WORKSHOP INTERNACIONAL

Nuevos modelos empresariales en el cooperativismo agroalimentario

Equity financing in cooperatives. Three case studies in dairy sector

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Abstract

There is a general view in economic literature that cooperatives are under-invested. Currently the issue is on the International Co-operative Alliance's agenda. To contribute to this topic we undertake an economic literature review in order to point out the reasons that could explain the financial constraints of cooperatives. We undertake three case studies from large dairy cooperatives to learn about how they have faced these alleged constraints. This raises questions because not all the successful cooperatives which have been studied have introduced changes to overcome the supposed limitations of cooperative ownership rights.

Keywords: cooperative capital, cooperative financing, cooperative ownserhip structure, ownership rights.

1. Introduction.

The constraints on cooperative financing have for some time seemed pervasive; there is a general view in the literature that cooperatives are underinvested.

The purpose of this paper is to contribute to this issue. To this end, we first undertake a literature review on cooperative firms based on property rights and agency theories. This review will enable us to acquire an understanding of the different nature of cooperative capital, its link with cooperative identity and the different ownership structure of cooperatives and the reasons which could explain the financial constraints of cooperatives.

After that, we undertake different cooperative case studies extracted from the dairy sector. We studied three big dairy cooperatives with the aim to learn how they have faced these alleged constraints. We also include in the study the equity accounting classification as an issue, which has not been addressed by economic literature. Finally, we conclude and propose possible work lines.

2. Cooperative: a different kind of firm, a different finance.

As is well-known, the International Co-operative Alliance (ICA) affirms in its Statement on the Co-operative Identity that- "*A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs, and aspirations through a jointly owned and democratically controlled enterprise*". Birchall (2010) points out that "*it also contains a hidden assumption that there are two organisations – an association of persons and an enterprise"* and he sees this as both unhelpful and misleading and advocates for a unified vision which avoids splitting the organization in two. He proposes an alternative approach based on the concept of member-owned businesses, but as he acknowledges, the vision of a cooperative as an association and an enterprise has a long intellectual history and when we address a study on cooperatives implicitly we focus on economic views or in social views.

Our analysis of the cooperative firm will be based our paper on property rights and agency theories. Although limitations on neoclassical economic theories could arise (Marwa, 2014), and non-economic causes for forming and maintaining cooperatives should not be taken lightly (Cook (1995); Birchall (2004)), we think that these theories are a good starting point to explain the constraints on cooperative financing.

A firm can be viewed as a nexus of contracts (Jensen and Meckling, 1979), the firm has contracts with stakeholders like its employees suppliers, customers, creditors, etc. To Fama and Jensen (1983) contracts which play a key role in any economic organization are *"those that specify 1) the nature of residual claims and 2) the allocation of decision process among the agents"*. In short, all contracts, apart from those with the owners, set out fixed remunerations. At this point Hansmann (1996) states that the type of patron[1] who owns the firm is that which minimizes the sum of total transaction costs for all type of patrons, where transactions costs include the cost of market contracting and costs of ownershsip. *"A cooperative can be defined as an economic organization whose residual claims are restricted to the agent group that supplies patronage under the organization's nexus of contracts (i.e. member-patron) and whose board of directors is elected by the same group"* (Vitiliano, 1983). To Nilsson (2001) the differences between investor-owned (IOF) and cooperative firms are due essentially to the vaguely defined property rights in cooperative organizations. In fact to Hansmann (1996) an IOF can be seen as a capital cooperative, that is to say the patron owner is the capital supplier and this capital is rewarded with the residual claim.

