



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

The Life Cycle of Agricultural Cooperatives: Implications for Management and Governance in Ethiopia

Gian Nicola Francesconi and Ruerd Ruben*

Abstract

Commercialization through cooperatives has the potential to reduce transaction costs and improve bargaining power of farmers vis-à-vis the market. The objective of this study is to evaluate the probability for Ethiopian agri-cooperative to engage in collective marketing activities over time, given market and governance characteristics. Using a sample of 200 agricultural cooperatives from the Ethiopian Highlands, the analysis reveals that collective marketing faces cyclical challenges related to increased competition. Empirical results also suggest that among Ethiopian cooperatives, those located in the Northern regions of Tigray and Amhara, and/or established upon the voluntary initiative of farmers, are more likely to engage in sustainable collective marketing activities over time. The study concludes with implications for policy and further research.

Keywords: Life Cycle, Collective Marketing; Cooperatives; Ethiopia

* Gian Nicola Francesconi is PhD researcher, Wageningen University, The Netherlands; e-mail: gian-nicola.francesconi@wur.nl. Ruerd Ruben is Professor in Development Studies, Centre for International Development Issues (CIDIN), Radboud University Nijmegen, The Netherlands; e-mail: R.Ruben@maw.ru.nl. This study was made possible by financial support from the International Food Policy Research Institute (IFPRI), Ethiopia Strategy Support Program (ESSP). The authors are especially indebted to Prof. Michael Cook from Missouri University and Dr. Nico Heerink from Wageningen University who generously provided feedback on this study.

Introduction

Historical experiences in industrial countries indicate that a key factor for advancing towards agro-industrialization is to simultaneously generate technological and institutional innovation (Hayami and Otsuka, 1992). As demonstrated by the limited benefits brought by the “Green Revolution” in sub-Saharan Africa, improved production, processing and marketing technologies are not sufficiently developed to foster industrialization. Even if improved technology (e.g. improved livestock and seeds) was made available in Africa, a myriad of smallholder farmers could not access or either sustain technological change, mainly because of missing markets (Fafchamps, 2005; von Braun, 1995) and failing governance institutions.

Markets are missing in Africa because of the scramble of indigenous socio-economic institutions that occurred during colonial history (Bertocchi and Canova, 2002), further aggravated by the dependency created from unsustainable foreign institutions in postcolonial times (Keyzer and Wesenbeeck, 2007). For these reasons, scholars and policy makers are increasingly looking for alternatives to promote the development of indigenous, community-driven market institutions (Binswanger, 2006), in an effort to realign institutional governance with technological development, thus creating basic conditions for advancing agro-industrialization.

The objective of this article is to evaluate the probability for Ethiopian agri-cooperatives to become engaged in collective marketing activities over time, given (external) market and governance constraints. Collective marketing has the potential to reduce transaction costs and improve the bargaining power of farmers vis-à-vis the market (Munckner, 1998; Helmberger and Hoos, 1995; Bonin et al., 1993; Dulfner, 1974; Nourse, 1945). However, in most Ethiopian cooperatives, marketable surplus is limited and agricultural commercialization still takes place outside the cooperative system, depending exclusively on individual entrepreneurship and resources (Bernard et al., 2008).

The remainder of the article is structured as follows: section two describes the evolution and challenges of agricultural cooperatives in Ethiopia; section three elaborates further on the theoretical framework of collective marketing; section four presents the available data and outlines the characteristics of the field sample; section five defines the empirical model used for analysing patterns and determinants of collective marketing in Ethiopian cooperatives; section six discusses the findings, and section seven draws conclusions and presents some policy implications.

Cooperatives in Ethiopia

This study focuses on Ethiopian agricultural cooperatives, which provide a well-known example of traditional market institutions. Although forms of rural cooperation in Ethiopia can be traced back in time almost to the origin of agriculture (7000-4000 B.C. according to Ehret, 1979), the institutionalisation of agri-cooperatives came only with the Derg and its communist regime (1974-1991). With the downfall of the Derg regime and its highly centralised governance, agricultural cooperatives entered a period of uncertainty during which many of them collapsed throughout the country. Before the downfall of the Derg, agricultural cooperatives were a major target of political propaganda by the government and contested by its opposition, fuelling internal conflicts.

