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ABSTRACT

A series of observations on various types of cooperatives is constructed from intermittent surveys between 1920 and 1950 and, where possible, these are extended to recent years. These observations allow several questions to be taken up : how well have organizations that resemble consumers' cooperatives fared in the U.S. economy over the last century? ; are consumers' cooperatives viable organizations in an economy dominated by capital-owned firms? ; where have cooperatives made their mark?; what role has government played in the patterns of cooperative development? Suggestions for further research on cooperatives are proposed.

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THE PERFORMANCE OF CONSUMERS' COOPERATIVE SOCIETIES IN AMERICA

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The purpose of this paper is to describe the performance of organizations that have the features of a consumers' cooperative and to determine whether consumers' cooperatives are viable associations in a market economy populated with competing capital-owned firms. The setting for this inquiry is the American economy from the early decades of the twentieth century to the present. Some have argued that the ultimate test of the efficacy of an organization that operates in a society such as America's is its ability to adapt and survive when it is subject to major shocks.

In what follows, first, I define what is meant by a consumers' cooperative. I do this by describing the pioneer cooperative and some of its descendants in the 19th and early 20th centuries. A principal source of information is a series of surveys undertaken from 1920 to 1950 by Florence Parker, an employee of the U.S. Department of Labor. The findings of her surveys were published in Bulletins of the U.S. Bureau of Labor Statistics (BLS). From these reports, I arrange her statistics by type of cooperative - the nature of the product or service being delivered to customers - during the years of her reports. Unfortunately, in recent years, the U.S. Department of Labor has not continued the sort of surveys that Parker undertook so, to bring the description up to more recent years, where possible, I call upon other sources. I conclude each type with information about its current standing.

A consumers' cooperative is an organization that distributes commodities or delivers services to consumers who also own the organization. Here "own" means both that the consumers have the opportunity to take the key decisions in the organization's operations and that they enjoy a segment

* A referee's comments improved this paper.

of any monetary net returns profit that results from its activities. A consumers' cooperative may adopt the practice of buying goods in bulk for lower prices, but this is not an essential feature of the consumers' cooperative. A group that behaves in this way is sometimes called a purchasing cooperative. The guiding principles that define a consumers' cooperative were set 175 years ago by an association in Rochdale, Lancashire.[1]

THE ARCHETYPE

The growth of production and factory employment in the late 18th century and early 19th century in Britain gave rise to grievances of workers that inspired the development of associations of workers, trade unions. Analogously, dissatisfaction with the quality of and prices charged for consumer goods inspired urban dwellers to cooperate in organizations that experimented with other ways of distributing the consumption of goods and services.

One of these organizations has had a rich posterity. This is the Rochdale Society of Equitable Pioneers, 28 men who set up their Toad Lane Cooperative Store in 1844. Each man contributed £1 (paid at the rate of tuppence a week) to purchase small amounts of groceries with which they opened a shop. Because they worked (as weavers), initially the shop was open only in the evenings on two days each week.

The goods for sale were of good quality and their prices were those ruling in the market. When the shop grew and hired employees, they were paid market wages. A key difference between this cooperative and the typical shop that was owned by those who provided the initial capital would not be in the prices of their goods for sale nor in the wages of their employees, but in the distribution

[1] In 2011 the International Co-operative Alliance named Rochdale the world capital of the cooperative movement.

of net returns: instead of being received and enjoyed by a small number of capital investors, the net returns would be distributed quarterly as dividends to those members who patronized the shop. An early dividend rate was 8.33 % (that is, 1s. 8d. on £1, Cole and Filson (1951, p. 431)). It was a profit-sharing business where the sharing was not among the capital-investors nor among the employees but among the consumer-members. From 1844 to 1857, the membership of the Toad Lane Store grew from the original 28 men to 1,850 men and women and its annual profit rose from £33 to £5,470 (Holyoake (1893) p.41). A particular concern of the Toad Lane store was with the quality of their commodities on sale and they vowed to sell only unadulterated food.

Believing in the importance of working families to be well-informed of the affairs of the day, the Pioneers put aside money for an Educational Fund used to buy books and newspapers. “Their....library contains 2,200 volumes of the best books published.:” (Holyoake (1893), p. 50.[1]

From the Toad Lane Cooperative Store in Rochdale was derived five guiding principles for a consumers’ cooperative:

1. That membership in the society should be open to all and accessible by setting low entry fees.

2. That any interest on capital invested in the society should be modest and at a rate that applies to all regardless of the amount invested.

3. That the members govern the society and each member has one vote regardless of how much capital each has invested or how much his purchases at the store.

[1] “The Store became a meeting place, where almost every member met each other every evening after working hours....Every member was allowed to express his opinions on whatever topic he took an interest in. Religion and politics, the terrors of Mechanics’ Institutions, were here common subjects of discussion, and harmless because they were open. In other respects, the co-operators acquired business confidence as well as business habits.” Holyoake (1893, p. 23) Also, from the minutes, Holyoake observed that (p.124) “Frugality in speech is certainly a virtue, though not usually counted in the list of meritorious economies.”

4. That the sale of goods on credit should be avoided (lest the society finds itself with too little liquid capital).

5. That net earnings be returned to members in proportion to their patronage.

A Rochdale Society is an association that follows these principles. The principles have not always been adhered to (sometimes membership was restricted to those with a particular skill or to those sharing the same employer or sometimes those who had invested stock in the society would receive a higher dividend rate) , but the five conditions above were the default definition of a Rochdale type of consumer cooperative. Beyond any particular principle, the goal was to foster cooperation and equal treatment.

The Rochdale Pioneers were a product of Victorian views of capitalism in which the creation of profits was met with approval, but the manner in which the profits were distributed might not be. An economist could characterize the Rochdale Pioneers as operating in three stages: in the first stage, the store chooses its goods for sale from its wholesaler and selects its inputs such as labor to maximize its revenues; with revenues thus determined, in the second stage, the store puts aside money for reserves, for depreciation, and for the payment of interest to those who supplied the society with capital [2] ; in the final stage, the society distributes the remaining revenues to its customer-members such that each member receives dividends in proportion to his patronage of the store's total sales.

