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# **Economic Factors Associated with the Growth** and Development of Agricultural Commodities

by

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## **ARTICLES**

# ECONOMIC FACTORS ASSOCIATED WITH THE GROWTH AND DEVELOPMENT OF AGRICULTURAL COOPERATIVES

Basil G. Coley\*

#### INTRODUCTION

Cooperatives have played important roles in various economies over time. They have become important entities in our economic system, especially in agriculture. Currently, there is much debate at the international level relative to the true nature of cooperatives. Depending on the country, a cooperative may be considered a form of economic system, a community development organization, or a form of business organization.

In the United States, cooperatives are considered a form of business organization; therefore, two important questions arise: (1) what are some of the economic factors associated with their growth and development? and (2) how have they grown and developed over time? This

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article will attempt answer these questions by discussing economic factors associated with the growth and development of U.S. cooperatives in general, and agricultural cooperatives in particular.

In order to place the economics and growth and development of cooperatives in proper perspective, it is necessary to first give a brief overview of some relevant historical and legal aspects. Thus, the procedure will be to discuss the following areas in sequence: (1) Historical Perspective; (2) Legal Perspective; (3) Economic Aspects; (4) Recent Trends in the Growth and Development of Agricultural cooperatives (marketing, supply, and service cooperatives); and (5) Economic Considerations to Encourage Further Growth.

#### I. HISTORICAL PERSPECTIVE

#### A. Early History

Agricultural cooperatives date back to ancient Babylonia where cooperative features could be found in some agricultural leases. King Hammurabi, who reigned from 2067 to 2025 B.C., made it possible for poor farmers to achieve economic freedom and independence, instead of hiring themselves out to large estate owners. Hammurabi's code enabled a number of them to take over large estates on a cooperative basis. Since that early start, various forms of cooperatives have played important roles in many economies.

However, Welsh-born Robert Owen, not Hammurabi, is regarded as the Father of Cooperation.<sup>4</sup> This social reformer pioneered the cooperative movement, developing the economic philosophy that the just price of a good was its cost; charging more would be unjust.<sup>5</sup> Profits caused overproduction. leading to crisis.<sup>6</sup> Although he is called the Father of Cooperation, many contend that Owen's cooperative philosophy was not wholesome and that Owenism was more like socialism than true cooperation.<sup>7</sup>

Numerous people have contributed to the development of coopera-

<sup>&</sup>lt;sup>1</sup> EWELL PAUL ROY, COOPERATIVES: DEVELOPMENT, PRINCIPLES, AND MANAGEMENT 41 (3d ed. 1976).

<sup>&</sup>lt;sup>2</sup> Id.

<sup>&</sup>lt;sup>3</sup> *Id*.

<sup>4</sup> Id. at 64.

<sup>&</sup>lt;sup>5</sup> Id.

<sup>6</sup> *Id* 

<sup>&</sup>lt;sup>7</sup> See *id.* at 63-84 for a long list of individuals who contributed to the growth and development of cooperatives.

tives.<sup>8</sup> Many were concerned with the building of communities and the transformation of society, but all were concerned with the economic survival of the participants.<sup>9</sup>

In 1844, a group of English textile workers, the Rochdale Society of Equitable Pioneers, set up the first of what was to become the truetype of the cooperative as we know it today. 10 Adopting features from other societies, the Rochdale Society ran a store based on what came to be known as the Rochdale Principles. 11 Nearly all cooperative history since the mid-nineteenth century has incorporated the Rochdale Principles. 12 These principles were based on fundamental ideas: the store was open to all; charged ordinary market prices; sold genuine articles which were what they were professed to be; took no credit; gave dividends in proportion to purchases; required that every member have a share/shares and good interest; gave each member equal voting power regardless of shares owned; and had an honest manager and an active committee. 13 Furthermore, the Society insisted on intelligent and efficient stock taking and auditing.<sup>14</sup> Today, agricultural cooperatives in the United States still operate under a modified form of these principles.15