Nonetheless, since 1994 agri-cooperatives began to re-emerge, strongly promoted and supported by policy reforms envisaging a return to cooperatives as a way to improve the participation of smallholder farmers in the emerging national economy (FDRE, 1994, 1998, 2002, 2005). According to Bernard et al. (2008) the share of *kebeles* with cooperatives went up from 10 percent in 1991 to nearly 35 percent in 2006.¹ In 2002, cooperative governance was further reinforced through the establishment of the Federal Cooperative Commission (FCC), a governmental body with the ambitious mandate to establish one cooperative per *kebele* to 70 percent of the national *kebeles* by 2010 (FCC, 2006). Although agricultural cooperatives have been growing rapidly in Ethiopia, and are expected to grow further, their contribution to improve marketable output appears still negligible (Bernard et al., 2008). Most agricultural cooperatives only serve farmers to procure improved and subsidized farming inputs from the state (see Spielman, 2007), while only few of these cooperatives assist farmers to improve output marketing.

It is a widespread opinion that public interventions to promote the formation of rural cooperatives are often too invasive in Ethiopia, triggering collective dependency rather than entrepreneurship. Similar concerns are reported from other developing countries, where cooperatives appear to be often used as instruments to implement policies designed without consulting them, in order to fulfil the agenda of the donors (World Bank, 2007, p.156). Top-down interventions tend to attract opportunistic and subsistence farmers, eager to extract subsidies rather than embark in economic activities. Cooperatives established by the spontaneous initiative of farmers are instead more likely to aim for commercial objectives.

Ethiopian cooperatives may also fail to provide marketing services to their members since they typically operate in the context of rural communities where

1 In Ethiopia a *kebele* is the smallest administrative units, below the municipality-district level.

they are subject to norms and values of social inclusion and solidarity. This may conflict with the requirements of professional, business-oriented organizations that are designed to assist members to compete in the marketplace (World Bank, 2007: p.155). In the name of social inclusion and solidarity cooperatives can be pressed to include and cross-subsidize poor-performing farmers at the expense of better performing peers, thereby weakening incentives for efficiency and innovation. Another reason of the failure of collective marketing is related to poor managerial capacities. In Ethiopia like in many developing countries, agricultural cooperatives are usually managed by village elders or elites, that often lack the necessary skills and resources to sustain collective business over time (World Bank, 2007: 156).

Finally, according to Putterman (1985) and Cook and Chambers (2007), collective marketing faces cyclical challenges. The marketing cycle is characterized by an initial stage with high turnover, followed by a reduction in sales due to increasing competition. Subsequently, cooperatives need to re-adjust their strategic behaviour to keep competing in the marketplace. However, Ethiopian cooperatives may easily fail to re-adjust and upgrade their organization, dropping out of the market. Governments and NGOs may play an important role in supporting capacity-building towards sustainable cooperative business management (World Bank 2007: p.156). However, external support to cooperative management has often resulted in political interferences on members' decisions, leading to internal corruption and conflicts (World Bank, 2007: p.156).

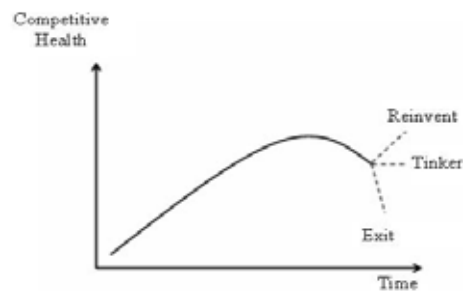
Analytical Framework

Twentieth century economic scholars have generally agreed that cooperative business emerge because of conducive public policies, in markets affected by asymmetric information and monopsony (or monopoly), or oligopsony (or oligopoly) power (see: Staatz, 1987; Sexton 1986, 1988). The existence of any one of these conditions leads to the consideration of collective action as a mean to facilitate agri-business activities. By contrast, when public support is too invasive, and/or markets are missing or highly competitive, either subsistence (autarkic) farming systems or investor-owned firms are most likely to emerge.