[2] If the store had an educational fund, as did the Rochdale Pioneers and some 20th century cooperatives, these would also be deducted from revenues before distribution. This might support the publication of a news sheet or pay for proselytizing material.

NINETEENTH CENTURY CONSUMERS' COOPERATIVES IN AMERICA

In America many co-operatives were established in the nineteenth century often with no reference to the Rochdale Pioneers, but they tended to encounter difficulties and either closed or became capital-owned. There were a number of farm cooperatives, some of which simply aimed to eliminate the middleman in buying activities. There were occasions when trade unions became involved in consumers' cooperatives. As the focus of the unions' efforts was on gaining recognition at their place of work, trade union interest in consumers' cooperatives tended to be short-lived.

In time, the Rochdale business model became better known in America[3] and an investigationby Edward Bemis[4] (1896) of cooperative stores identified 49 "Rochdale societies" with a membership of 16,807 individuals, about 64 % of whom were in New England. (He wrote there were 1,486 such societies in Britain at that time.) Bemis obtained information on dividend rates paid on patronage by 33 of the societies in America in 1895-96 and the average rate was 5.1% with a maximum of 12% by a society in Maine and a minimum of 2.0% by two societies in Kansas.

FLORENCE PARKER'S SURVEYS FROM 1920 TO 1950

The next attempt at a systematic assessment of the extent and practices of consumers' cooperatives was undertaken in 1920. The key figure in this work and, indeed, in subsequent surveys until 1950, was Florence E. Parker, an employee of the U.S. Department of Labor. It is evident from her book (Parker (1956)), that she sympathized with the cooperative movement, but these

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[3] Thus in 1862 the Union Cooperative Association No. 1 was organized in Philadelphia on Rochdale principles, but because of the drag of a heavy overhead it failed after 24 years of operation. Detail on 19th century American cooperative societies is contained in the first six chapters of Parker (1956).

[4] Edward Bemis (1860-1930) was an economist with a Ph.D. from Johns Hopkins University.

sympathies did not prevent her from providing a dispassionate evaluation of cooperative performance as is evident from her discussion of "Failures in Cooperation" accompanying her 1920 and 1925 surveys. In 1925, she identified 249 defunct retail cooperatives that, she determined, failed because they had not built up sufficient reserves to survive the severe contraction that followed the war.

The findings of her surveys of consumers' cooperatives were reported in Bulletins of the Bureau of Labor Statistics published from 1922 to 1951 . They constitute an invaluable source of information for anyone interested in the evolution of the cooperative movement in America. At the same time, in the presentation of her findings, she did not follow the same organization from survey to survey and this frustrates the construction of a consistent series of the cooperatives over time. For instance, her list of cooperatives sometimes included agricultural cooperatives and sometimes it did not and she did not always indicate when it did. In this paper, agricultural cooperatives are dealt with in a separate section below.

Another problem she faced was that of non-reporting: some cooperatives did not respond to her surveys or did not provide all the information she sought. In some Bulletins, she reports the response rate and presents membership data for all the co-ops (that is, including those not reporting) by a process of imputation: deriving estimates of membership of the non-responding co-ops by assuming those non-reporting co-ops have the same number of members as look-alike coops that did report their membership. She did not follow that procedure in reports of all years so the series created reflects non-response and, in some years, probably mis-states membership. Of course, this non-response issue does not apply only to her surveys and they plague surveys today, but it is important to acknowledge these problems with Parker's surveys and not to place undue confidence in the precise values.

Her first survey for 1920 differed from subsequent surveys in a number of respects. In her 1920 survey, she does not report membership figures for types of co-ops; in subsequent surveys, such membership figures are reported.[5] In 1920, she distinguishes between societies that conform to Rochdale principles and those that do not. She states that about 80% did so conform. In later surveys, she does not report this information. Tables listing the number and membership of types of consumers' cooperatives are supplied in the years 1925, 1929, 1933, 1936, and from 1939 to 1950 (except for 1947). I follow the convention of identifying the survey by writing Parker(t) where t is the year to which the survey relates even though it was published in a later year. The entire publications used in this paper are listed in the References.

I organize the information by type of consumers' cooperative starting with retail cooperatives, followed by financial cooperatives (insurance and credit unions), housing, electricity and telephone, medical and hospital care , agriculture and concluding with some information on workers' cooperatives. In each case (where possible), I bring the account up to the present and conclude with an assessment of the cooperative movement.

From Parker's surveys, for each type of cooperative, I report the total membership across all cooperatives, the total number of stores, and a measure of their business, an index number of their total real sales. To be precise, starting with the aggregated sales figures of a given type of

[5]In 1920, her membership figure for all non-agricultural consumers' co-ops is 196,352.

cooperative in a given year (as supplied by Parker), I divide this by a price index[6] to arrive at a series of price-adjusted or "real" sales and, to facilitate the tracking of movements in sales over time, I create an index number (usually such that the base year is 1950). I would have liked to have done this for patronage payments, but Parker does not always provide this information. Moreover, some cooperatives appear to have distributed patronage dividends to frequent consumers who were not members. Hence, even if we had total patronage payments from all of Parker's surveys, we cannot divide these by the reported members to arrive at average patronage payments to members.

RETAIL COOPERATIVES

At one time, the most familiar of consumers' cooperative was the local retail store selling groceries or general merchandise. Indeed, in Parker's surveys, this is the largest of the retail cooperatives whose number, membership, and sales are listed in Table I from 1920 to 1950. [7] Also included in the list of retail cooperatives in Table I are cooperative bakeries, creameries, laundries, restaurants, boarding houses, publishing and printing societies, water supply associations, cold storage facilities, recreation associations, garages, trucking businesses, and buying clubs. This list of cooperative retail outlets indicates that, in this period, the cooperative model found application to a wide variety of retail businesses.