#### B. Cooperatives in the United States

Early cooperative development in the United States may be traced back to the Pilgrim Fathers who were forced by necessity to band together in a mutual agreement on a cooperative basis. As they developed, these early cooperatives reflected ingenuity in meeting the challenges of early America. Has early as the 1780s, farmers organized societies to import purebred cattle; later, they joined in community drives of livestock to the eastern coastal cities . . . . [Other cooperative efforts] included husking bees, threshing rings, bull and stallion rings, and other forms of group activity. Has early states and other forms of group activity.

<sup>&</sup>lt;sup>8</sup> *Id*.

<sup>&</sup>lt;sup>9</sup> Id.

<sup>&</sup>lt;sup>10</sup> Scroggs, Claud L., *Bringing Into Focus The Cooperative Principles*, in Cooperation—Catalyst for Action 99 (Beryle Stanton ed. 1976).

<sup>&</sup>lt;sup>11</sup> *Id*.

<sup>12</sup> Id.

<sup>13</sup> Id. at 100.

<sup>14</sup> Id.

<sup>15</sup> Id. at 100-01.

<sup>&</sup>lt;sup>16</sup> Martin A. Abrahamsen, Cooperative Business Enterprise 89 (1976).

<sup>&</sup>lt;sup>17</sup> *Id*.

<sup>18</sup> Id. at 89.

The history of cooperatives in the United States includes significant contributions by the National Grange, the Farmers Alliance, the Farmers Educational and Cooperative Union of America, and the American Farm Bureau Federation.<sup>19</sup> Cooperatives grew during the depression years when the economy was bad. In the 1960s, the Kennedy-Johnson administration spurred further examination of cooperatives' potential contribution to the economic welfare of economically disadvantaged groups—especially black farmers of the south, low income whites of the Appalachian Mountains, Spanish-speaking Americans of the Southwest, and Indian tribes throughout the United States.<sup>20</sup>

The Office of Economic Opportunity (OEO) was created in 1964 with one of its major objectives being to provide grants to cooperatives serving low income people.<sup>21</sup> The federal government has demonstrated interest in cooperatives through support of cooperatives in teaching, research, and extension programs at land-grant colleges and universities, as well as many other areas.

#### II. LEGAL PERSPECTIVE

The legal environment dictates the various forms of economic activity in a society. For any economic unit to flourish, or even be viable, favorable laws are essential. Over the years, federal and state governments have enacted many laws affecting cooperatives. At the national level the most important of these were the Sherman Antitrust Act of 1890,<sup>22</sup> the Clayton Act of 1914,<sup>23</sup> and the Capper-Volstead Act of 1922.<sup>24</sup> A review of economic history prior to these laws will assist in placing them in proper perspective.

#### A. Economic Background Prior to the Antitrust Laws

There are six ideologies of our capitalist economic system: (1) private ownership of property and resources; (2) self interest as the dominant motive; (3) freedom of choice and of enterprise; (4) reliance on the market system; (5) open competition; and (6) a limited role of the government.<sup>25</sup>

<sup>19</sup> Id. at 100-01.

<sup>&</sup>lt;sup>20</sup> Id. at 101.

<sup>&</sup>lt;sup>21</sup> Id.

<sup>&</sup>lt;sup>22</sup> See Sherman Antitrust Act, 15 U.S.C. §§ 1-7 (1999).

<sup>&</sup>lt;sup>23</sup> See Clayton Act, 15 U.S.C. §§ 12-27 (1999).

<sup>&</sup>lt;sup>24</sup> See Capper-Volstead Act, 7 U.S.C. §§ 291-292 (1999).

<sup>&</sup>lt;sup>25</sup> CAMPBELL R. McConnell & Stanley L. Brue, Economics: Principles, Problems, and Policies 61 (14th ed. 1999).

