to varying degrees, increases the financial risks for their cooperatives. However, whether such increased financial risks would weaken members' commitment is, according to the interviewees, more dependent on trust, personal relationship, reputation and other forms of social capital between members and managers. A strong social capital in cooperatives would reduce the probability that risk-averse members will be less committed to the cooperative when facing increased risks.

Except social capital, the majority of our interviewees also claimed that the risks that are attached to the debt capital will not have any significant impacts on the members' commitment as long as the members feel that they will be further benefited from it.

Enlargement of capital basis

Debt capital enlarges agricultural cooperatives' capital basis and enables them to expand. All seven interviewees claimed that debt capital has been extremely important for them in order to keep a high level of satisfaction among their members. The new business opportunities, new system for sharing information and higher purchasing prices have generated more concrete benefits to the members of these cooperatives thanks to the debt capital. From this point of view**,** debt capital definitely has positive effects on members' commitment as long as the expansions are driven by the individual member' interests.

Unfortunately, cooperatives' investments in increasingly fast expansions can have negative impacts on member commitment in indirect ways, especially if debt capital comes from private lenders. According to those interviewees who have used their debt capital to reach higher expansions, such growth has sometimes led to more complex businesses and decisions, which makes it more difficult for the members to participate in the governance of the cooperative. Such a more concentrated control of cooperatives would damage member commitment because of smaller opportunity to build trust with managers. According to agency theory, such negative change might also be perceived as an additional risk for having information asymmetry in the cooperative.

For those cooperatives that have used debt capital mainly to pay higher prices to their members or provide other types of financial supports, the business might not be more complicated than before. Thereby, the members will not have problems to continue having the control and understanding about their cooperatives as they had before. According to the answers from those cooperatives using debt capital from banks, the member control might be decreased because of the expansion of the business but it does not mean that member' interests has to be more ignored thanks to the banks' constant supervision and inspection of the cooperative. Considering most members' hope for short-term and quick profits, debt capital's positive effects on member commitment might not be as expected if they are spent on long-term investments.

The general conclusion is that debt capital can have a multi-dimensioned set of effects on agricultural cooperatives, which can lead to both positive and negative changes in the level of member commitment. Debt capital's effects should be evaluated in the consideration of its source, how it has been used and other conditions in order to reach relevant and comprehensive results. The conclusions we had should probably not be generalized in other contexts considering the specific tradition and culture the interviewees were chosen from. It is important to keep in mind that member commitment in Chinese agricultural cooperatives seems to be overwhelmingly dependent on social capital such as members' trust on their managers and the amount of benefits that members can get from the cooperatives. A stronger demand of higher member control among the members would have probably resulted in different conclusions.

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Qi, L.L. (2012), Fu Yang Hu Yuan Chicken Cooperative
Xue, S.W. (2012), Hang Zhou Ban Shan Fruit Cooperative

Appendix – Question guide

1. What are the incentives for the farmers to join your cooperative?
2. Are there any members being concerned about that the cooperative might have difficulties to make repayments and fulfill other terms of the loans?
3. Do the lenders' influences on the cooperative business affect the members' willingness to make financial contributions to the cooperative?
4. How do you think the cooperative's dependence on the members' investments has changed after acquiring debt capital?
5. How often have the members made investments in the cooperative compare to the time without debt capital?
6. How has the acquisition of debt capital contributed to the financial performance and results of the cooperative?
7. How has the members been benefited by the acquisition of debt capital so far? Give examples.
8. How engaged are the members when it comes to seeking information, attending meetings and express their opinions? Compare to before debt, why?
9. How much can the members influence the decisions now compared to when no debt capital was involved?
10. What are the members' views on the risks that are attached with the debt capital of your cooperative?
11. Do the lenders give their opinions and advices about the operation of the cooperative? How does the management handle them?
12. Except the possible influence from the lenders, any changes in the operation or strategy in order to adapt to the terms attached to it (e.g. repayment and interests)?
13. Do the members have opinions about how to use the borrowed money?
14. What are the members' biggest interests in agricultural cooperatives?
15. Do the debt providers give their opinions and advices when the management making important decisions? How do you handle it?
16. How has the management's ambition to expand the cooperative changed after receiving debt capital?
17. Have you noticed any changes (strategically or managerially) in the operation of the cooperative since the involvement of debt capital? How have the members interpreted and reacted to these changes?
18. Is one of the incentives that made the members joining the cooperative that it might reduce the risks of the farmers' overall farming activities?
19. Do you think that the debt capital increases the risks that the cooperative is exposed to?
20. Which activities have been financed by debt capital?
21. How has the debt capital affected the level of financial risk that the cooperative is exposed to?
22. Why did you join the cooperative? Is it important for you that your membership in the cooperative can help you to reduce the risks of your overall farming activity?
23. Have you adjusted your way of working with your cooperative and your own farm business after the increase of debt capital and the risks it causes?
24. How do the communication routines work in your cooperative? How is the relationship between managers and members? Compare to when debt capital was not available