Parker described a buying club as "an initial step in cooperative organization" that saves

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[6] The price index is that constructed by Officer (2007). This is very similar to the BLS series and the base years are 1982-84 = 100.

[7] Thus, in 1925, the total sales of the cooperative stores selling groceries, meats, and general merchandise ("classic" cooperatives) represented 86 per cent of the sales of all the retail outlets; in 1936, the number of these classic cooperatives constituted 91 percent of all the retail associations grouped in Table I ; and in 1950 the membership of these "classic" cooperatives was 89 percent of the membership of all cooperative retail stores.

its members money by buying in bulk. In recent years, these clubs have become a device for people with serious health problems (such as AIDS or hepatitis C) to buy expensive medications at wholesale prices and to purchase drugs not yet approved by the Federal Drug Administration. Buying clubs tend to be informal groups of people and a reliable count of them appears not to have been made for many years. Often they are called purchasing cooperatives.

In the early years, the typical cooperative boarding and rooming house consisted of unmarried men who pooled their resources and took possession of a large old house, restored it, and operated it at cost. They provided inexpensive accommodation for itinerants and often served simple meals. By the 1930s, some had become lodgings for students and staff at local colleges or for employees at a nearby company.[8] Ownership shares were traded when some owners left the boarding house and new people moved in.

According to all three series in Table I, the years from 1920 to the late 1940s were a period of substantial growth in the imprint of retail cooperatives on American society.[9] The upward trend in membership exceeds that in the number of societies implying a growth in the membership of the typical retail co-op. Around this upward trend were cycles coincident with the business cycle.

The economy's contraction from 1929 to 1933 was especially difficult for these businesses

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[8] "There were at least five organized boarding houses in the latter part of 1935, four of them operated by college students and one by unemployed union laborers." from Consumers' Cooperation in California, 1934-35 *Monthly Labor Review* May 1936, p. 1223 .

[9] Unfortunately, Parker's 1950 survey is not presented in the same way as her previous surveys frustrating comparisons of the 1950 observations with earlier years. In 1950, she presents figures for farm, for non-farm cooperatives, and for the sum of the two sectors. The sum yields values that seem to be a continuation of the trend in previous years and that correspond to her narrative and this is what is reported in Table I.

with declines in membership, in the number of retail cooperatives, and in sales.[10] In her report for 1936, Parker noted (on page 11), "The depression had the usual effect of depressions upon the cooperative movement. Cooperative associations are predominantly working-class organizations and as such are peculiarly sensitive to conditions affecting the employment and income of the workers. A substantial number of associations were wiped out by the results of unemployment, bank failures, failures of employing firms, and the general hard times which their resources were not sufficient to overcome." The subsequent expansion from 1933 to 1939 more than made up for the losses during the preceding years.

These retail cooperatives gave rise to another class of cooperatives: wholesale cooperatives. In the early decades of the 20th century, improvements in trucking and rail operations and in refrigeration reduced transport costs and increased the distance that a wholesaler would reach with fresh produce. This had the effect of undermining local wholesale monopolies (Heflebower (1980) pp. 100-113) and the ensuing competition resulted in the closure of some wholesalers. Retailers saw an opportunity to secure their supplies by buying out a struggling wholesaler. The retail cooperatives were particularly responsive to this opportunity and they collaborated to acquire a wholesaler or, sometimes, to create a wholesaler of their own. A single large retail cooperative might own its wholesaler which may also do business with other retail cooperatives.[11]

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[10] The number of retail cooperatives in 1933, namely 253, in Table I is the number who responded to Parker's survey. She estimated there were 965 retail businesses in all.

[11] The cooperative retail stores were following the example set by the Rochdale Pioneers who, after much discussion, set up in 1864 a wholesale society to serve it and other cooperative retail societies in the north of England.

In her first survey for 1920, Parker identified "at least 15 cooperative wholesale societies" and another 6 which had both its own retail and wholesale business.[12] By 1950 , there were over 50 wholesale cooperatives doing millions of dollars of business. Some served a district (part of a state), some a single region, and others covered several regions of the country. They supplied 5,349 cooperative associations. They adhered to the Rochdale principle of distributing patronage dividends to their retail stores customers. For example, in 1936, they returned to their retail members a dividend of 6½ % of total sales.

The decades after the Second World War brought substantial changes in food retailing as small, stand-alone grocery stores were replaced by supermarkets that were often part of a regional or national chain. "Of the 25,710 stores affiliated with cooperative groups in 1948, about 16,000 had left by 1958" (U.S.Federal Trade Commission (1966, p. 42)) . The response of the cooperative retailers was to expand their wholesalers.[13]

Consider, as an example, Wakefern Food Corporation, a retailers' cooperative: Wakefern was established in 1946 when eight independent grocers in Newark each contributed $1,000 to set up an association that purchased their merchandise in quantities that secured lower unit prices. Similar to the buying clubs mentioned above, it was a purchasing cooperative. Today, its revenues

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[12] In 1950, the retail business of the regional wholesale cooperatives was one-fifth of their wholesale business (Parker (1950. Table 7, page 7)).

[13] This is recognized by Flexner and Ericson (1957, p.7-8): "The hundreds, or thousands, of small societies, each with a store doing a few thousand dollars' worth of business annually, are giving way to fewer, but much larger societies and stores. Only those cooperative retail stores which have a large annual turnover can hope to compete with chain-store prices and variety of merchandise.....In certain areas, leadership in mergers and reorganizations of local cooperatives and in store modernization has been taken by the regional wholesale cooperative serving the member societies of the area."

are about $13 billion and its 51 member-retailers include Price Rite Marketplace , ShopRite, The Fresh Grocer, and Dearborn Market. In all, 353 supermarkets on the East Coast are supplied with groceries bought from Wakefern.

