

Innovations in Cooperative Ownership: Converted and Hybrid Listed Cooperatives

Bekkum, O.F. van, and J. Bijman

Nyenrode Business Universiteit, E-mail: o.f.vbekkum@nyenrode.nl

Wageningen University, E-mail: jos.bijman@wur.nl

Abstract

Cooperatives are often criticized for being an inferior company ownership form. It is asserted that their decision making processes are inefficient and that, due to the principle of member finance, they are capital constrained. While cooperatives continue to feature strongly in agro-industry rankings, it is true that many cooperatives have introduced important changes in their governance structures and ownership form. In this paper we present and discuss examples from our database of over 50 cases of cooperatives worldwide that have introduced innovative capital structures, often including external ownership, during the past two decades. Especially we zoom in on cooperatives that have obtained public listing of their shares in the stock exchange. We observe that a number of cooperatives, rather than converting into limited company structures, deliberately maintain their cooperative identity. Rather than alluding to its end, may cooperative floatation actually signal the emergence of a new and viable business form, the publicly listed cooperative hybrid?

Key words: cooperative, ownership structure, governance structure, IPO, agribusiness

1. Introduction

Ownership plays a crucial role in enterprise development. Specifically, ownership assigns residual rights of control and residual rights of income (Hansmann, 1996). There is a vast body of literature on the efficient assignment of ownership rights focusing on explaining the boundaries of the firm, the internal incentive structures, and the owners' investment behavior. In the domain of the cooperative business form, ownership issues are more complex because, traditionally, these rights are linked to the transaction relationship between member and cooperative, rather than to the financial relationship. Shares, if they exist at all, commonly generate bank-interest related dividends, while residual surpluses are distributed as a bonus on the transaction relationship. Members have only limited incentives to invest in their cooperatives. At the same time, cooperative business strategies have become more focused on growth, value-adding and internationalization, all being requiring additional equity capital. As a result of this mismatch between member investment incentives and cooperative capital needs, the classical cooperative ownership form has come under considerable pressure. Not surprisingly, cooperative ownership structures are being adapted and various new arrangements have emerged. These innovations in

cooperative capital and ownership structures often include elements of investor-ownership capital structures, sometimes involving external ownership. The ultimate form of including investor ownership is the conversion of the cooperative into a public or private limited company.

In this paper we present and discuss examples from our database of over 50 cases of cooperatives worldwide that have introduced innovative capital structures, often including external ownership, during the past two decades. Especially we zoom in on cooperatives that have obtained public listing of their shares in the stock exchange. From these cases important lessons may be learnt with respect to the viability of the cooperative business form.

This paper serves several goals. First, it gives an answer to the question whether the cooperative business form is viable or not. Second, it provides managers and directors who consider changing the structure of their cooperative many examples of how to adapt the ownership structure to the changing demands of their environment. Third, it serves as a basis for further research on the consequences of changing ownership structure, particularly of cooperatives becoming listed at the stock exchange. The paper is structured as follows. In Section 2 we briefly outline the logic of cooperative ownership. In Section 3 we present numerous cases of cooperative innovative ownership structures, from Europe, North America and New Zealand/Australia. Section 4 zooms in on the cooperatives that have obtained listing at a stock exchange, either as fully converted companies or as hybrids of cooperative and listed company. In Section 5 we give conclusions and discuss some further research. The appendix gives a full list of the all the cases mentioned in the paper.

2. The logic of cooperative ownership

A cooperative is often characterized by three essential organizational elements: user-benefit, user-control and user owned (Barton, 1989). Thus, in the classical cooperative, ownership is grounded in use transactions rather than in capital investments. Even in the Anglo-Saxon world where membership is conditional on the purchase of a minimum number of shares, these shares are not the basis for assignment of ownership rights, i.e. the residual rights of control and the rights to residual claims. The classical cooperative distributes benefits on the basis of use. That is, even if a formal dividend is paid on shares (in Anglo-Saxon countries), this dividend isn't performance based. If the cooperative is doing well (or not), this is reflected in the price the member receives (in a marketing cooperative) or pays (in a supply cooperative). Membership is restricted to users. If shares must be bought upon entry, this right and obligation is restricted to users. Equity grows by means of 'retained earnings': the cooperative pockets a margin from the price paid or received by members. Again, the use relationship is leading. Control is exercised on a membership basis, mainly applying a one member, one vote system, sometimes following a limited version of proportional voting.

There is logic to this ownership arrangement. The controlling principle of any enterprise is that of pursuing owner interests. In the publicly listed company this is shareholder value; in the classical cooperative it is user value. The primary interest that unites all members of a cooperative is the fact that they are all entrepreneurs (consumer cooperatives excepting). They need the cooperative to further their individual business interest. As long as all farmers relate to the cooperative as

users, they all share a common interest. The moment their primary interest in the cooperative shifts to non-entrepreneurial benefits, interest conflicts may emerge, openly or hidden.