After the Civil War, improved transportation, mechanized production methods, and sophisticated corporate structures expanded local markets into national markets, leading to the development of trusts—monopolies—in the 1870s and 1880s.<sup>26</sup> Questionable tactics used to monopolize markets spawned public mistrust of big business.<sup>27</sup> Therefore, antitrust laws evolved for markets where monopolies were not essential.<sup>28</sup>

#### B. The Sherman Antitrust Act and Cooperatives

Originally passed in 1890, the primary point of the Sherman Antitrust Act resides in the first two sections. Section 1 provides: "Every contract, combination in the form of a trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations is hereby declared to be illegal . . . ."<sup>29</sup> Section 2 goes on to provide: "Every person who shall monopolize, or attempt to monopolize, or combine to conspire with other person or persons, to monopolize any part of the trade or commerce among the several states, or with foreign nations, shall be deemed guilty of a felony . . . ."<sup>30</sup> Thus, monopoly, collusive price fixing, and dividing up of markets among competitors became Federal crimes.

Cooperatives were easy targets for "restraint of trade" litigation under the Sherman Antitrust Act and state antitrust laws. Between 1890 and 1910, directors and officers of selling cooperatives were indicted under the laws of five states and the Sherman Antitrust Act.<sup>31</sup>

However, large business combinations continued to flourish under the Sherman Antitrust Act.<sup>32</sup> Farmers, faced with large corporate organizations on every side, believed their only salvation depended upon their ability to form counter organizations adapted to their own economic needs.<sup>33</sup> Farmer cooperatives had grown both in number and power by the time the Clayton Act was passed.<sup>34</sup>

<sup>&</sup>lt;sup>26</sup> Id. at 667.

<sup>27</sup> I.A

 $<sup>^{28}</sup>$  Id. A few markets create a natural monopoly. Their economic behavior is controlled by public regulatory agencies. Id.

<sup>&</sup>lt;sup>29</sup> Sherman Antitrust Act, 15 U.S.C. § 1 (1999).

<sup>30</sup> Id. at § 2.

<sup>31</sup> Roy, supra note 1, at 99.

 $<sup>^{32}</sup>$  Joseph G. Knapp, USDA, Capper-Volstead Impact on Cooperative Structure 3 (1997).

<sup>33</sup> Id.

<sup>&</sup>lt;sup>34</sup> *Id*.

#### C. The Clayton Act and Cooperatives

In 1914 Congress passed the Clayton Act to remedy weaknesses and abuses of the Sherman Antitrust Act.<sup>35</sup> Congress attempted to protect farmer cooperatives through a clause defining a distinct type of agricultural association which would not be a per se combination in restraint of trade.<sup>36</sup> However, it soon became apparent that cooperatives were not fully protected under that act; they were still considered combinations in restraint of trade.<sup>37</sup>

#### D. The Capper-Volstead Act and Cooperatives

Finally, in 1922 Congress enacted the Capper-Volstead Act.<sup>38</sup> Heralded by the farming community as "the Magna Charta of Cooperation, it gave the green light for the development of strong, well organized, and well financed cooperative associations, and under its protection cooperative marketing was to flourish as never before."<sup>39</sup>

#### III. ECONOMIC ASPECTS

#### A. Dichotomy of Cooperatives

In addressing the economic aspects of cooperatives, one observes a clear dichotomy between two groups of cooperators. One group considers the main purpose of the cooperative to be community building and/or the building of a type of economic and social system. Another group thinks of it strictly as a form of business organization within an economic system. The former group manifests itself in communist style cooperatives while the latter group gave rise to our capitalist style cooperatives. This dichotomy has resulted in much confusion about cooperatives, particularly when they are discussed at international conferences.

This author was criticized for recommending cooperatives for an underdeveloped country which had limited resources and a large number

<sup>&</sup>lt;sup>35</sup> Id. See Clayton Act, 15 U.S.C. §§ 12-27 (1999); Sherman Antitrust Act 15 U.S.C. §§ 1-7 (1999).