There are other cooperative wholesalers such as URM stores (based in Spokane), Associated Wholesale Grocers (Kansas City), and Associated Food Stores (Salt Lake City). See Table II. As URM's website states, "all its net earnings on business done with or for its member-owners through its Patronage Departments are allocated and paid to its member-owners in the form of patronage dividends....paid to the member-owners in proportion to the business each owner does with URM...". The cooperative grocer today is more likely to be the wholesaler and the retailer is the member. Many consumers may not realize that their purchases are, indirectly, from a cooperative association. Smaller cooperative grocers are still active and Knupfer (2013) provides a sympathetic portrait of over thirty of them.

FINANCIAL COOPERATIVES : INSURANCE

In view of the problems that tend to arise in insurance markets from incomplete information between the insurer and the insured, the notion of combining the roles of insurance provider and insurance policy-holder would seem natural and beneficial to both. Such is the arrangement with mutual insurance companies in which the policy-holders (those being insured) own the company, a classic example of a consumers' cooperative. They have been a durable feature of insurance markets in America since at least the late eighteenth century when Benjamin Franklin and other firefighters formed the Philadelphia Contributionship to replicate the Amicable Contributionship of London (founded in 1696). The purpose of both Contributionships was to pool risks of a local fire by making regular payments into a fund that would be called upon to compensate home owners for losses in the event of a fire. Such prepayment schemes came to be used in cooperative medical insurance.

Before reserves could be built up, some mutual insurance companies used the premiums paid by the policy-holders as initial capital. The policy-holders were advised that insurance policies would operate once a certain amount was raised. In this way, there were no banks or wealthy individuals with claims on the company. For a long time, mutual insurance companies have existed alongside stock insurance companies in which the owners of the companies are those who have provided the capital. A stock insurance company passes positive net returns over to the stockholders, but they may not be policy holders of the company's insurance. A mutual insurance company passes net returns over to their customers (the policy holders) in the form of dividends or lower premiums.

Because the shareholders of a stock insurance company often hold diversified portfolios of securities, they may be more risk-tolerant and willing to support a policy of risky behavior of their insurance company in return for higher returns. This is why some have claimed the mutual insurance company will be a safer place to buy insurance.[14]

In Parker's survey for 1936, she found that 71 percent of the 1,317 insurance associations reporting were formed in 1900 or earlier.[15] Although they wrote insurance for life, accident, health, fire, and automobile insurance, the most common policy concerned fire insurance. Many of these insurance companies served a small area in which "the members know each other and can judge whether an applicant for insurance is a good moral risk" (Parker (1936) p. 137). Forty percent of

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[14] For a historical perspective on the advantages of mutual insurance over stock insurance (both for life insurance and for property insurance), see Hansmann (1985).

[15] There were 1,317 associations that reported their year of formation. She estimated there were 1,800 mutual insurance associations in all.

these mutual insurance companies had fewer than 1,000 members.

Today, in terms of the total assets of life insurance companies, three of the eight largest companies are mutuals while four of the largest writers of premiums for homeowners insurance are mutual companies.[16] Parker's observations on mutual insurance companies from 1929 to 1950 are in Table III. Variations between 1960 and 2000 in the relative importance of mutual life insurance companies in Table III may reflect changes in the tax treatment of their dividends in 1959 and in 1984. Certainly there has been a long-term downward trend in the fraction of households owning life insurance (both stock companies and mutuals).[17]

FINANCIAL COOPERATIVES: CREDIT UNIONS

Credit unions trace their lineage not to Rochdale but to Germany where they arose in the mid-nineteenth century.[18] Yet, their operating principles resembled in many ways those of Rochdale consumers' societies. Credit unions appear in Parker's work in her survey for 1925 where she writes, "In general....the bank, as an institution, has not reached the great body of persons with small incomes. In times of financial stress, most of these persons know of only two avenues of relief - charity, or the loan shark. One solution of this problem and apparently a very successful solution

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[16] The three largest mutual life insurers (by total assets) in 2017 were New York Life, Northwestern Mutual, and Massachusetts Mutual. The four largest mutual companies writing homeowners insurance in 2017 were State Farm Mutual Automobile Insurance, Liberty Mutual, Nationwide Mutual, and American Family. Together these four companies wrote almost one-third of all homeowners insurance. The information comes from the 2019 Insurance Fact Book, Insurance Information Institute, 2019, Tables 7 and 11.1 .

[17] Thus Hartley, Paulson, and Powers calculate (2017) that "In 1989, 77 per cent of households owned life insurance. By 2013, that share had fallen to 60 per cent."

[18] For the European origins of credit unions and their early years in North America, see the first few chapters of Moody and Fite (1971).

is the cooperative credit society, called in the United States the credit union." (page 11) She refers to credit unions as "poor men's banks" .

By the end of 1925, 24 states (many in the North-East) had passed legislation facilitating the formation of credit unions with the purpose of promoting thrift among its members and of providing loans at moderate rates to a member. Though the membership fee was $1 or less, there were restrictions on membership designed to ensure a new member would be of "good character" who had a high probability of repaying a loan. Typically, each applicant for membership needed an existing member to vouch for the prospective member's probity. In this way, the original credit unions consisted of people working at the same firm, or attending the same church, or belonging to the same trade union or immigrant group.[19]

In addition to access to credit, the member received interest on his deposits and a share of positive net income earned by the organization. The credit union had a cap (often 5%) on the proportion of the union's capital that may be owned by a single member. As in the Rochdale-type cooperative, important issues were decided by majority vote in which each member had one vote regardless of the size of his deposit or loan.

Similar to credit unions, Parker identified labor banks and mutual savings banks as having characteristics resembling cooperative societies. The labor banks were usually attached to a particular trade union. The pioneer trade unions developing banking institutions to cater to their members included the Brotherhood of Locomotive Engineers, the Amalgamated Clothing Workers, the Machinists' International Union, and the International Printing Pressmen's Union. There were

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[19] When a credit union consisted of the employees of a particular firm and if and when the firm closed for business reasons, the credit union was dissolved. This accounted for some of the closures of credit unions in the 1930s and in the Great Recession of 2007-09.