Cooperatives in developing countries frequently face life-cycle phenomena related to changes in their internal organisation and external market position (Putterman, 1985). Ben-Ner (1988, 1984) pointed to the cooperative life cycle that grow counter-cyclically, emerging during recessions and dissolving during economic booms. In a similar vein, Pérotin (2006) confirms that the creation and exit of cooperative firms is mainly related to contextual factors.

Figure 1 shows the business cycle of the average US agri-cooperative, as reported by Cook and Chambers (2007). At an early stage cooperatives manage to procure and sell at lower prices than market competitors. As a result, cooperatives can enter a period of growth and glory. However, while cooperative members tend to over-celebrate their achievements, market competitors are likely to modify their strategic behaviour, and the competitive advantage of cooperatives begins to diminish. When the cooperatives realize the pressure of increasing market competition they also face new complexities for upgrading their business performance. While some members might be willing to invest in the common cause, others might not.

Figure 1: Cooperative life cycle



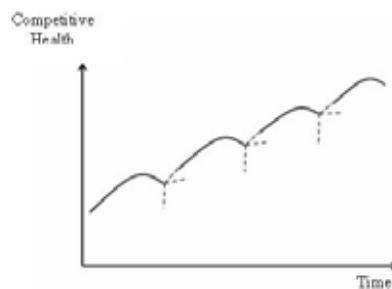
Source: Cook and Chambers (2007)

As stated by Olson (1965: 44): “...unless the number of individuals in a group is quite small or unless there is coercion or some special device to make individuals act in their common interest, rational, self-interested individuals will not act to achieve their common or group interest”. Due to fading competitiveness and diverging preferences over time, disagreements and conflicts arise within cooperatives, undermining the stability of the coalition (Sexton, 1986; Staats, 1987), and promoting the desertion of most progressive members (Barham and Childress, 1992; Cook, 1995; Karantininis and Zago, 2001). According to Barham and Childress (1992), the desertion of cooperative members can thus be considered as a natural adjustment process to reduce internal heterogeneity of preferences.

At some point in time, cooperatives need to confront the decision to withdraw from the market or to re-adjust (tinker or reinvent) their structure and conduct, and enter a new business cycle (see Figure 2). The tinker option can involve investments made with external funds generated through strategic alliances with firms or other cooperatives. Alternative solutions can involve proportionality

strategy of internally generated equity capital, such as base capital plans, proportional voting, narrowing product scopes, pooling on a business unit basis, and capital acquisition on a business unit basis. The reinvent option considered is that of shifting to a more radical or new form of cooperative such as a “new generation cooperative” (see Sykuta and Cook, 2000). This new structure involves shareholding as a mechanism to generate equity capital, in addition to members’ patronage (i.e. percentage of members’ revenue retained by the cooperative). Where shares are irredeemable, tradeable and appreciable and members are required to purchase them on the basis of expected patronage, so that patronage and shareholding are proportionately aligned.

Figure 2: Cooperative life cycles



Source: Cook and Chambers (2007)

According to Cook and Chambers (2007), the life cycles of US cooperatives describe an upward trend, implying that agricultural cooperatives became a sustainable form of business organization. However, different scenarios can be hypothesized for different countries. In particular in many developing countries, markets and governance regimes are expected to be less favourable to cooperative business development. These agricultural cooperatives are also village-level organizations that rely on limited managerial capacity. Kotler (1995) argues that organizational adjustments can be difficult in the absence of a common vision and a strong management. Pagano (1993) suggests that timely institutional reforms can be difficult to enforce when options for attracting the necessary venture capital are limited. For these reasons, cooperatives in developing countries may tend to delay the organizational adjustments needed to keep competing in the marketplace. Due to adverse external conditions (missing markets and invasive governance) as well

as managerial procrastination, agri-cooperative business in developing countries is therefore expected to be less adaptive and may face limited sustainability.