<sup>&</sup>lt;sup>36</sup> Id. (describing the background of the Clayton Act. See 15 U.S.C. §§ 12-27 (1999)).

<sup>37</sup> Id. at 4.

<sup>38</sup> See Capper-Volstead Act, 7 U.S.C. §§ 291-292 (1999).

<sup>&</sup>lt;sup>39</sup> Id. at 11-12 (describing the effect of the Capper-Volstead Act. See 7 U.S.C. §§ 291-292 (1999).

of small farms.<sup>40</sup> In that country the government had taken over some of the larger plantations and handed them to the peasants to be farmed as cooperatives. Ordinary workers were placed as managers. However, since these cooperatives were formed without much economic thought, they failed miserably.<sup>41</sup>

#### B. Cooperatives and Economic Systems

Government orchestration of cooperatives is a hallmark of communist countries.<sup>42</sup> For example, groups of farm families may be put together in communal villages which work several thousand acres of land under a chairman or manager who is a member of the Communist Party. The state owns all of the land, equipment, and facilities, as well as everything that is produced.<sup>43</sup> Communists have adopted the term "cooperatives" in order to capitalize on the respect and admiration which free enterprise cooperatives had earned prior to the Russian revolution of 1917.<sup>44</sup>

In developing socialist countries, the cooperative often functions as an instrument of the state for carrying out economic and social programs.<sup>45</sup> The cooperative system may serve as the state trading agency by supporting various functions such as assembling and processing agricultural products, and supplying farms with seeds, feeds, petroleum, fertilizer, etc.<sup>46</sup>

Some who have studied the subject believe that cooperatives are best used when they replace the free market and focus on community development.<sup>47</sup> For example, an extensive study of community development in Saskatchewan examined the social role of cooperatives in the community, as well as community interest versus self-interest.<sup>48</sup> A book on the findings concludes that cooperative, rather than individual, action holds the key to answering many questions faced by society.<sup>49</sup> One reviewer of this book points out that its authors prefer a holistic management approach, dealing with the needs of the community as a

<sup>&</sup>lt;sup>40</sup> Basil G. Coley, *Entrepreneurship Through Cooperatives*, Presentation at the American Economics and Finance Association Meeting (Jamaica, Aug. 1993).

<sup>41</sup> Id.

<sup>42</sup> Roy, supra note 1, at 32.

<sup>43</sup> Id.

<sup>44</sup> Id.

<sup>&</sup>lt;sup>45</sup> ABRAHAMSEN, supra note 16, at 11.

<sup>&</sup>lt;sup>46</sup> Id

<sup>&</sup>lt;sup>47</sup> See Brett Fairbairn et al., COOPERATIVES AND COMMUNITY DEVELOPMENT, (1991).

<sup>48</sup> Id.

<sup>49</sup> Id.

whole.<sup>50</sup> The reviewer also notes that most of the socialist world is shifting to free markets and capitalism in order to improve the wellbeing of their citizens through development of their economies and communities. In contrast, the authors of the study have serious reservations about the effectiveness of free markets and individual action in promoting effective long-run community development.<sup>51</sup> Therefore, at least some economists believe that cooperatives are best used when they replace the free market and focus on community development.

#### C. Cooperatives as a Form of Business Organization

#### 1. Cooperatives and the Corporation Compared

In order to examine the cooperative as a form of business organization, one must first compare it with the corporation. The questions posed in Table 1 will assist in identifying distinguishing features.