2 such banks in 1920, 37 in 1925, 22 in 1929 and 4 in 1933 . Their sensitivity to the state of the economy and the accompanying changes in unemployment is evident.

The mutual savings bank was owned by its depositors and managed by trustees who served with little or no compensation. They functioned along lines similar to credit unions with net earnings distributed among the depositors (after putting aside reserves for self-insurance against adverse events). There were 620 mutual banks with over 9 million depositors in 1920 and 578 banks with 13 million depositors in 1934. [20]

Notwithstanding opposition from established banks and with the support of farmers and trade unions, in 1934, the U.S. Congress passed the Federal Credit Union Act which permitted the establishment of credit unions in states that lacked the enabling legislation.[21] Initially, the Federal Credit Union Division, the agency created to administer the Act was placed in the Farm Credit Administration in recognition of the severe credit problems in rural areas .

The energy that was expressed in the passage of the Federal Credit Union Act led to the creation of an sister insurance company: the Credit Union National Association Mutual Insurance Company. Today it is known as the CUNE Mutual Group that works closely with credit unions selling a variety of insurance products to more than thirty million customer-members.

As shown in Table III, there followed a substantial growth in the number of credit unions and in their membership. The belief that credit unions are a safe place to bank was confirmed during the recession of 2007-09, when the credit union failure rate was substantially lower than that of

[20] The information on labor banks and mutual savings banks comes from Parker (1933pp. 67 - 70).

[21] See Moody and Fite (1971, pp. 127-168).

commercial banks.[22] By 2019, there were 120 million members of credit unions.[23]

HOUSING COOPERATIVES

Although there were variations in the meaning and operations of housing cooperatives,[24] a typical housing association was formed when a group of individuals used a loan from a credit union or a trade union to purchase neighboring buildings or an apartment block and then leased units to individuals who became members by putting down money (the amount determined by dividing the size of the loan by the number of dwellings) that went towards the repayment of the loan. This initial down-payment was sometimes paid in installments. In addition, each member paid a monthly or quarterly rent that covered taxes, insurance, and depreciation of the unit. The member of the housing association did not receive title to his dwelling. Ownership was lodged in the association; the member enjoyed a permanent lease. In short, in a housing cooperative, the landlord (the association) and the tenant (the members of the association) are the same.

When a member moved, first he was required to offer his house to the association who paid the individual the home's current estimated value before a suitable new member was found. All issues concerning the association were settled through an exchange of views and majority vote in which each dwelling-member had one vote. It should be noted, that, at least in New York City, some of the cooperatives consisted of wealthy households who used the majority vote principle and the

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[22] Data from the Federal Deposit Insurance Corporation and the National Credit Union Administration indicate a failure rate of about 6% for commercial banks and a 1% failure rate for credit unions.

[23] The extent of cooperative financial institutions and the recent research of them is taken up in McKillop *et al*. (2020)

[24] See U.S. Department of Labor, Bureau of Labor Statistics (1952) .

requirement that existing members had to approve the admission of each new member to maintain the exclusivity of their association.

In her survey for the year 1925, Parker lists 32 housing associations with 2,300 members.[25] Parker's surveys (summarized in Table IV) show a growth in housing cooperatives from 1925 to 1950 and especially in the years after the Second World War when a "severe housing shortage led to an increased interest in cooperative housing as one means of solving the problem" (page III of U.S. Department of Labor (1952)).

Parker is careful to exclude from her surveys what she calls "so-called cooperative apartment buildings" constructed by private contractors seeking immediate profit by selling them outright to individual purchasers. Today these are called market-rate housing cooperatives. They are sponsored by real estate developers in which the rule of "one individual member one vote" does not apply.

Condominiums have features similar to housing cooperatives, but when an individual buys a unit in a condominium, she owns that property. Ownership does not reside in an association. This implies that, in a condominium, each occupant must provide the financing for herself. In a cooperative, the financing applies to the entire collective association. Further, many condominiums do not honor the governance principle of "one individual, one vote". Before 1960, there were few condominiums (Hansmann (1991)). No U.S. state had passed legislation that enabled the formation of condominiums, but by 1967 all but one state had done so. A decade later, the number of condominiums exceeded the number of housing cooperatives. Table IV shows that together housing cooperatives and condominiums constitute today a small and yet growing share of all housing units.

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[25] The first housing cooperative was formed in New York City in 1876 (Hansmann (1991, p.27)).

UTILITY COOPERATIVES: ELECTRICITY and TELEPHONES

To encourage the extension of electricity to rural and remote areas of the country, the Rural Electrification Act (REA)of 1936 set up an agency with the task of making loans to those living in such areas. These loans could be made to corporations, states, municipalities, non-profit businesses and cooperatives. In fact, the cooperatives (some created to facilitate this process) became the preferred medium.[26] Their growth from 1929 to 1950 is given in Table V.

Parker (1936) lists the existence of 45 electricity cooperatives before the Act including one that started in 1914. In June 1937, she records "at least 259" electricity cooperatives: "These associations have been formed among the prospective users of electric power in rural districts............These people cooperate in the erection of the poles, the stretching of the wires, the bargaining for and purchase of current, and the maintenance and repair of lines. The current is obtained from a municipally owned power plant if there is one nearby or from a private power company. Several associations....have (with Federal aid) constructed their own generating plants." (Parker (1936) pp.88-89)

By 1955, cooperatives had managed more than 90 per cent of the REA's electricity program and they had built 95 percent of the powerlines through which electric current flowed. "The REA cooperatives are responsible for most of the great progress made since 1936 in bringing central station electric current to the rural population" (Flexner and Ericson (1957, p. 28)).

Today two types of electricity cooperatives may be distinguished. First, there are those

[26] The Act was preceded by a Presidential Executive Order in May 1935 to undertake such an electrification program and the Act enshrined this in Congressional legislation. An Executive Order of August 1935 stipulated that not less than one-quarter of the loan was to be spent on labor and 90 percent or more of those working on the project should be drawn from public relief rolls.

cooperatives that generate and transmit (G & T) electric power. They are owned by their consumers, the distribution electricity cooperatives. These distribution cooperatives deliver the power to homes and workplaces, their consumer-members. The G & T cooperative is similar to a wholesaler that is owned by its retailers (the distribution cooperatives) and they, in turn, are owned by their consumers, homes and workplaces.