Data

The data used in this study is collected in Ethiopia through direct interviews with the management committees of 206 agricultural cooperatives. Sample sites include the four regions of Tigray, Amhara, Oromia and SNNP, covering mainly the Ethiopian highlands, which are generally characterised by favourable agro-ecological conditions. The sample includes 13 *woredas* (alike municipalities or district) per region, and four agricultural cooperatives per *woreda*.² The sample does not claim representativeness of the national agri-cooperative system. The survey was conducted between May and July 2006, and each cooperative was surveyed once on the basis of a structured questionnaire. The latter was designed with the intention to capture the heterogeneity in cooperative structure and conduct.

Within our sample, 62 percent of the cooperatives were established during the previous (Derg) regime (1974-1991), while the others emerged between 1993 and 2006 under the current government (post 1991). During the Derg, output marketing by cooperatives was directly organised and controlled by the state. The structural adjustments that followed the military coup and the fall of the Derg regime had profound impacts on existing agricultural cooperatives. As governance and markets were reformed, cooperatives had to re-organize to legitimate the continuation of their activities. Some were unable to do so and collapsed at the end of or immediately after the Derg regime. Others engaged in internal restructuring and re-institutionalization. For these reasons, the data used in this study describe the establishment or re-establishment (for cooperatives originally established during the Derg regime), and the development of collective marketing in the period between 1991 and 2006 (post Derg).

Consequently, the age of cooperatives, measured from establishment (for cooperatives founded after 1991) or re-establishment (for cooperatives founded during the Derg and re-established after 1991) until 2006, ranges from a minimum of one to a maximum of 14 years, with an average of 12 years. 52 percent of the cooperatives were established or re-established on the initiative of farmers, as opposed to external initiatives by governmental or non-governmental organizations. The number of founding members can vary widely in Ethiopian cooperatives (10-3,000), and on average amounts to 600 farmers. In 2006, the

2 In two *woredas* we were able to survey only three cooperatives.

average cooperative counted 884 members. The average growth in number of members from establishment to 2006 is estimated at 190 percent. In 44 percent of the cooperatives the initial chairman was appointed by the government. 60 percent of the cooperatives engaged in collective marketing, at least once, in the year before the survey. In our sample, agricultural marketing through cooperatives involves primarily cereals, such as teff (21 percent of the cooperatives), maize (18 percent) and wheat (9 percent), or coffee (16 percent).

In Table 1 we compare differences in the establishment of cooperatives that engaged in collective marketing between 2005-2006 and those that did not. Table 1 suggests that marketing cooperatives are mainly found in Tigray and Amhara regions. Table 1 suggests also that cooperatives established upon members' initiative, with an initial chairman appointed by the government, are more likely to engage in collective marketing. However, the analysis presented in Table 1 could be affected by selection bias due to the presence of cooperatives that did not engage in collective marketing because they were recently established and did not have sufficient time to set up marketing services.

Table 1: Differences across cooperatives, Ethiopian Highlands, 2006

Number of Obs. 2006	Coops that are not engaged in collective marketing	Coops that are engaged in collective marketing
Coops established on farmers' initiative (dummy)	0.31 (0.47)**	0.68 (0.47)**
Coops with 1 st chairman appointed by the government (dummy)	0.37 (0.49)*	0.48 (0.50)*
Coops in Tigray (dummy)	0.17 (0.38)**	0.35 (0.48)**
Coops in Amhara (dummy)	0.15 (0.36)**	0.35 (0.48)**
Coops in Oromia (dummy)	0.41 (0.49)**	0.15 (0.36)**
Coops in SNNP (dummy)	0.27 (0.45)**	0.15 (0.36)**

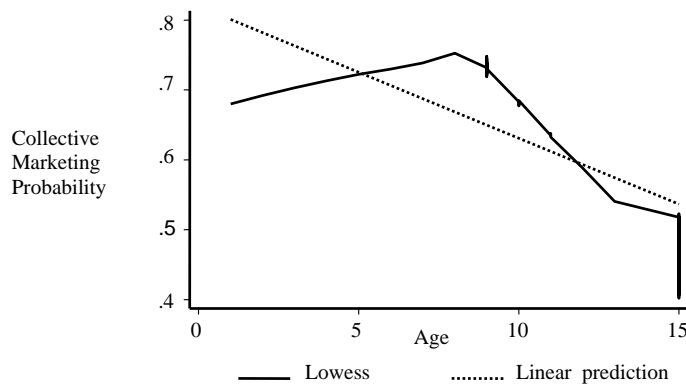
Standard deviation in parenthesis ()

* denotes significant difference between the two groups at 5 percent level.