Because of these characteristics, many tend to think cooperatives offer more advantages to members than corporations offer to shareholders, especially in the area of management and control. However, it should be noted that cooperatives have been criticized for not seeking entrepreneurial profits and for their limited equity capital.<sup>52</sup> In fact, financial pressures on farmers, a bull market in corporate equities, and the lack of means for recapturing appreciated value as a going business have led a number of cooperatives to consider restructuring.<sup>53</sup> In reviewing six cases of cooperative restructuring, Lee F. Schrader pointed out that equity capital issues led three of them to restructure as investor-oriented firms or to become part of investor-oriented firms.<sup>54</sup>

Terence J. Centner has also questioned whether agricultural cooperatives are mere historic remnants or viable membership organizations.<sup>55</sup> He questioned many aspects of cooperatives such as professional man-

<sup>&</sup>lt;sup>50</sup> Harold G. Love, *Book Reviews*, 7 J. AGRIC. COOPERATION 124-26 (1992) (reviewing CO-OPERATION AND COMMUNITY DEVELOPMENT ECONOMICS IN SOCIAL PERSPECTIVE).

<sup>51</sup> Id. at 125.

<sup>&</sup>lt;sup>52</sup> Lee F. Schrader, Equity Capital and Restructuring of Cooperatives as Investor-Oriented Firms, 4 J. AGRIC. COOPERATION 41, 44 (1989).

<sup>53</sup> Id. at 45.

<sup>54</sup> Id.

<sup>55</sup> Terence J. Centner, The Role of Cooperatives in Agriculture: Historic Remnant or Viable Membership Organization?, 3 J. AGRIC. COOPERATION 94 (1988).

agement, cost to organize, economic control, and patronage refunds.<sup>56</sup> He advised that, "[i]n the absence of sufficient justification, cooperative members should realize that there may be economic reasons for favoring an alternative business arrangement."<sup>57</sup>

However, criticism can be levied at some aspects of the corporation, as well. The bull market is not going to last forever. The success of large corporations supports the separation of ownership from control.<sup>58</sup> As the number of shareholders gets larger, the average shareholder's proportional interest grows smaller.<sup>59</sup> Typically, a shareholder may own an interest as small as a fraction of one percent.<sup>60</sup> Correspondingly, under the usual corporate system of one vote per share, the average individual shareholder has minimal voting power in a corporation.<sup>61</sup> Lack of voting power translates into little opportunity for the small shareholder to influence the election of directors or management policy.<sup>62</sup> Thus, he/she acts merely as a passive investor, leaving the decision making to others. This situation has been exacerbated in this era of large mutual funds and investment management companies that control large blocks of shares. Thus, the cooperative and the corporation each has problems unique to its form.

#### 2. Economic Theory and Cooperatives

Farmers buy and sell their products under an atomistic market structure; farm operators are higher in number and smaller in size than others in the market channel.<sup>63</sup> The result is that farmers acting individually have no control over the prices of the products they sell or buy and are regarded as price takers. In most instances they will sell to a monopsonist or oligopsonist who has tremendous market power and control over prices. The attempt to increase their bargaining strength, to achieve higher prices for their outputs, and to secure lower prices for their inputs is the fundamental economic basis of cooperatives.

<sup>56</sup> Id. at 94-95.

<sup>57</sup> Id. at 104.

<sup>&</sup>lt;sup>58</sup> JOE S. BAIN, INDUSTRIAL ORGANIZATION 74-75 (1959).

<sup>59</sup> Id

<sup>60</sup> Id. at 75.

<sup>61</sup> Id.

<sup>62</sup> Id.

<sup>&</sup>lt;sup>63</sup> Randall E. Torgerson et al., Evolution of Cooperative Thought, Theory and Purpose, 13 J. FARM ECON. 1, 4 (1998).

Various aspects of economic theory have been used in order to analyze and explain the economic aspects of cooperatives. One of the earliest theories of cooperation was that the cooperative is a form of vertical integration with one firm operating at different stages of the process of producing, marketing, or buying.<sup>64</sup> The economic anticipation is greater net margins to members of the cooperative, achieved as farmers gain greater control over their products and perform more production and marketing functions.<sup>65</sup>

Currently cooperatives are moving in the direction of horizontal integration. In horizontal integration, farmers join together to perform identical production or marketing functions, allowing economies of scale. In these days of corporate mergers and mega-mergers, this is essential to lower total operation costs.