During the past two decades, cooperatives increasingly have shifted from production-based to market-led strategies. Changes in consumer behavior, technological development, chain structure power shifts, and globalization have given rise to capital intensive strategies. As a result, member investment requirements have intensified considerably. In addition, the market led strategies result in the balance between produce and capital content in the cooperative's marketing output starting to tilt towards the latter. This makes it harder to properly communicate member production signals as well as investment incentives through the traditional use relationship. Produce prices inflated by capital returns lead to the (marketing) cooperative being supplied beyond its profitable marketing needs, diluting or even eroding residual earnings. Also, it makes the members believe capital investments in the cooperative are worth less than they really are, hence threatening the cooperative's access to sufficient funding.

There are two basic 'cooperative' solutions to this situation: (1) introduction of delivery rights that are subject to member investments with an adjustable capital-to-produce ratio, and (2) introduction of market-based pricing mechanisms, and distributing residual earnings as rewards to production-linked, member invested capital. In both solutions members continue to be primarily entrepreneurs, i.e., producers primarily focusing on on-farm investment opportunities, and considering investments in the cooperative only as secondary opportunities.. The transaction, investment and control relationships between member and cooperative remain bundled. The bundling of these three relationships is continues to be the essential characteristics of the cooperative (irrespective of the organization's particular legal form).

There are also two basic 'non-cooperative' solutions to the same problem, separating the transaction relationship from the investment relationship: (1) the introduction of production de-linked member capital instruments, and (2) the issue to non-member parties of shares that generate performance based returns. These two solutions approach members and non-members as 'share traders' rather than 'investors' (i.e. entrepreneurs). As soon as one of these non-cooperative solutions are pursued, a de-linking between transaction and investment benefits emerges, leading to a breach in member solidarity. These results are 'non-cooperative', even when the organization continues to be 100% farmer owned.

3. Innovations in cooperative ownership: A review of cases

We will now present brief information on some 50 cases of cooperatives that started experimenting with innovative capital and ownership structures over the past 20 years. We have ordered these cases on the basis of how far the innovative structure has departed from the classical cooperative form. In this paper we do not aspire to be exhaustive, but to show recent trends and developments as well as the diversity in innovative solutions.

3.1 Appreciable and/or internally tradable shares

A number of cooperatives have begun to introduce mechanisms to allow members to capture some of the cooperative's value increase over time. While cooperative capital has often been built

up by successive generations of farmers, capital intensity is clearly growing rapidly in recent years. There are numerous examples where half of the cooperative's current equity was raised during the past five years. In order to induce members to agree on raising these amounts of capital through retained earnings, thus at the cost of transaction-related benefits for the members, cooperatives have introduced appreciable share structures. This way, members when exiting the cooperative (for instance on retirement) participate in the cooperative's value growth.

- *Campina*¹ (The Netherlands) introduced supply-linked, non-tradable, non-dividend bearing, and non-voting participation units in 1991, which are revalued on an annual basis by its Board of Directors. In fifteen years the value went up from €4.54 to €5.75 (i.e., an average annual increase of 1.9%).
- *Fonterra* (New Zealand) has, since its birth in 2001, supply-linked, non-tradable, 'interest' bearing, voting, 'fair value' shares, annually revalued by the Board of Directors based on external expert recommendation. The value of these shares has increased from NZ\$ 3 as of May 2001 to NZ\$ 5.44 in May 2005 (i.e. an annual increase of 20.3%).
- *Friesland Foods* (The Netherlands) has bimonthly, internally and formally tradable, production de-linked, dividend-bearing but non-voting certificates of B shares. Issued at €45 in 1995, peaking early 1999 at €75, down to €46 mid 2001, and in January 2006 traded at €61 (i.e. an average annual increase of 3.5% in ten years).
- Starch cooperatives *Avebe* (The Netherlands) and *Lyckeby Stärkelsen* (Sweden) have internally and informally tradable, supply-linked shares. Prices aren't published.
- *Dairygold* (Ireland) launched an internal market for its non-linked, non-voting, 'interest' bearing shares in December 2004. On two market days the price went up from €1 to €2.35, trade being suspended in December 2005 as new plans for a company split and partial stock-listing were being revealed.
- In the United States various *new generation cooperatives* have internally tradable, production-linked shares that may appreciate over time if the business is performing well.

3.2 Externally tradable subordinate bonds

One attractive option to obtain external capital without losing member control is by issuing subordinate bonds. While subordinated bonds classify as debt rather than equity, they may be included as 'guarantee' or 'risk-bearing' capital.

- *Campina* (The Netherlands) introduced subordinated bonds distributed as part of the milk price in 1997. The bonds have a maturation period of 20 years, generate an annual dividend that is linked to 4-5 years Netherlands state bonds with a 1% premium, and are informally tradable both within and outside the membership.
- *Arla Foods* (Denmark/Sweden) issued a €135m non-listed bond loan in April 2004, generating a fixed dividend of 5.61% during the first seven years, with an option to be extended for another three years.
- *Friesland Foods* (The Netherlands) issued, in May 2003, perpetual cumulative subordinated notes (i.e. permanent bonds), listed at Euronext in Amsterdam, with a total value of €125m. They generate a fixed 7.125% interest. Despite the fact that these notes

¹ All cooperatives are mentioned in *italics*.

are permanent, Friesland Foods includes them in its balance sheet under liabilities, rather than equity.