In 1949, the legislation establishing the REA was amended to enable these loans to be used for extending telephone lines to rural areas not receiving central station service. Again cooperatives were among those charged with channeling these loans to consumers.[27] As with the electricity cooperatives, the telephone cooperatives existed before 1949 : one telephone cooperative was established in 1893 and many were formed in the first two decades of the 20th century. Parker describes the typical telephone cooperative in the mid-1930s as "........a small organization of 60 to 70 members, serving on average about 90 subscribers (including members)".

Although they conform to the principle of one vote per member, the electricity and telephone cooperatives did not satisfy all the Rochdale principles because dividends were not always paid and members were not required to provide capital. In some cases, particularly with the telephone associations, there was no surplus to return to the consumers. When there was a surplus, these cooperatives used their net earnings to retire their loans.

Today, the electricity cooperatives own 42 per cent of the country's distribution lines. The Rural Electrification Administration became a part of the Rural Utilities Service in 1994 and they still supply much of rural America with electricity. Their number, membership, and total revenues

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[27] Today the Rural Electrification Administration is within the U.S. Department of Agriculture. The organization representing the interests of the electricity cooperatives is the National Rural Electric Cooperative Association (NRECA).

in 1997 are reported in Table VI.

UTILITY COOPERATIVES: WATER

Another utility with a cooperative presence is the delivery of water. Parker's survey for 1936 reports 5 such associations with 628 members . These had grown to 33 associations with 2,115 members in 1941. Later, in reporting her findings in the BLS Bulletins, Parker bundles water supply associations with "Other Service Associations" and they are not identified separately. They are included in the series of retail cooperatives in Table I .

According to Deller *et al.* (2009), water cooperatives are small and exist in places far from an existing system (principally in rural areas). In some instances, they were created by real estate developers to enhance the appeal of their housing promotions. On the basis of information from the Environmental Protection Agency, Deller (2009, p.56) estimates that, among about 155,000 public systems for delivering drinking water, about 3,352 are cooperatives, that is, approximately 2% .

MEDICAL CARE COOPERATIVES

In November 1932, the Committee on the Costs of Medical Care published a report titled Medical Care for the American People. It noted that medical resources were not "distributed according to needs, but rather according to the real and supposed ability of patients to pay for services". Among its recommendations was that "medical care costs should be placed on a group payment basis, whether through insurance, taxation, or both". This proposal was strongly criticized by the American Medical Association even though the Committee had also written that "payment through individual fee-for-service should continue to be available for those who prefer it". This proposal for modest reform and the AMA's sweeping condemnation of it was a pattern that was repeated many times later.

At about the same time that this report was published, a young physician, Michael Shadid (an immigrant from the Middle East) opened what became a very influential medical care cooperative. With the help of the Oklahoma Farmers' Union, he founded the Farmers' Union Cooperative Hospital Association in rural Oklahoma. The health of those living in rural America was substantially inferior to those in urban areas and the resources available to rural residents to address these needs substantially lower. Shadid's medical care cooperative was accompanied and followed by other medical care cooperatives as shown in Table VII. Although the cooperatives differed in their details, a typical medical care cooperative had the following features.

First, each cooperative member was required to make a regular payment into the association (akin to membership dues in a society).[28] At the cost of a higher regular pre-payment, other family members were also entitled to medical services. These payments would enable a member to access certain physician services including consultations, physical examinations, and laboratory analyses. A charge would accompany prescriptions and overnight stays in a hospital. In most cases, the cooperative would contract with a local hospital for its use, but in other instances (including Shadid's Oklahoma cooperative) the cooperative owned a hospital and its equipment.[29] Second, the physicians formed a multi-specialty group practice and were on contract with the cooperative association.

Third, these associations emphasized preventive medicine as indicated by periodic physical examinations of all members.

Fourth, the management of the association was in the hands of a board whose members were

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[28]There was nothing novel in such pre-payments in medical care plans. See Schwartz (1965).

[29] Parker (1944) reports 50 medical care cooperatives with 95,000 members had contracts with hospitals and 18 cooperatives with 45,000 members had their own facilities.

selected by the rank-and-file members in recurring elections in which each member had one vote and proxy voting was forbidden. The board often had at least one person with expertise in finance and who attended to the financial health of the association and another person who was a physician and who oversaw medical issues.

The 1930s was a decade of extensive public discussion of alternative methods of providing health services to the needy and cooperative medical care was a part of that discussion. Concerned with aspects of this discussion and with the emergence of cooperative medical care, the American Medical Association (AMA) declared ten principles of desirable medical service, "a kind of codification of professional ideology" (Starr (2017, p. 299)) .

With respect to the institutions of medical care, the AMA's fifth principle stated "The medical profession alone can determine the adequacy and character of such institutions." Moreover, the second principle affirmed that "No third party must be permitted to come between the patient and his physician in any medical relation." Lest there be any doubt, the tenth principle claimed "There should be no restrictions of treatment not formulated and enforced by the organized medical profession [presumably the AMA]".

The AMA was asserting its place as the ultimate judge of how medical services should be delivered. "In short, the AMA insisted that all health insurance plans accept the private physicians' monopoly control of the medical market and complete authority over all aspects of medical institutions" (Starr (2017, p.300)).