Paradoxically, these vaguely defined property rights are originated by the common ownership and (to a lesser extent) by the democratic control. What follows from this is an inefficient organization (Porter and Scully, 1987), and consequently this would result in the disappearance of cooperatives. Therefore, *"noneconomic causes for forming cooperatives should not be taken lightly"* (Cook, 1995), but as Nilsson (2001) states *"ideological motivations commonly found in the sociological and institutional literature on cooperatives […], can be said to have an economic rationale"*. Trust between members, mutual understanding, a feeling of community, common problem conceptions, etc. are of vital importance (Hakelius, 1996). Although it is true that social factors are crucial to cooperative organizations; they are interconnected with economic factors, as Nilsson (2001) points out, if cooperative business corrects market failure for

[1] Hansmann utilizes the term patron which can be taken as synonymous of stakeholder which contract with the firm.

members and members enjoy a certain trust in their internal relationships (and therefore there is homogeneity between members' interest), under these conditions members actively control the firm and the previously mentioned "the vaguely defined property rights" are of less importance.

Chaddad and Cook (2004) characterise traditional cooperatives as having the following attributes: "*ownership rights are restricted to member-patrons, residual return rights are non transferable non appreciable and redeemable; and benefits are distributed among members in proportion to patronage*". They sum these up as representing a "vaguely defined" property rights structure.

These vaguely defined property rights lead to conflicts over residual claims and decision control, resulting in the following five general problem sets (Cook, 1995):

- the free rider problem (or the problem with common ownership);
- the horizon problem;
- the portfolio problem;
- the control problem (or the follow-up problem); and
- the influence costs problem (or the decision-maker problem).

These problems explain the recurrent difficulty of cooperatives to attract capital. In this way, common ownership causes the free rider problem as new members pay a small quantity of capital to join the cooperative services diluting the capital between members. This discourages members from investing in the cooperative.

As the residual rights of the member in the cooperative are neither appreciable nor transferable and the planning horizon of the member is limited to membership duration this discourages investing and results in suboptimal investment decisions. This is known as the horizon problem.

A well-composed investment portfolio reduces the risks and adjusts them to the risk preferences of the investor. The members are heterogeneous with regards to risk preferences (Vitiliano, 1983), as the investment decision is tied to patronage decision, members are not able to adjust their risk preferences which at best could be adapted to the average member preference.

In addition, Chaddad and Cook (2002) summarize theoretical and empirical literature which claims that (USA agricultural) cooperatives are financially constrained as follows:

1. Cooperative residual claims are restricted.
2. Cooperatives' vaguely defined property rights structure discourages members from contributing risk capital.
3. Equity capital acquisition in cooperatives is tied to member patronage (with consequent dependence on internally generated capital).
4. Cooperative equity capital is generally not permanent.
5. Cooperatives have limited access to external sources of funds.

As new arguments we point out the following:

The first one states that as residual claims (rights) are restricted to member-patron, capital has to be provided by them and therefore is limited by their capacity.

The third one argues that cooperatives rely on internally generated capital (per units retains, patronage refunds, etc.) due to the lack of incentives to attract direct investments.

The fourth one argues that the equity capital (patronage refunds, per unit retains) is not permanent as it is allocated to individual members' accounts and is redeemable. The same could be said of redeemable members' shares, but the fact is that shares are stable and the economic literature reserves an agent control function to redeemable capital (Fama and Jensen, 1983).

And finally the fifth one argues that residual rights are restricted to members and cannot be transferred. Therefore access to public equity markets is not available option unless the firm changes its organization form (Hart and Moore, 1996).

3. Some real examples from big dairy cooperatives.

In the following lines we are going to study the financing of three dairy cooperatives and one from New Zealand and the other ones from Europe. All of them ranked in the World Co-operative Monitor.

We have chosen dairy cooperatives because, i) it defines a subsector inside the agriculture, therefore the economic activity of the cooperatives is more similar than different agricultural cooperatives and, ii) the dairy sector is very competitive and dynamic and requires high investments in capital (industrial processing of the raw milk, and the subsequent marketing of the industrial products, R+D activities, brands, etc.). Therefore is a subsector that could point out the adaptation of the cooperative financing to these needs.

3.1 Fonterra Co-operative Group.

Fonterra Co-operative Group Limited is a cooperative company incorporated and domiciled in New Zealand. Fonterra Co-operative is the parent company and presents consolidated financial statements in accordance with IFRS. We examine the annual report and financial statements of 2012 and 2013.