** denotes significant difference between the two groups at 10 percent level.

Figure 3 shows that the probability to be engaged in collective marketing in 2005-2006 decreases with the age of the cooperatives, describing a concave curve.³ The probability increases during the first eight years of cooperatives' life, and then begin to decrease at a faster pace reaching a marketing probability that is below the initial level. The downward slope of the life cycle suggests that the average Ethiopian cooperative is an unsustainable form of marketing organization over time. However, the scenario presented in Figure 3 could also be affected by selection bias since the sample used does not aim at national representativeness. Moreover, Figure 3 neglects potential differences across cooperatives. In particular, there might be a minority of cooperatives that do engage in sustainable marketing activities. The following part of the analysis needs to identify these succesful stories, if they exist, as well as their market and governance framework.

Figure 3: Life cycle of an average cooperative, Ethiopian Highlands, 2006



Empirical Model

The empirical model presented in this section aims at measuring the probability for an Ethiopian agri-cooperative to engage in output marketing activities over time, given the market and governance environment in which it operates. To do so, we estimate the following probit model:

$$y_i = \beta_0 + \beta_1(m_i * x_i) + \beta_2(m_i * x_i^2) + \beta_3(m_i * x_i^3) + \beta_4(g_i * x_i) + \beta_5(g_i * x_i^2) + \beta_6(g_i * x_i^3) + \beta_7 l_i + e_i \quad (1)$$

3 The probability for a cooperative to be engaged in collective marketing activities, given its age, is calculated using Locally Weighted Least Squares (or lowess smooth) technique (default in STATA).

where the dependent variable, y , is equal to one when a cooperative i engaged in output marketing activities during 2005-2006, and equal to zero when it did not. In order to capture the cyclical evolutions of cooperative business, the independent variables in equation 1 include cooperative age, x , as well as its squared value, x^2 , and cubic term, x^3 . Since Ethiopian cooperative business evolves in cycles (see Figure 3) these variables are expected to explain y , with x^2 showing opposite sign in respect to x and x^3 .

In order to distinguish the effect of different markets and governance regimes on the cyclical evolution of Ethiopian agri-cooperatives, x , x^2 , and x^3 are interacted with two indicators: (a) a dummy, m , for cooperatives established on farmers' initiative (m equal to one), as opposed to cooperatives originated from top-down interventions by the government or NGOs (m equal to zero); and (b) a dummy, g , for cooperatives whose initial chairman was appointed by the government (g equal to one), as opposed to cooperatives with an initial chairman chosen by the farmers (g equal to zero).

As discussed in section two, cooperatives founded on the initiative of a small group of members, under the conducive support of the state, are more likely to sustain marketing activities over time. For this reason farmers' initiative, m , is expected to have a positive influence on collective marketing in 2005-2006, y . Part of the literature discussed in section two suggests that governmental interference, g , has a negative impact on collective marketing. However, when cooperatives are formed by poorly educated smallholders the intervention of the government could also be necessary to promote collective marketing. The empirical model includes also a set of three dummies, l , indicating the region in which a cooperative i operates (Tigray, Amhara, Oromia, or SNNP)⁴. Ethiopia is a Federated Republic, in which regional governance is semi-autonomous, and Amhara and Tigray regions have a longer history of trade and are also more advanced in terms of infrastructures, urbanization, and institutions, compared to the rest of the country. Regional differences reflect the fact that Amhara represented the ethnic elite during the longstanding empire (1930-1974) of Haile Sellase (himself an Amhara), while Tigray is the homeland of the current ruling party.