The fundamental elements of cooperative medical care conflicted with these principles of the AMA: a consumers' cooperative association implied the consumers of medical care were the managers of the medical care association, not an outside professional association . Therefore, it is not surprising that the AMA "…..was unremittingly hostile [to cooperative medical care] and by the end of the decade succeeded in convincing most states to pass restrictive laws that effectively barred consumer-controlled plans from operating" (Starr (2017, p. 302)).[30]

Shadid maintained that consumer control should be welcomed by doctors as it left doctors "free to devote themselves to their professional work". Recognizing the AMA's fears of socialized medicine, Shadid added "Cooperative medicine is not state medicine…..the doctor remains in control of the professional end of the work." Regardless, physician organizations continued to oppose medical care cooperatives whenever they were mentioned as a component of substantive health care reform as they were in the debates over reform of the health care system in 1993-94 when President Clinton's reforms were under consideration and in 2010 when the Affordable Care Act was enacted.

Agencies in Roosevelt's administrations found cooperatives to be a useful device to improve the health of low-income farmers. Thus, with the help of low-interest loans, farmers were encouraged by the Farm Security Administration to set up medical care cooperatives and urged the participation of physicians in the program. As with Shadid's design, farmers made regular payments to doctors that entitled the farmers to the services of the doctors when the need arose. Not only did the health of the farmers improve but the incomes of the rural physicians rose.[31]

Today some medical care cooperatives operate on a local or regional basis. An example is Health Partners which was set up in 1957. It is a consumer-governed organization with 1.8 million members that provides health insurance and health care with 55 primary care clinics, 22 urgent care

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[30] There were attempts to remove Shadid's license and he lost his malpractice insurance. Doctors were discouraged from joining his association.

[31] Grey (1999) provides detail on the Farm Security's programs and the role of cooperatives. .

centers, and 8 hospitals in Minnesota and its neighboring states.

Other cooperatives specialize in home health care such as Cooperative Care in Wisconsin and I Am Unique Special Care and Case Management, Inc., in North Carolina. Both are worker cooperatives owned and managed by those who work for the organization.

FUNERAL and BURIAL COOPERATIVES

Parker (1936, pp.74-5) wrote that, given the accident-prone nature of the occupation and given that "funeral expenses form an item of considerable importance in mining regions...it is not surprising, therefore, that the first cooperative burial association of which the Bureau of Labor Statistics has record was started in 1915 by a group of coal miners organized in a local union in Illinois". Coal miners and farmers in the same general area were involved in the creation of more of these associations in the 1920s. Parker noted "The high cost of dying and what seemed exorbitant charges for funeral service were the motives for the formation of the cooperative burial associations now in existence."

As in the case of medical care cooperatives, the creation of burial associations generated opposition from associations of private undertakers and it required resort to the courts for the cooperatives to practice. As is evident from Table VII, by 1950, the membership of funeral and burial cooperatives was almost ten times its membership in 1936. Membership in a funeral and burial cooperative was a form of insurance against the cost of the service, a cost that was rising disproportionately over time. Usually membership in a funeral association entitled a member's entire family to this service. Often the association had a fund from which monetary assistance was loaned when the member's family was unable to pay the cost of burial. The source of this fund consisted of lapsed membership fees and an assessment of a small amount per member each year.

The continued rising expenses associated with dying have served to maintain a presence for cooperative funeral associations today.[32]

AGRICULTURAL COOPERATIVES

Cooperatives have been a feature of American farming for a long time: a dairy cooperative was established in 1810 in Goshen, Connecticut; a hog slaughtering and packing cooperative was set up in 1820 in Granville, Ohio; and an irrigation cooperative for farmers was formed in 1853 in Tulare County, California. An organization of farmers, popularly known as The Grange, was formed with Federal Government assistance after the Civil War to help Southern farmers recover from their losses and to foster reconciliation between Southern and Northern farmers. The Grange's 1875 convention supported the Rochdale principles as a method for operating their local societies.

In the first half of the 20th century, the Federal government passed legislation friendly to the agricultural cooperatives. For instance, facing claims that marketing cooperatives were operating as trusts, Congress passed legislation (known as the Capper-Volstead Act of 1922) exempting agricultural cooperatives from anti-trust laws provided they followed certain rules. These rules included a one-member one-vote governance rule and, to address accusations of monopoly pricing, the cooperative was required to pay dividends to their members of no more than 8 per cent of sales per year.

The problem of inadequate sources of credit was acute in rural areas where farmers, operating in an environment of volatility in their product prices, sought loans to tide them over periods of income losses. In 1933, the Federal Credit Act assisted farmers with loans and established "Banks

[32] In 2017, the BLS series of funeral prices was 3.4 times its value in 1986 (U.S. Department of Labor (2017)).

for Cooperatives" (now named CoBank) encouraging the formation of credit unions to help finance farmers' activities.[33] CoBank is a cooperative owned by its customers - agricultural cooperatives, rural utilities, and rural credit unions. Its annual report for 2019 stated that "almost 60%" of its net earnings were paid to its customer-members as patronage dividends.[34]

Agricultural cooperatives are distinguished according to the function each fulfills. A Marketing cooperative engages in the sale of their farmer-members' products. In some ways, they resemble the sales division of a conventional capital-owned firm.[35] The Farm Supply cooperative sells items to farmers. The third type of agricultural cooperative is the Service cooperative which provides services for farmers such as storing and shipping crops and managing and moving livestock.

Table VIII shows that, when classifying co-ops according to the source of most of their revenue (as in columns (1), (2), and (3)), farm marketing co-operatives are most numerous but farm supply cooperatives have the most members. Table VIII also indicates that many cooperatives do not specialize in one of these activities: if cooperatives are categorized according to whether they receive any revenue from a revenue-generating activity (as in column (4)) most farm cooperatives provide some service for farmers and marketing is the least common activity for the cooperatives. As one observer has noted, when classifying cooperatives by their business volume, "a cooperative

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[33] Initially, the Federal Credit Union Division, the agency created to administer the Federal Credit Union Act was placed in the Farm Credit Administration in recognition of the severe credit problems in rural areas.

[34] Page 7 of https://www.cobank.com/-/media/files/financials/2019/cobank-2019-annual-report.pdf?la=en&hash=DDAD226893F20E21C43B7DE275CB1AAA85C82CE3

[35] The behavior of a marketing cooperative may well differ according to whether is is marketing a single commodity or many commodities. See Hetherington (1991, pp. 164-224).

can be classified as marketing one year but supply in another year if it conducts pretty much an even amount of marketing and supply business" (Demko (2018, p. 10).