- *Südzucker* (Germany) raised €250m from a November 2003 issue of 5 year convertible bonds, which was listed on the Frankfurt stock exchange in December of the same year. The bond has a 3% interest rate and with a conversion option into common shares at a rate of €20.53.
- *Alliance Group*, a New Zealand meat cooperative, *Fonterra*, a New Zealand dairy cooperative, have listed unsecured capital notes.
- *Bonlac* (Australia), prior to its acquisition by Fonterra, had listed unsecured capital notes as well.

3.3 External corporate investors at subsidiary or group level

A number of cooperatives have external investors, either as special members or as shareholders. Sometimes these external investors participate at group level, sometimes at subsidiary level. Clearly, entry of external investors introduces an conflict of interests between members, who prefer benefits through use, and external shareholders, favoring high return on investment.

- *Cebeco Group* (The Netherlands) invited investment bank NIB Capital in as a special “K” member into the cooperative, when in November 1997 it issued €67m worth of participation units, with a cumulative preferred dividend based on seven year state bonds with a premium between 0.5-2%, conditional on certain financial ratio’s being met, and granting 16% voting rights.
- *Granarolo* (Italy) offered 20% of its shares to Intesa Bank to fund its €72m acquisition of Yomo, in April 2004, with the intention to list within a few years so as to provide Intesa with an exit option.
- *Capsa* (Spain) is 57% owned by cooperative *Central Lechera Asturiana*. Other main shareholders include Bongrain (27%) and two regional cooperative banks. In December 2005, Capsa received a €300m hostile bid from a consortium of investment companies. While the bid was rejected by the Board of Directors of the cooperative as well as the shareholders, such a bid always causes unrest. There is always a group of farmers who realize that the true value of their investment far exceeds that which they pocket upon retirement.
- *Sodiaal* (France) exchanged, in July 2002, 50% ownership of its daughter company Yoplait for a capital infusion of €250m on part of Banque National Paribas Affaires Industrielles (PAI). The agreement was to list Yoplait within three to five years, but so far there have been few signs in that direction.
- There are many more examples. For example, the German and Austrian *Raiffeisen* banks also act as external ‘cooperative’ shareholders in a considerable number of cooperatives, e.g. in listed sugar cooperative Agrana and dairy ‘cooperative’ NÖM.

3.4 Public listing of preferred stock

The benefit of listing preferred stock in the cooperative as opposed to listing common stock is that of excluding external control. In addition, due to their fixed dividends, preferred stock does not affect performance based incentives to member capital. In case of bankruptcy, preferred stock

ranks ahead of common stock, but behind subordinate bonds. Preferred stock is considered as equity. Cooperatives with listed preferred shares include:

- *Dairy Farmers of America* (USA), since November 2004.
- *Cenex Harvest States* (USA), as of November 2001.
- *Pro-Fac/ Birdseye Foods* (USA), since October 1994,
- *Saskatchewan Wheat Pool* (Canada) listed nonvoting common stock in April 1996.
- *Clover Dairies*, a South African dairy cooperative, as of January 2004.
- *Agricore United* (Canada) also has both listed preferred and common stock, since July 1993.
- *Westfleisch* (Germany), obtained in March 2006 mezzanine capital from a consortium of German financial institutions. Mezzanine capital is a special class of capital, which is non-voting, usually carries a fixed interest, has a limited maturation period, and ranks subordinated to bonds but ahead of preferred stock. Importantly, it is classified as equity, rather than debt. In the case of Westfleisch it has a five to eight year duration.

3.5 Conversions into farmer-owned limited liability companies

There are also cases where cooperatives have converted from a member-owned form into an investor-owned form, while remaining farmer-owned. Reasons for this conversion can be the need to enhance flexibility of decision-making, or the desire to attract external capital. There may also be tax issues involved. The impact on member interests depends on the quality of the cooperative prior to conversion. If member funding was not linked to production to begin with, then not much changes with the conversion. However, a change of legal form often serves as a stepping stone to more far-reaching changes.

- *US Premium Beef* (USA; August 2004) converted to promote an investor orientation, though tax reasons played an important role as well. Its share structure and production-linked internal tradability has not been affected.
- *Dakota Pasta Growers* (USA; July 2002), *Golden Oval Eggs* (USA; August 2004) and *South Dakota Soybean Processors* (USA; June 2002) have also converted into limited liability companies and introduced external, private share trading mechanisms through stock brokers in order to improve share liquidity.