The empirical model proposed (equation 1) could suffer from econometric problems inherent to the use of cross-section data, and these should be addressed before interpreting the results. In most cases, when econometric models are based on data collected at one point in time, as in this case, it is difficult to ascertain that right hand side variables cause variations in the left hand side variable rather than the other way around (endogeneity). However, causality does not seem to be a

4 The regions covered by the survey are four.

problem in this model since age of (existing) cooperatives, and lagged variables (referring to cooperatives' establishment) are interacted in the model. An additional concern relates to the use of cross section data is heteroskedasticity, here controlled by estimating the model with robust standard errors.⁵

Results

Empirical findings are summarized in Table 2. Results suggest that the regions of Tigray and Amhara offer better environments indeed for agricultural cooperatives to embark in collective marketing activities. Cooperatives in these two regions have 23-27 percent more probability to engage in collective marketing than in the other two regions (SNNP and Oromia). These findings are supported by the frequent complaints (sometimes degenerating into violent acts) of southern populations (from SNNP, Oromia, Gambela and Somali regions) about political clientelism, in favour of Tigray and Amhara regions. Table 2 shows also that farmers' initiative is significant in explaining the probability for a cooperative to be engaged in collective marketing in 2005-2006, given cyclical evolutionary patterns. By contrast, governmental interference in cooperative management is insignificant in explaining collective marketing probability.

The relationship between farmers/external initiative and collective marketing, over time is depicted in Figure 4. It is clear that cooperatives established upon farmers' initiative are a more sustainable form of business than cooperatives established on the basis of top-down initiatives (by either the government or NGOs). This finding is largely supported in development and agri-business literature (see section about cooperatives in Ethiopia), which generally recognizes the voluntary and active participation of farmers as key indicator of commitment to collective entrepreneurship. The literature appears to be fairly divided on the issue of public interference in cooperative management (see section about cooperatives in Ethiopia). Our empirical results suggests that governmental interference in cooperative management has no significant impact in promoting collective marketing activities.

5 Heteroskedasticity occurs when the variance of the random error term is not constant across observations.

**Table 2: Heterogeneity in cooperative life cycles (Probit),
Ethiopian Highlands, 2006**

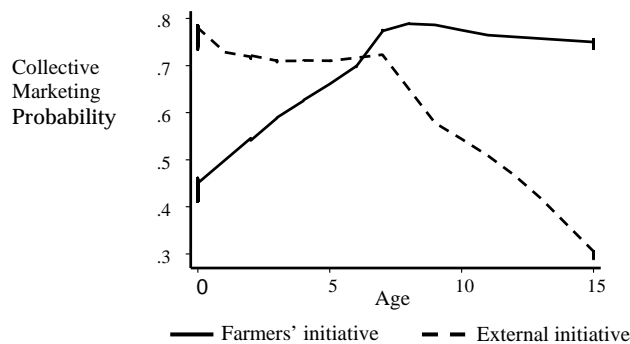
Dependent variable: Dummy for cooperatives that engaged in collective marketing in the last year (2005-06)	Probit estimation	Marginal effects
<i>Coops established on farmers' initiative</i>		
Coop Age	2.40 (0.58)**	0.89 (0.20)**
Coop Age ²	-0.44 (0.10)**	-0.16 (0.04)**
Coop Age ³	0.02 (0.00)**	0.01 (0.00)**
<i>Coops with 1st chairman from the government</i>		
Coop Age	-0.24 (0.33)	-0.09 (0.12)
Coop Age ²	0.07 (0.06)	0.03 (0.02)
Coop Age ³	-0.00 (0.00)	-0.00 (0.00)
<i>Spatial Effects:</i>		
Coops in Tigray (dummy)	0.61 (0.34)*	0.21 (0.10)**
Coops in Amhara (dummy)	0.72 (0.30)**	0.24 (0.09)**
Coops in Oromia (dummy)	-0.10 (0.31)	-0.04 (0.11)
Number of obs. = 201		
Correctly classified obs. = 75.6%		
Log pseudolikelihood = -103.68		
Pseudo R ² = 0.2349		