The number of shares held by the members is according to the level of transactions with the cooperative, exactly: "*each shareholder supplying milk to the Company in a season is required to hold one Co-operative share (share) for each kilogram of milksolids obtainable from milk supplied to the Company by that shareholder, excluding milk supplied by that shareholder under contract supply or as unshared supply, in that season*" (Fonterra, 2012).

The previous one is known as the share standard. In addition, each shareholder is able to hold further shares up to 20% of the share standard.

The rights attaching to shares include:

- voting rights of one vote per 1,000 kilograms of milksolids obtainable from milk supplied to the Company by a shareholder during the season preceding[2];
- rights to any dividends[3] declared by the Board; and
- rights to share in any surplus on liquidation of the Company.

Shares are valued on the basis of a Restricted Share Value, which is determined by the Board on an annual basis, for each season, after having regard to a value range determined by an independent valuer.

If a shareholder decreases supply during a season, the number of shares held will be re-apportioned between the number of minimum required shares (calculated using the share standard) and the number of any additional shares that may be held.

[2] Less milksolids supplied under contract supply or as unshared supply.
[3] Dividends are based on the number of shares, that is, based on capital

Shares held in excess of the number required to be held by the share standard can be surrendered at the election of the shareholder. However shares representing greater than 120% of the number required by the share standard will automatically be surrendered, at the then prevailing share price.

Payment for the surrender of shares may be made at the option of the Cooperative by:

– cash; or

– the issue of Capital Notes.

The Company also has the option to pay the surrender value in special circumstances by the issue of redeemable preference shares.

Shares acquired by shareholders may be paid by:

– cash; or

– the redemption of any Capital Notes held (at the discretion of the Company).

Capital notes are unsecured subordinated borrowings which are quoted on NZX's debt market (NZDX). They are classified as non-current liabilities in the financial statements.

Therefore, this system tries to keep equity in hands of shareholder supplier

From 2013 Fonterra has established the "Fonterra Shareholders' Market", where shareholder suppliers are able to buy the share that they need to supply milk or sell shares in excess directly. Consequently the shares are not redeemed.

Also from 2013, shareholders may elect to sell the economic rights[4] of some of their Cooperative shares to the "Fonterra Shareholders' Fund", subject to an individual limit set by the Board within an overall individual limit set out in the Company's constitution. On the sale of an economic right of a Cooperative share to the Fund, a Shareholder supplier transfers the legal title to the Cooperative share to the Custodian. Where the

[4] The economics rights are:
– the right to receive any dividends declared by the Fonterra Board;

– the right to any other distributions made in respect of Co-operative shares; and

– rights to share in any surplus on liquidation of Fonterra.

Cooperative share transferred was backed by milk supply, the shareholder supplier is issued a voucher by the Custodian (subject to limits). But voting rights are kept by members shareholders.

In May 2013, Fonterra offers its shareholder suppliers to sell economic rights of shares backed by milk supply to the Fund, and to sell to Fonterra the resulting Units (Supply Offer).

Under this Offer, shareholder suppliers sold the economic rights of 60 million cooperative shares to the Custodian, resulting in the issuance of 60 million Units in the Fund. Fonterra acquired the 60 million Units via the New Zealand Stock Exchange (NZX) and immediately redeemed these, resulting in the transfer of 60 million Co-operative shares to Fonterra by the Custodian. Fonterra subsequently cancelled these shares. As a result of this redemption, the Supply Offer did not ultimately affect the total number of Units on issue.

The Custodian holds legal title of cooperative shares of which the economic rights have been sold to the Fund on trusts for the benefit of the Fund.

A shareholder supplier who holds a Unit can require the Fund to effectively exchange it for a Co-operative share held by the Custodian. The Custodian relinquishes legal ownership of that Co-operative share (subject to the shareholder supplier does not excess the limits on the number of cooperative share held). A Unit is cancelled by the Fund, as all Units in the Fund must be backed by a cooperative share held by the Custodian.