Schrader (1989) analyzed a number of American cooperatives that converted into for-profit corporations in the 1980s. Interestingly, most of them fell prey to takeovers within a few years. Apparently, being able to sell a cooperative enterprise requires its conversion into a limited company structure. *Capitol Milk Producers Coop* was taken over by Southland Corporation in November 1986. *American Cotton Growers* was taken over in 1987 first by Avondale and later by *Plains Cotton Cooperative Association*. *Rockingham Poultry Marketing Cooperative* was acquired by Wampler-Longacre through an exchange of shares in 1988, which went public and was subsequently taken over by Pilgrim's Pride in 2000.

The majority of all major marketing cooperatives in the Netherlands have 'lowered' their commercial activities into limited company structures, but have retained 100% cooperative ownership. The main reasons here were to improve the efficiency of business level decision making by giving more freedom to executive management. The members' transaction and

investment incentives were not altered by these changes. However, in two cases the conversion did alter investment relationships:

- The merger of potato cooperative *De ZPC* with farmer and employee owned trading house Hetteema into HZPC in July 1999, when the traditional cooperative structure changed into that of a formal association, with association members (growers and employees) owning internally formally tradable, de-linked certificates of shares generating performance based dividends.
 - When Dutch supply cooperative ABCTA, in January 2006, changed both its name (into *ForFarmers*) and its corporate structure (following other Dutch coops), it explicitly mentioned the option of inviting external investors in the cooperatively owned limited company. ForFarmers is currently in the process of individualizing its collective capital. In all likelihood, future transactions with the company will be de-linked from the members' investment obligations.
-
- *Hansa Milch* (Germany) founded a joint stock company end of December 2003 to facilitate future entrance of external investors, subject to 75% member approval.
 - *Nordmilch* (Germany) will decide at its June 2006 annual meeting about the formation of a limited company structure, which for the time being will be 100% owned by the cooperative, though entry of other business partners as minority shareholders (maximum 25%) is clearly anticipated, especially with a view to strengthen its international position.
 - *Swedish Meats* (Sweden) is currently (April 2006) in the process of changing its corporate structure to permit stock-listing or external investors.

4. Converted Listed Cooperatives and Hybrid Listed Cooperatives

The most dramatic form of change in cooperative ownership is that of public stock listing. We observe two general categories publicly listed cooperatives: (1) cooperatives that convert to shareholder companies as part of their listing process, which we term "Converted Listed Cooperatives" (CLCs or converts); and (2) cooperatives that deliberately decide to retain as much of their cooperative structure as possible thus creating hybrid ownership forms; we refer to this category as "Hybrid Listed Cooperatives" (HLCs or hybrids). In the case of the CLCs, an important driver besides raising additional capital from external sources is giving members a one-time opportunity to cash their share of the value locked up in the cooperative. In the second category, members and external investors partner in advancing their common interests. The particular way the HLC is structured determines whether there is sufficient balance in delivering benefits to both groups of owners, so as to preserve the viability of this hybrid ownership form. The rest of this paper is devoted to cooperative stock listings, focusing on the two categories of converts and hybrids.

4.1 Converted listed cooperatives (CLCs)

This category is that of the conversion of the cooperative into an investor-owned company, whose shares are subsequently publicly traded on a stock exchange. This model basically is an exit strategy for the cooperative. Conversion may result in public listing only after a number of years. Particularly if the conversion was followed by investments by private equity capital companies, one may expect these companies to cash in on their investment after a number of

years. Also the need to acquire additional equity capital in later years may be a reason to go public after all. Among the group of CLCs we observe movements into different directions.

Falling prey to takeovers

A number of cooperatives converted, went public and were subsequently taken over by other industry players, leaving former members bereft of any control.

- *American Rice* (USA) was taken over by ERLY Industries in 1988, continued through financial difficulties and is owned by Spanish Grupo SOS since 2003.
- *Otago Farmers* (New Zealand) obtained listing on the New Zealand's 'grey' market, received a hostile bid from venture capitalist Ronald Alfred Brierley that was rejected by the Board but accepted on an individual basis by many former members. Otago eventually merged into *Kiwi Cooperative Dairies*, now *Fonterra*.
- *Dairy Vale Foods* (Australia) went public in April 1995, ran into financial difficulties, and was taken over and de-listed in September 1998 by *Dairy Farmers Group*, which is currently preparing floatation.
- *Golden Vale* (Ireland) went public in July 1990 and was taken over by *Kerry Group* in October 2001.
- *Farmers Grazcos Cooperative* (Australia) went public in November 1987 after letting in Panfida Foods Ltd as a 70% shareholder earlier in the same year and changing its name to Panfida Pastoral Co. In 1992 mother company Panfida Foods plc went into bankruptcy and the CLC was de-listed.
- *Affco*, New Zealand's largest meat cooperative, floated in May 1995. After meat industry deregulation, New Zealand's meat industry was in a difficult shape due to overcapacity and Affco had suffered losses consecutively for a number of years. In 1989 it took over troubled and debt-laden Waitaki International. Following a major capital restructuring to improve the balance sheet and a member capital injection Affco came out with a 54% member ownership and a few industry bodies as external shareholders. Affco raised NZ\$50m from IPO to repay debts but had to restructure again within a few years. No collective body representing supplier-shares remained and the farmer share gradually evaporated.