Standard error in parenthesis (),

*denotes significance at 10% level,

**denotes significance at 5% level.

**Figure 4: Life cycle of bottom-up and top-down cooperatives,
Ethiopian Highlands, 2006**



Conclusions and Implications

Throughout history, Ethiopian rural households have created different forms of associations (or cooperatives) to address their socio-economic problems. Today, agricultural cooperatives are increasingly considered as an institutional solution to support the livelihoods and commercialization of Ethiopian farmers. However, this study indicates that agricultural commercialization through cooperatives faces cyclical challenges, and many Ethiopian cooperative face major difficulties to sustain collective marketing activities over time.

Collective marketing appears to be more sustainable in the Tigray and Amhara regions where market and governance conditions are more favourable compared to the southern Ethiopian regions. Furthermore, collective marketing activities appear to be better in place in cooperatives established by voluntary initiative of farmers instead of being created by top-down interventions (by the government or NGOs). External interventions increase the probability for a cooperative to embark on collective marketing at an initial stage. However, collective competitiveness decreases rapidly in cooperatives under permanent tutelage of the government or NGOs. Cooperatives created by the voluntary initiative of farmers are instead less likely to engage in collective marketing at an early stage, but they are better able to sustain these business activities over time. Even while incentives for cooperative change may come from outside, decisions regarding pathways for adaptation of cooperative organisation and management need to be sustained by the members themselves. The study also confirms that direct interference of the government in cooperative management brings no clear benefits to collective competitiveness.

For these reasons, public support to agricultural cooperatives should avoid direct interference with cooperative establishment and management processes, but could better focus on supporting managerial capacity-building, to prepare cooperative members confronting the cyclical challenges coming from the marketplace. Further research is needed to identify appropriate managerial practices to be applied by different types of cooperatives at specific stages of market engagement and under different market environments.

References

- Barham, B.L. and M. Childress (1992). "Membership Desertion as an Adjustment Process in Honduran Land Reform Cooperatives", *Economic Development and Cultural Change* 40, 578–614.

- Ben-Ner, A. (1988). "The Life Cycle of Worker-Owned Firms in Market Economies: A Theoretical Analysis", *Journal of Economic Behaviour and Organization* 10, 287–313.
- Ben-Ner, A. (1984). "On the Stability of the Cooperative Form of Organization", *Journal of Comparative Economics* 8, 247–260.
- Bernard T., A.S. Taffesse and E.Z. Gabre-Madhin (2008). "Impact of Cooperatives on Smallholders' Commercialization Behavior: Evidence from Ethiopia", *Agricultural Economics* 39, 1–15.
- Bertocchi, G. and F. Canova (2002). "Did Colonization Matter for Growth? An Empirical Exploration into the Historical Causes of Africa's Underdevelopment", *European Economic Review* 46, 1851–1871.
- Binswanger, H.P. and T. Nguyen (2006). "Scaling Up Community Driven Development: A Step by Step Approach", Washington D.C.: The World Bank.
- Bonin, J.P., D.C. Jones and L. Putterman (1993). "Theoretical and Empirical Studies of Producer Cooperatives: Will Ever the Twain Meet?" *Journal of Economic Literature* XXXI, 1290–1320.
- Cook, M.L. (1995). "The Future of U.S. Agricultural Cooperatives: A Neo-Institutional Approach", *American Journal of Agricultural Economics* 77, 1153–1159.
- Cook, M.L. and M. Chambers (2007). *Role of Agricultural Cooperatives in Global Netchains*, Working Paper for the Montpellier Workshop organised by INRA-MOISA and Wageningen University.
- Ehret, C. (1979). "On the Antiquity of Agriculture in Ethiopia", *Journal of African History* 20, 1–177.
- Fafchamps, M. (2005). *Market Institutions in Sub-Saharan Africa*, Cambridge, MA: MIT Press.
- FDRE (Federal Democratic Republic of Ethiopia, 1994). *Proclamation no. 85/1994 Agricultural Cooperative Societies*, Federal Negarit Gazeta, Addis Ababa.
- FDRE (Federal Democratic Republic of Ethiopia, 1998). *Proclamation no. 147/1998 to Provide for the Establishment of Cooperative Societies*, Federal Negarit Gazeta, Addis Ababa.
- FDRE (Federal Democratic Republic of Ethiopia, 2002). *Ethiopia: Sustainable Development and Poverty Reduction Program*, Addis Ababa.
- FDRE (Federal Democratic Republic of Ethiopia, 2005). *Plan for Accelerated and Sustained Development to End Poverty*, Addis Ababa.
- Hayami, Y., and K. Otsuka (1992). "Beyond the Green Revolution: Agricultural Development Strategy into New Century", in: *Agricultural Technology: Policy*