Fonterra is an example which merits a deep study. In few years Fonterra has change its equity structure, has removed the *value return* (returns to members according to the milk supplied), has introduced dividends on shares held, has introduced the “Fonterra Shareholders’ Market” and the “Fonterra Shareholders’ Fund” while the cooperative is under control of its members. Following the Chaddad and Cook (2004) models, Fonterra was a member-investment cooperative where distribution of profits were in proportion patronage to a distribution of profits according to the proportion of member shareholdings and after that to a cooperative with an internal market to transfer the shares and losing the characteristic of redeemable. Now it is a cooperative close to new generation cooperatives model.

3.2 Royal FrieslandCampina.

Royal Friesland Campina is a Dutch cooperative whose members are dairy farmers from Netherlands, Germany and Belgium. Zuivelcoöperatie FrieslandCampina U. A.[5] (the cooperative) is the sole shareholder of Royal FrieslandCampina N.V.[6], which is the parent company of the Group. Royal FrieslandCampina N.V (from now the Parent Company) presents the consolidated financial statements of the Group in accordance the International Financial Reporting Standards (IFRS). We examine the 2013 financial statements and annual report.

All milk supplied by the members is purchased by FrieslandCampina Nederland B.V., a subsidiary of the Parent Company.

FrieslandCampina's milk price comprises the guaranteed price, the performance premium and the distributed registered fixed member bonds. The guaranteed price is the weighted average of the annual milk prices for raw milk paid by the reference companies (twelve German dairy companies, Arla Foods in Denmark, Bel Leerdammer, Cono Kaasmakers and DOC Kaas in the Netherlands and Milcobel in Belgium).

The equity of the parent company is formed by issued capital, share premium, perpetual notes, member bonds, cooperative loan, fair value reserve, other reserves[7], retained earnings and non-controlling interest.

Issued capital is formed by 10,000,000 shares all are held by Zuivelcoöperatie FrieslandCampina U. A. (the cooperative).

Perpetual notes are perpetual subordinated loans with a 7.125% cumulative interest. There is not repayment commitment, but the notes can be repaid (that is, they are callable). The notes are subordinated to the claims of all other existing and future creditors to the extent that these are not subordinated. The notes are listed on Euronext Amsterdam. Interest payments may be deferred, if the Parent Company has not fixed or distributed any performance premium in the 12 months prior to the annual coupon date. Deferred interest becomes payable on the date on which a performance premium is next distributed. All perpetual notes have been repaid in 2013, therefore there is not perpetual notes at the end of 2013.

[5] Uitgestolen Aansprakelijkheid (U.A.)
[6] Naamloze Vennootschap (N.V.)
[7] Cash flow reserve and currency translation reserve.

Member bonds have been issued to Zuivelcoöperatie FrieslandCampina U.A. and its members. The member bonds comprise registered fixed member bonds and unrestricted member bonds. Registered fixed member bonds cannot be traded. On the termination of business activities and the termination of the membership the registered fixed member bonds are automatically converted into unrestricted member bonds. Legal bodies that are members of FrieslandCampina can also convert registered fixed member bonds into unrestricted member bonds on the transfer of business between members. Unrestricted member bonds can be held interest-bearing and can be traded between member bond holders.

The member bonds are perpetual and have no expiry date. The interest charge for the member bonds is the six month Euribor plus 3.0%. The bonds are subordinated to the claims of all other existing and future creditors to the extent that these are not subordinated. A portion of the profit is attributed to the member dairy farmers in the form of registered fixed member bonds. Interest payments may be deferred, if the Parent Company has not fixed or distributed any performance premium in the 12 months prior to the annual coupon date. Deferred interest becomes payable on the date on which a performance premium is next distributed.