Liquidating share value

Some cooperatives went public to enable shareholders to liquidate their shareholdings at full value. The incentive of members to do so is stronger when market access for their products is not at risk because competition is sufficient to guarantee fair prices, when the member exit ratio is high, and when liquidity of internal share trade is low. Among the cooperatives included in this category are:

- *Warrnambool Cheese and Butter Factory* of Australia (which formally speaking was never a cooperative, but was a farmer-owned company) listed in May 2004 to permit members to sell their shares at fair value. It did not issue any new shares at the occasion so capital constraints would not seem to have been an immediate concern. In its listing prospectus Warrnambool announced a supplier share plan to enhance supplier loyalty. Under the plan, shares may be issued to suppliers at a maximum discount of 5% from the market price, to a maximum in any particular year of 15% times the total number of

shares outstanding. It also employs a dividend reinvestment plan available to all shareholders, again under which a maximum 5% discount may be granted.

- *Donegal* (Ireland) converted in 1989 and became listed in December 1997. Only IRP 2.5m was raised upon IPO, but it provided the 1,100 farmer-shareholders to cash their shares. At the time, somewhat less than 20% of shares were held by external parties including *Golden Vale* and *Glanbia*.
- *Dairy Crest* (UK), the former processing arm of the Milk Marketing Board of England and Wales, had to be privatized under WTO regulations and went public in August 1996. At the time, shares were privatized to 29,000 eligible former Board suppliers and an additional 30% was issued in the stock market. Individual suppliers could to dispose of their shareholdings at their own discretion. After ten years, less than 10,000 farmers still own shares, though it isn't clear how much of their original shareholding they have retained, how many are still active farmers, and how many of these are in effect supplying Dairy Crest. It is guessed that farmers still own some 10% at the maximum. It is bit of a tragedy to note that the cooperatives that have grown out of the Marketing Board are currently investing quite heavily in the acquisition of processing capacity, dreaming particularly about Dairy Crest. Dairy Crest, as well as UK's Arla Foods plc, have recently introduced supplier pricing schemes based on price movements in end markets, making farmers less vulnerable to the cut-throat competition between dairy processors.
- *Irish Agricultural Wholesale Society (IAWS)* registered in the unlisted securities market in November 1988 and moved to full listing in the Irish and London stock exchange by June 1993. By July 2005, 18% of its shares were still held by *IAWS Cooperative*, which basically turned into an investment company since 1988. In September 2005, IAWS Cooperative also converted its cooperative status, changed its name to "One51" to avoid confusion with the first converted IAWS business, and now also prepares for stock listing. It is to launch in the grey market any day as it heads for full listing within a few years IAWS used to be a federated cooperative owned by some 40 Irish and British agricultural cooperatives. Throughout, there has been pressure from members to cash their shareholdings. While IAWS originally held close to 100% of the IAWS plc shares, it has given away all shares to its members over time and currently holds less than 1%. Upon listing of One51, its original cooperative members are to receive a second cash gain.

4.2 Hybrid listed cooperatives (HLCs)

There are many different forms of cooperative stock listings that may be regrouped under the heading of hybrid: cooperatives that have somehow sought to combine their cooperative objectives with the benefits of access to external capital.

External investors as a class of members

Some cooperatives retain their cooperative legal form and invite investors into the cooperative. This coincides with the investor-share cooperative model of Chaddad and Cook (2004), where the cooperative acquires nonmember equity capital without converting to an IOF. The investor-share cooperative issues separate classes of equity shares in addition to the traditional ownership rights held by the member of the cooperative. Investor shares could be preferred stock, nonvoting common stock, and participation certificates.

- In Section 3 we have already referred to *Granarolo* and *Sodiaal* which opened up to external investors at group and subsidiary level respectively, anticipating stock listing as an exit option for these investors.
- American *Pro-Fac* (October 1994: only preferred stock)
- *Cenex Harvest States* (November 2001, only preferred stock),
- Canadian *Saskatchewan Wheat Pool* (April 1996, nonvoting common stock).

The Irish Model

Another form is that where, the cooperative has established a subsidiary (i.e., a separate legal entity) whose shares become publicly traded. The cooperative remains in place as a shareholder organization, representing its member interests. Often the member capital structure is not on par with the share structure of the listed company, creating room for collective ownership programs, dividend reinvestment policies and the like. This model has also been named the Coop-Plc model (Harte, 1997; Nilsson, 1999) or the Irish Model (e.g. by Chaddad and Cook, 2004).