- Issues for the International Community* (ed. Jock R. Anderson), pp. 35., Washington, DC, USA: The World Bank.
- Helmberger, P. and S. Hoos (1995). "Cooperative Enterprise and Organisational Theory", *Journal of Cooperatives* 10, 72–86 (Reprinted from the *Journal of Farm Economics*, 44 (May 1963): 275–290).
- Karantininis, K. and A. Zago (2001). "Cooperatives and Membership Commitment: Endogenous Membership in Mixed Duopsonies", *American Journal of Agricultural Economics* 83, 1266–1272.
- Keyzer, M.A. and L. van Wesenbeeck (2007). "Food Aid and Governance", in *Development Economics between Markets and Institutions*, eds. E. Bulte and R. Ruben, Mansholt Publication Series, Vol. 4, Mansholt Graduate School of Social Science, Wageningen Academic Publishers.
- Kotler, J.P. (1995). "Leading Change: Why Transformation Efforts Fail", *Harvard Business Review*, 59–67.
- Munckner, H.H. (1988). *Principios Cooperativos y Derecho Cooperativa*, Bonn: Friedrich Eberhart Stiftung.
- Nourse, E.G. (1945). "The Place of the Cooperative in our National Economy", in *American Cooperation*, pp. 33–39, Washington, DC: American Institute of Cooperation.
- Olson, M. (1965). *The Logic of Collection Action: Public Goods and the Theory of Groups*, Cambridge: Harvard University Press.
- Pagano, U. (1993). "Organizational Equilibria and Institutional Stability", in: S. Bowles, H. Gintis & B. Gustafsson (eds), *Market and Democracy*, Cambridge: Cambridge University Press.
- Pérotin, V. (2006). "Ebtry, Exit, and the Business Cycle: Are Cooperatives Different?" *Journal of Comparative Economics* 34, 295–316.
- Putterman, L. (1985). "Extrinsic Versus Intrinsic Problems in Agricultural Cooperation: Anti-Incentivism in Tanzania and China", *Journal of Development Studies* 21, 175–204.
- Sexton, R.J. (1986). "The Formation of Cooperatives: A Game Theoretic Approach with Implications for Cooperative Finance, Decision Making, and Stability", *American Journal of Agricultural Economics* 68, 214–25.
- Spielman, D.J., M.J. Cohen and T. Mogue (2008). *Mobilizing Rural Institutions for Sustainable Livelihoods and Equitable Development: A Case Study of Local Governance and Smallholder Cooperatives in Ethiopia*, IFPRI Working Paper, Washington D.C..
- Staatz, J.M. (1987). "Farmers Incentives to take Collective Action via Cooperatives: Transaction Costs Approach", in *Cooperative Theory: New Approaches*, J. Royer, ed., USDA-ACS Service Report No. 18, pp.87–107.

- Sykuta, M.E. and M.L. Cook (2001). "Cooperative and Membership Commitment: A New Institutional Economics Approach to Contracts and Cooperatives", *American Journal of Agricultural Economics* 83, 1273–1279.
- Von Braun, J. (1995). "Agricultural Commercialization: Impact on Income and Nutrition and Implications for Policy", *Food Policy* 20, 187–202.
- World Bank (2007). "Agriculture for Development", *World Development Report 2008*, Washington D.C.