On a more theoretical basis, Helmberger's classic theory leads to the conclusion that open membership cooperative activity in an imperfectly competitive market will eliminate monopsony profits and thus push prices and outputs toward a competitive equilibrium.<sup>66</sup> Although cooperatives may initially pay patrons the same prices as those paid to other firms, at the end of the year, any net margin is returned to patrons on a pro-rata basis.<sup>67</sup> Thus, in order to compete, other firms must pay the initial market price, as well as the equivalent of the patronage refund.<sup>68</sup>

The above analysis indicates that Helmsberger's economic theory supports the development of cooperatives as sound economic entities with their own theoretical foundation.

### 3. Economic Efficiency of a Cooperative

There has been much debate about the economic efficiency of cooperatives. Some analysts question government support for cooperatives, viewing it as promotion of inefficiency, as compared to for-profit corporations.<sup>69</sup> Among farmers, "[c]ooperatives [are] perceived as not operating as efficiently as proprietary firms [and] as [not] having higher

<sup>64</sup> Id. at 5.

<sup>65</sup> Id.

<sup>&</sup>lt;sup>66</sup> Ronald D. Knutson, Cooperatives and the Competitive Ideal, 48 J. FARM ECON. 111, at 112-13 (August 1966); see P.G. Helmberger, Cooperative Enterprise as a Structural Dimension of Farm Markets, 46 J. FARM ECON. 603, 603-17 (1964).

<sup>67</sup> Knutson, supra note 66, at 113.

<sup>68</sup> Id.

<sup>&</sup>lt;sup>69</sup> Jarvis L. Cain et al., Cooperative and Proprietary Firm Performance as Viewed by Their Customers, 4 J. AGRIC. COOPERATION 81, 87 (1989).

quality management." Other analysts come to a contrary conclusion. "[D]espite a number of recent studies addressing cooperative efficiency, evidence on the economic efficiency of cooperatives is limited and does not support the popular perception that cooperatives are less efficient than comparable investor owned firms."

#### 4. Taxation of Cooperatives

An attractive economic aspect of the cooperative is its favorable tax status when properly organized according to the Internal Revenue Service code. Apart from those previously discussed, there are many less known statutes affecting farmer cooperatives. The War Revenue Act of 1898 provided an exemption for local, not-for-profit farmers cooperatives and associations organized for mutual benefit. Other tax laws such as the Corporation Tax Statute of 1909, the Income Tax Statute of 1913, and various Revenue Acts addressed cooperatives and taxation.

The 1962 Revenue Act<sup>77</sup> clearly distinguished between exempt and non-exempt cooperatives. Exempt cooperatives must conform to the tax status of Internal Revenue Code section 521 cooperatives under this act.<sup>78</sup> Most importantly, the act provided that cooperatives may deduct dividends paid on capital stock and other equity when determining taxable income.<sup>79</sup> Thus, appropriately organized cooperatives avoid the double taxation which corporations face.<sup>80</sup> Since this is one of the major differences between cooperatives and corporations, it has been widely discussed and debated in agricultural economics literature. Some take exception to the view that the corporate income tax favors

<sup>70</sup> Id.

<sup>&</sup>lt;sup>71</sup> Richard J. Sexton & Julie Iskow, What Do We Know About the Economic Efficiency of Cooperatives: An Evaluative Survey, 8 J. AGRIC. COOPERATION 15, 15-16 (1993).

<sup>&</sup>lt;sup>72</sup> 26 U.S.C. § 521 (1999).

<sup>&</sup>lt;sup>73</sup> War Revenue Act of 1898, ch. 448, 30 Stat. 448 (repealed 1939).