- *Kerry Group* was one of the first cooperatives worldwide to go public as far back as in October 1986. Initially farmers agreed to a free float of maximum 49%. The cooperative's current shareholding, however, stands at 31%, down from 90% of 100 million shares upon IPO, when another 5m shares was issued. Secondary issues during the first decade and share exchanges between the Co-operative and its members have resulted in the Co-operative now owning some 57m shares out of 187m. It is estimated that member direct shareholding in the plc currently amounts to some 45m, or 25%. Member milk business accounts only for some 5% of the hugely grown group's total turnover. Member shares in the Co-operative (as opposed to the plc) have a nominal value of 1.25 euro, but are traded at a grey market for some 50 euro, considering that the underlying value of the Co-operative's share in the plc, which would capitalize on Co-operative shares in the event the Co-operative would be liquidated or it were to sell its Plc shares sold, as well as the annual dividend the Co-operative shares generate (about €1.30 per share) are very high. As far as milk transactions are concerned, the cooperative has milk intake obligation from all its members. The Plc isn't obliged to take in the Co-operative's milk, but in practice, it has always done so. Ten out of 14 non-executive Board members are still farmers. Kerry Group acquired and de-listed *Golden Vale* in October 2001, which had listed in July 1990.
- *Avonmore* issued 10% of its shares to members and employees in June 1988. In September it placed another 6% with institutional investors and started trading the same month, and *Waterford Foods* (both of which obtained listing in September 1988).
- *Waterford Foods* floated in November 1988.
- *Glanbia* is the result of the September 1997 merger between *Avonmore* and *Waterford Foods*. The cooperative owner share appears to have stabilized at around 54%, but the company's turnover appears to have stagnated as well. In 2001, *Glanbia* introduced a new mechanism for members to contribute individualized capital on a more attractive basis than their traditional 'cooperative shares' with a performance insensitive dividend and being redeemed upon retirement at nominal value. This may prevent future watering down of the cooperative share, should a new share issue be considered. A heated discussion instigated by the 'Fresh Milk Producers', being dissatisfied with milk prices, in 2003 centered around a proposal for a debt issue to de-list *Glanbia* and return it to full member control, a proposal that was rejected by the Board. Continued discontent led to a

non-confidence vote in May 2005, but the Board refused to step down in absence of legal obligation to do so.

- *Südzucker* went public in December 1986 at the Frankfurt Stock Exchange. In March 1990 an issue of €17m preference shares followed in the Brussels stock exchange, subsequent to its acquisition of Belgian sugar company Tirllemontoise. German beet farmers founded cooperative SZVG (Süddeutsche Zuckerrüben Verwertungs Genossenschaft) in 1950 to buy a joint stake in the sugar industry. Buying their first shares in 1956, by 1982, their holding had already increased to 49.5% in Süddeutschen Zucker and 75% in Zuckerfabrik Franken. When the two companies merged in 1988, SVGZ obtained a 60% shareholding. Südzucker holds a 37.5% share in *Agrana*, which in turn holds 11% in Südzucker. Back in October 1989, both companies already exchanged 2.5% of shares in Südzucker for 10% in *Agrana*. When in June 1991, *Agrana* listed preference shares in Vienna, Südzucker increasing its share to 25%. Austrian beet growers association ÖVZG Rubenbauern' has been buying into the organization and kept ownership at 10-20% throughout successive phases of mergers and acquisitions and currently owns 8%. Both companies have supplier contracts with their cooperative owners.

Finnish Model

As a variant to this Irish Model, there also seems to be a Finnish Model. Three agricultural cooperatives from Finland have brought their subsidiaries to the stock market but have retained a controlling stake in these companies through the introduction of a separate class of shares, exclusive to members and which carry with stronger voting rights. Two of these cooperatives are minority shareholders in terms of number of shares, but still retain the majority of the votes.

- *Metsäliitto* has 38% of the shares of its subsidiary M-real (listed in June 1987), but retained 60% of the voting rights.
- *LSO Cooperative* has 37% of the shares in HK Ruokatalo (listed in February 1997), but 84% of the voting rights.
- The three cooperatives that have founded the *Atria Group* maintain a majority position both in number of shares (58%) and voting rights (92%).

Listed subsidiaries

Another variant is that where the cooperative continues to run its business as a cooperative, but decides to list one of its subsidiaries.

- Finnish *Metsäliitto*, as already mentioned it listed its daughter M-real, but it also listed its daughter Metsa Tissue in December 1997, delisting it again in May 2003.
- French *Limagrain* quoted two of its subsidiaries: vegetable seed producer Vilmorin et Compagnie (November 1993) and Dolisos (January 1988), producer of homeopathic medicines.

Listing value-added half of split business

Yet another variant is where the cooperative splits up its business in a commodity business and a value-added company, obtaining stock-listing for the latter and a delivery right for the former. This model was advocated by Zwanenberg (1997). Benefits are that members supposedly keep control over their market access and fair prices, and obtain financial revenues from their value-added shareholding. Threat is that the commodity business gets stuck in the low end of the

market without sufficient development potential. Once a third party acquires the listed entity with its brands, distribution network etc., the future of the commodity business may be imperiled.