Cooperative loan (as equity) is a subordinated loan advanced to Royal FrieslandCampina N.V. by Zuivelcoöperatie FrieslandCampina U.A. in 2009 which has been converted into a perpetual subordinated loan. The loan from the Cooperative is subordinated to the claims from all other existing and future creditors to the extent that these are not subordinated. Interest payments may be deferred, provided that Royal FrieslandCampina N.V. has not fixed or distributed any performance premium in the 12 months prior to the annual interest payment date. Deferrered interest becomes payable on the date on which a performance premium is next distributed. The perpetual subordinated loan from the Cooperative is classified as equity.

The equity structure of Royal Friesland Campina could be seeing as like “member-investor cooperative”, where part of the patronage return is in form of registered fixed member bonds. Members cannot trade registered fixed member bonds, only on the termination of business activities and the termination of the membership they are automatically converted into unrestricted member bonds, which can be traded between member bondholders. Member bond is the most important instrument in the equity structure, representing almost the 50% of the equity. But this instrument has a ceiling in their remuneration (3%), therefore the main way to distribute benefits is by means of patronage.

The perpetual notes are so far less important (5,76% of the equity in 2012) and have been repaid in 2013, therefore the wholly owned by the cooperative is not a proper capital seeking entity.

The Royal FrieslandCampina case shows us the important effects of the accounting standard in the design of financial instruments in order to qualify to accounting classification as equity. Member bonds, perpetual bonds (and cooperative loan) are perpetual and subordinated instruments and their remuneration is not mandatory from contractual characteristics.

3.3 Arla.

Arla Foods amba is a Danish cooperative with dairy farmer members from Denmark, Belgium, Germany, Sweden, Luxembourg and UK. Arla Foods amba is the parent company of Arla Group and presents the financial statements in accordance with IFRS.

The equity's structure is formed by individual capital, common capital and supplementary payment. Collective capital comprises unallocated equity (capital account and statutory reserve for Special purposes), the individual capital comprises delivery-based owner certificates and contributed capital. The supplementary payment is the proposed profit appropriation, that is to say, the proposed portion of profit to be distributed to members when it is approved by the Board of Representatives. It is formed by the supplementary payment for milk and the interest on contributed capital (interest rate of CIBOR +1.5% on individual member accounts (paid in capital)).

As it is established in the Articles of association, the member, on termination of membership does not entitle to any share of the Cooperative's property or assets. The member has only rights on individual capital, and this is paid "*pursuant to the applicable provisions*", that is, the Board of Representatives shall decide on any payment of delivery-based ownership certificates, contributed capital or other individualised consolidation[8]. Therefore, ownership rights in Arla are restricted to members, nonappreciable and redeemable but subject to the approval by the Board of Representatives, in order to qualify as equity accounting.

[8] Article 5.

On the other hand, the farmer-member receives “on-account” price for the milk, which is paid monthly and a supplementary payment (which comprises the supplementary payment for milk and the interest on contributed capital) and the individual consolidation, which is the share of profit deposited in individual capital. Although this includes remuneration on individual capital, specifically on contributed capital, in addition on supplementary payment, it is not a mixed configuration of returns based on capital and based on patronage, the remuneration of contributed capital is capped and only represents above the 1.5 % of the Supplementary payment and less if we take account the individual consolidation which is a component of the milk price (Arla quotation).

There is a lack of information on the initial investment to entry in the cooperative, despite this lack; we can assess the cooperative structure of Arla as very close to a traditional cooperative in models identified by Chaddad and Cook (2004). This fact raises questions on how it can explained the expansion of Arla despite the supposedly limitations on its ownership rights.

Conclusions.

The study of how some big dairy cooperatives face financing issues has shown different equity structures and how they can quickly change. Also it has showed that accounting classification as equity matters and it is a characteristic which is taken account.

Equity structures varies from more traditional as Arla Corporation with individual capital and common capital to more innovative as Fonterra with a market to exchange members’ shares in order to keep the required number of shares according to the transactions with the cooperative (milk supplied). The case of Arla raises questions to the traditional economic literature on how it can explained the expansion of Arla despite the supposedly limitations on its ownership rights.

We think that an expansion of the study, adding new case-study could be of interest in order to generalize the results.

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