<sup>&</sup>lt;sup>74</sup> Roy, *supra* note 1, at 545.

<sup>&</sup>lt;sup>75</sup> See Payne-Aldrich Tariff Act of 1909, ch. 6, 36 Stat. 11, 112 (repealed by Revenue Act of 1913).

<sup>&</sup>lt;sup>76</sup> See Revenue Act of 1913, ch. 16, 38 Stat. 114, 166-67 (current version codified as amended at 26 U.S.C. (1999)).

<sup>&</sup>lt;sup>77</sup> See Revenue Act of 1962, Pub. L. No. 87-834, § 2, 76 Stat. 960, 962 (codified in scattered sections of 26 U.S.C.).

<sup>78</sup> See 26 U.S.C. § 521 (1999).

<sup>79</sup> See Roy, supra note 1, at 553.

<sup>&</sup>lt;sup>80</sup> Id.

the development of cooperative enterprise, while supporters praise it.<sup>81</sup> Naturally, the favorable economic aspects of cooperatives continue to contribute to their growth and development.

# IV. RECENT TRENDS IN THE GROWTH AND DEVELOPMENT OF AGRICULTURAL COOPERATIVES

#### A. Number, Membership, and Gross Business

The number of farmers' cooperatives in the United States has been declining in recent years. Data for the 25-year period, 1970-1995 show that in 1970 there were 7,995 farmers' cooperatives. These had declined to 4,006 by 1995, a decrease of almost 50% (Table 2). The number of cooperative members declined slightly less, but still by almost 39%. In contrast, the average number of members per cooperative grew from 770 to 940 for an increase of 22%.

In terms of gross business done by the cooperatives during the period, this increased from a total of \$27,281 million in 1970 to a total of \$112,195 million in 1995 or 311.3% (Table 3). However, the most astonishing area of growth in cooperatives during the 25-year period was the gross business done per cooperative. This increased from \$3.4 million in 1970 to \$28 million in 1995, an increase of 723.5% (Table 3). This is ample evidence that cooperatives are growing in size in an effort to maintain their competitive position with the non-cooperative form of business organization.

#### B. Contribution of Farmers' Cooperatives to the Agricultural Sector

Tables 2 and 3 indicate that cooperatives are important entities in the agricultural sector. Table 4 shows the magnitude of the contributions of farmers' marketing cooperatives to total farm output for 1970-1995. Table 4 uses only the gross business for farmers' marketing cooperatives because supply businesses are mostly inputs and because services include many different operations.

According to Table 4, the total amount of business done by farmers' marketing cooperatives was 36% of farm output in 1970. The percentage contribution was highest in 1980 at 44.6%. Since then, it decreased but now seems to be trending upward again. Although there has been some fluctuation in gains, it increased to 39.4% in 1995. The

<sup>&</sup>lt;sup>81</sup> Peter Helmberger, The Future Roles For Agricultural Cooperatives: Reply, 49 J. FARM ECON. 761 (1967).

average percentage contribution for the 25-year period was 38.6%. Thus, for the 25-year period, cooperatives have generally contributed the same proportional share of total farm output, leaving room for further acceleration of growth.

#### V. ECONOMIC CONSIDERATIONS TO ENCOURAGE FURTHER GROWTH

#### A. Emulating the New Generation Cooperative

In recent years there has been what some consider a re-birth in cooperatives in states such as North Dakota and Minnesota. Some are even calling it "co-op fever." These cooperatives do not seem to have broken any new ground in cooperative economic theory, but have merely strictly adhered to basic theories proposed in the literature over the years. They are engaging in value added processing activities instead of the traditional marketing of raw agricultural commodities and the selling of farm inputs.