- *Dairy Farmers Group* (Australia) agreed in June 2004 to a split of its business in a supply cooperative and a processing company and it currently prepares for listing within two-three years. 80% of shares in the processing business were distributed to members, while the remaining 20% remained with the cooperative as a collective. Similar ‘carve up’ proposals were abandoned following court action in October 1999 and voted down by members in June 2001. Dairy Farmers Group used to have a conservative A\$ 1 nominal value share, redeemable two years after retirement. The real share value is, however, considerably higher. In December 2000, it received an A\$ 581m (plus A\$ 212m debts) takeover bid from National Foods that valued shares at A\$ 5.14, after already having received a A\$ 471m (plus A\$ 206m debts) bid by Parmalat in September 1999, or A\$ 4.02 per share. This share value differential has put an enormous pressure on the Board to make haste with its capital restructuring plans.
- *Dairygold* (Ireland) is also preparing for stock listing of its value-added and non-dairy business, which it agreed to split off from its commodity business.

It is interesting to note, finally, that cooperatives are also frequently active on the stock exchange as acquiring rather than issuing companies. An example is *Campina* acquiring stock-listed Südmilch and de-listed it in 1994 after purchasing the remaining 34% of its preference shares. In July 2005, Campina established a joint venture with May 2005 stock-listed Vietnamese Vinamilk. In September-December 2005 Campina gradually took an 8% stake in listed Alaska Milk in the Philippines. But there are many more cases. Danish-Swedish *Arla Foods* acquired London-listed Express Dairies in September 2003. British *First Milk* bought 15% into stock-listed Robert Wiseman Dairies in November 2004. Netherlands farmer-owned *Sovion* bought 89% into German stock-listed meat company Moxsel in April 2003. In December 2002 the joint venture of two French sugar cooperatives, *Union BS & Union SDA*, now trading as Tereos, took over stock-listed Beghin-Say, which was subsequently de-listed. Again, there are many more examples to be cited.

5. Conclusions

In this paper we have discussed a wide range of cooperative capital and ownership innovations, starting from production-linked and appreciable shares all the way to cooperative stock listings and conversions. The main question of this paper formulated in the introduction of this study has been whether these experiments, and especially the extreme ones of cooperatives going public, given the high number of incidences, foreshadow the end of the cooperative business form, or alternatively, whether these innovations actually permit cooperatives to come out reinforced.

In Section 2 we have distinguished between ‘cooperative’ and ‘non-cooperative’ solutions to the cooperative challenge of finding additional equity capital. We suggest that the distinction is not between 49% or 51% member ownership, but is in the principles underlying the distributing of ownership rights, specifically that of the rights to residual income. So long as the sensitivity to business performance is with members proportional to their transaction volume, member interests remain uniform and there is a basis for cooperative entrepreneurship. The moment voluntary

investment schemes are introduced that allow members, as well as non-members, to capture the cooperative's residual benefits, interest conflicts emerge and the member transaction relationship is threatened to suffer.

In this paper we have examined a considerable number of cooperatives that have obtained stock listings during the past 20 years. Two groups were distinguished: those that converted into limited companies, with member shares de-linked from production and enabling members to cash their shares at their own discretion, continuing a transaction relationship with the company or not. Nothing specifically 'cooperative' remained. The second group is made up of cooperatives that deliberately retained some form of collective ownership, be it majority or minority, exercised joint control, and preserved a transaction relationship with the listed entity. These organizations attempted to 'keep the best of both worlds': farmer loyalty, security of market access for their production, and at the same time benefiting from access to external capital. We coined the term hybrid listed cooperatives (HLCs).

Without qualifying each and individual case, the main lessons as to how 'cooperative' benefits may be secured when going public or finding other, less extreme, forms of access to capital, appear to be the following:

- It would seem very unwise from a cooperative ownership point of view to go public out of financial necessity, rather than out of a luxury position.
- Marginalization of cooperative ownership following public listing would also seem to correlate highly with situations where farm level production and member-related processing business are not internationally competitive.
- Public listing of cooperative businesses that depend highly on (ex) member produce and that create limited added value would seem to impose a big threat to the prices these members receive. A situation of market dominance would further aggravate this.
- Maintenance of some collective form or organization for 'members' is essential. Free riding behavior on part of farmers each individually assuming the rest will take responsibility to maintain a large collective shareholding, implies an almost certain of control.
- Mechanisms for dividend reinvestment or alternative forms of on-going 'member' capital raising are required in order to avoid member ownership to water down towards zero over time.
- A collective preferential supply and processing contract or at least a mutually agreed periodic negotiating process with the listed entity and on behalf of the 'members' appears to be crucial in order to avoid shifts towards external sourcing.
- Arrangements are needed for undisputable 'member' price determination, e.g. based on external benchmarks or accountable price movements in end markets, and that are not vulnerable to the pressures of year-end profit determination. Alternatively, a profit distribution scheme may be devised where dividends are linked to the level of 'member' prices. Theoretically speaking at least, the interests of members and external shareholders could thus be aligned. In any case there must be absolute clarity as to how prices will be determined.
- Exercise of collective control, possibly facilitated by the introduction of differential voting rights to alternative classes of member vs. public shares.

But the discussion does not end right here. There is a lot more to be learned from the group of CLCs (as well as from the HLCs). A large number of valid questions remain as yet unanswered also with respect to these ex-cooperatives. Firstly, if cooperatives went public in order to solve capital constraints, did they indeed raise amounts of public capital that they couldn't have generated internally? Secondly, if cooperatives obtained listing with the purpose of realizing rapid growth strategies, how much faster have they grown than their non-listed cooperative peers? Thirdly, if cooperatives floated their shares in order to enable their members to unlock the value of capital they had invested in their cooperative, did these members actually cash significant amounts as compared e.g. to their annual farming incomes? In other words, do cooperatives and their members, when going public, really do so for the right reasons? Have they been successful, or could they perhaps have done without it? These and other questions we will yet have to address as part of our continuing research activities on the issue.

References

- Barton, D. G. (1989). What is cooperative. In: D.W. Cobia (ed.), Cooperatives in agriculture. Englewood Cliffs, NJ, Prentice Hall: 1-20.
- Chaddad, F. R. and M. L. Cook (2004). Understanding new cooperative models: An ownership-control rights typology. Review of Agricultural Economics **26**(3): 348-360.
- Hansmann, H. (1996). The ownership of enterprise. Cambridge, MA / London, The Belknap Press of Harvard University Press.
- Harte, L. N. (1997). Creeping Privatisation of Irish Co-operatives: A Transaction Cost Explanation. In: J. Nilsson and G. v. Dijk, Strategies and Structures in the Agro-food Industries. Assen: Van Gorcum: 31-53.
- Nilsson, J. (1999). Co-operative Organisational Models as Reflections of the Business Environments. Finnish Journal of Business Economics **4**: 449-470.
- Zwanenberg, A. (1997), European Dairy Cooperatives - Developing New Strategies (PhD thesis), University of Cork

Appendix: Case Identification

Affco	NZ	CLC that was basically taken over
Agricore United	CAN	CLC: Listed preferred & common stock
Alliance Group	NZ	Listed subordinate bonds
American Cotton Growers	USA	Converted to farmer-owned limited company and was taken over
American Rice	USA	CLC that was taken over
Arla Foods	DK/SE	External subordinate bonds
Atria	FI	HLC Finnish Model
Avebe	NL/DE	Appreciable capital structure
Bonlac	AU	External subordinate bonds
Campina	NL/D/B	Appreciable capital structure; External subordinate bonds
Capitol Milk Producers Coop	USA	Converted to farmer-owned limited company and was taken over
Capsa/ C.L.Asturiana	ES	External shareholders
Cebeco Group	NL	External shareholders
Cenex Harvest States	USA	Listed preferred stock
Clover Dairies	SA	Listed preferred stock
Dairy Crest	UK	Farmer-owned business with marginalized ownership
Dairy Farmers Group	AU	Appreciable, linked capital structure; Prepares for listing of carved-up value-added business
Dairy Farmers of America	USA	Listed preferred stock
Dairygold	IR	Appreciable capital structure; Prepares for listing of carved-up value-added business
Dairy Vale	AU	CLC that was taken over
Dakota Growers Pasta	USA	CLC: Privately listed preferred & common stock
Donegal	IR	CLC liquidating share value
Farmers Grazcos Cooperative	AU	CLC that was taken over
Fonterra	NZ	Appreciable capital structure; Listed subordinate bonds
ForFarmers (ABCTA)	NL	Converted to farmer-owned limited company with view to external investors
Friesland Foods	NL	Appreciable capital structure; Listed permanent bonds
Glanbia	IR	HLC Irish Model
Golden Oval Eggs	USA	Converted to privately listed limited company
Golden Vale	IR	CLC that was taken over
Granarolo	IT	External shareholder; Prepares for listing
Hansa-Milch	DE	Lowered business into limited company with view to external investors
HK Ruokatalo/ LSO Cooperative	FI	HLC: Finnish Model
HZPC	NL	Converted to farmer-owned limited company
IAWS	IR	CLC with marginalized cooperative ownership
Kerry Group	IR	HLC: Irish Model
Limagrain	FR	HLC: listed subsidiaries
Lyckeby Stärkelsen	SE	Appreciable capital structure
Metsäliitto	FI	HLC: listed subsidiaries
Nordmilch	DE	Lowers business into limited company with view to external investors
Nordzucker	DE	External investors at group level
Otago Farmers	NZ	CLC that was almost taken over
Pro-Fac/ Birdseye Foods	USA	Listed preferred stock
Rockingham Poultry Mark. Co-op	USA	CLC that was taken over
Saskatchewan Wheat Pool	CAN	Listed preferred stock
Sodiaal	FR	External shareholder; Prepares for listing
South Dakota Soybean Processors	USA	Converted to privately listed limited company
Südzucker	DE	HLC: Irish Model: Listed subordinated bonds; Listed preferred stock; Listed common stock
Swedish Meats	SE	Lowers business into limited company with view to external investors
US Premium Beef	USA	Converted to farmer-owned limited company
Warrnambool Cheese & Butter	AU	CLC liquidating share value
Westfleisch	DE	Externally tradable subordinate bonds/ listed preferred stock