Facilitators of the New Generation start-ups emphasize three critical components in the development process: feasibility studies, business/marketing plans, and equity drives. 83 Traditionally, the raising of capital has been cited as a problem for cooperatives but the New Generation Cooperatives seem to be overcoming this problem by raising between thirty to fifty percent of their total capital requirements through the sale of delivery rights shares. The remaining capital requirements are met through debt or the issue of preferred shares. 84

Thus, solution of the financing problem, vertical integration into oligopolistic markets, and adherence to sound economic principles seem to drive the New Generation Cooperatives. As they continue to develop, they should provide successful models for other cooperatives to emulate.

#### B. Adherence to Cooperative Economic Principles

No one would dare doubt that cooperatives will continue to play an effective role in our economic system. Farmers developing new cooperatives enjoy a high probability of success if they adhere to cooperative and economic principles.

Cooperatives represent opportunities for farmers to have their own

<sup>&</sup>lt;sup>82</sup> Andrea Harris et al., New Generation Cooperatives and Cooperative Theory, 11 J. AGRIC. COOPERATION 15, 16 (1996).

<sup>83</sup> Id. at 25.

<sup>84</sup> Id. at 16.

integrated businesses.<sup>85</sup> Although farm supply and some fruit and vegetable cooperatives have shown significant progress toward this end, they and other agricultural cooperatives show great potential for even higher levels of integration.<sup>86</sup>

#### C. Education

Perpetuation and furtherance of any pool of knowledge requires continuous education. During the twenty-five years prior to 1976, American economists directed little attention to the unique nature of cooperatives, their basic objectives, and their place in the national economy.<sup>87</sup> Articles in professional journals and publications were concerned largely with problems of structure and selected aspects of operations.<sup>88</sup>

A survey of introductory economics textbooks revealed a deemphasis on cooperatives.<sup>89</sup> Of 114 books surveyed, 55 were general economics; 15 were agricultural economics; 19 were micro-economics; and 25 were macro-economics.<sup>90</sup> The books on micro- and macroeconomics made no mention of cooperatives, while only four of the books on general economics and six of those on agricultural economics had more than one hundred lines on cooperatives.<sup>91</sup>

Thus, even though cooperatives effectively contribute to our economy, these contributions could undoubtedly be enhanced if more students were exposed to this form of business organization in their elementary economics textbooks.

#### SUMMARY AND CONCLUSIONS

Historically, cooperatives evolved mostly because of economic issues. After overcoming some unfriendly laws such as the Sherman Antitrust Act and the Clayton Act, cooperatives began to thrive in this country. There has been much debate in the literature regarding whether the real purpose of cooperatives in society is to function as a form of economic system, as a community development organization, or as another form of business organization. Communist countries have

<sup>85</sup> ABRAHMSEN, supra note 16, at 444.

<sup>86</sup> See id.

<sup>87</sup> Id. at 83.

<sup>88</sup> Id.

<sup>&</sup>lt;sup>89</sup> Lori Lynch et al., De-emphasis on Cooperatives in Introductory Economics Text-books, 4 J. AGRIC. COOPERATION 89, 90 (1989).

<sup>90</sup> Id.

<sup>&</sup>lt;sup>91</sup> Id.

chosen the first option, capitalist countries have chosen the third. With this choice, cooperatives have played an important role in the agricultural sector in this country. During the twenty-five year period, 1970-1995, they declined in numbers and in membership, but grew tremendously in gross business per cooperative. This evidences that cooperatives are part of the dynamism and change in our economy. As other businesses become larger, cooperatives are realizing that in order to compete they must also grow in size. This trend is expected to continue.

The New Generation Cooperatives are providing new models on the economic aspects of vertical integration and cooperative finance. As more knowledge becomes readily available to students through elementary economics textbooks and other media, interest in cooperatives should continue to grow. Also, as cooperatives become larger, more highly qualified professionals will be needed for management positions. To fill this need, agribusiness, agricultural economics, business, and economics departments in colleges and universities will have to gear up to make cooperative management a specialized track in their programs in order to fill this void. Cooperatives face a future of exciting economic challenges.