The Farm Supply cooperative conforms to the activities ascribed to a consumers' cooperative. Its customers, principally farmers, constitute its owners, the member-owners receive patronage payments that are related to their purchases, and in governance each member has one vote regardless of a member's assets or business. Notwithstanding the decline in the number of farms,[36] Tables IX and X show that Farm Supply cooperatives increased in number and membership until the late 1950s or 1960s since when they have been in decline partly through mergers and partly through dissolutions. Their total revenues have continued to grow. Farm Supply cooperatives now constitute 41.5 percent of all agricultural cooperatives; in 1951 they were one-third of all cooperatives.

In 2017, the largest single item of all cooperatives' sales to its member-owners was petroleum (a category that includes lubricants, ethanol, and biodiesel).[37] Petroleum associations appear also in Parker's surveys where, she notes, they served both urban consumers and farmers.[38] The petroleum associations sold gasoline to farmers and urban dwellers and, ultimately, entered the

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[36] The U.S.D.A. reports there were 5.65 million farms in 1950, 2.44 million farms in 1980, 2.19 million farms in 2010, and 2.02 million farms in 2019.

[37] The gross value of petroleum sales in 2017 was $26.3 billion and these represented 37% of all farm sales (Table 2 of U.S.D.A. Agricultural Cooperative Statistics 2017).

[38] "Petroleum products accounted for almost one-fourth of total sales [of Farm Supply cooperatives] in 1953-54 with between 40 and 45 percent of these petroleum products consumed in household uses, as distinguished from farm operations, according to a Department of Agriculture estimate" (Flexner and Ericson (1957)) Note that included in Parker's figures on petroleum associations are 10 cooperative gasoline filling stations in her 1925 survey, 198 cooperative gas filling stations in 1929, and 616 cooperative "gasoline and oil associations" in 1933.

business of refining. In 1936, whereas the largest of the petroleum associations paid dividend rates of between 6 and 11 percent of sales, the most frequent patronage refunds in the retail stores were below 6 percent. The growth of petroleum cooperatives from 1925 to 1950 is given in Table IX. Their number from 1951 to 1986 and an index of their sales are in Table X.

WORKERS' COOPERATIVES

Although Parker's reports concentrated on consumers' cooperatives, in the earlier years, her surveys picked up instances of cooperatives owned and managed by their workers, that is, workers' (or producers') cooperatives .[39] She calls them "workers' productive societies". She wrote in her 1925 report that her survey "represents as far as the bureau has knowledge, the first attempt at an inclusive study of the workers' productive societies of the country" (Parker (1925, p.27)). In that report, she claims the existence of 39 such societies and 21 of them responded with information to her questionnaire.[40] Her reports for the years 1929 and 1933 also included observations on worker co-ops, but worker coops do not appear in subsequent reports.

The first two columns of Table XI report the number of worker cooperatives known to be in existence and the number of worker cooperatives reporting, R , to Parker's survey from 1925 to 1933. The other columns of this table report the total number of members M (shareholders) aggregated over all the co-ops , the total number of shareholders actually working in these plants, MW, and the number of (non-member) employees E. The final column is total employment in the worker cooperatives reporting to Parker's surveys (that is, the sum of MW and E). Notwithstanding

[39] In Britain, consumers' cooperatives tended to buy a large fraction of the products of workers' cooperatives (Carr-Saunders *et alia* (1938, p.190)).

[40] Parker's tally of 39 worker cooperatives in existence in 1925 is consonant with Jones' (1984) count of 17 cooperatives formed in the 1920s.

the fewer cooperatives replying to Parker's survey in 1933 than in 1929, it is noteworthy that total employment in these worker co-ops rose from 1929 to 1933 even though these years correspond to a severe economic contraction: the unemployment rate rose from 3.2 per cent in 1929 to 25.2 percent in 1933 and the index of industrial production fell from 240 in 1929 to 159 in 1933.[41]

Because the composition of her worker cooperatives changes over time and because she does not identify the co-ops by name, it is impossible to follow a particular co-op over time and to draw confident inferences about whether the degeneration hypothesis was operating. One version of the degeneration hypothesis postulates that over time a typical worker co-op employs a larger fraction of non-member workers in its work force. Parker is aware of this possibility and she provides a clear statement of this hypothesis, but she does not use her observations to determine whether it is operating.

Nor is her contrast of workers' cooperatives with consumers' cooperatives entirely correct. That is, of workers' cooperatives, she writes in her survey for 1925 (p.27) that "each additional member increases the number who must share in the profits, though not necessarily increase the business done or the amount of profits to be shared.....if additional workers are needed, [the worker cooperative is inclined] to secure these as employees, not as members." By contrast, she writes, in a consumers' cooperative "it is in the interest of the members to enlarge the membership for each new member helps, with the purchasing power he brings in, to increase the business of the society". It is correct that a cooperative's total sales are likely to increase when a new member joins the cooperative, but each member's <u>fraction</u> of total sales will fall (unless each current member increases

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[41] The unemployment rate as a percentage of the civilian labor force is from Table A-3 of Lebergott (1964) and the index of industrial production is from Miron and Romer (1990) where 100 corresponds to the year 1909.

his purchases in the co-op) and, a smaller fraction of a larger quantity will not guarantee higher dividends for existing members. [42]

In her 1925 survey, there were only three workers' cooperatives in which all the workers were members; the remaining 18 societies hired some employees. There were other ways in which the societies departed from the ideal of a workers' cooperative: for instance, 19 of the 21 co-ops reporting did not divide profits equally among the members but in proportion to stock ownership as in a conventional capital- investor company. With respect to governance, even though most of these societies departed from the principle of equal division of profits among the members, when it came to voting on decisions affecting the whole co-op, each member had one vote irrespective of the amount of stock each held.

The type of work undertaken by these societies was diverse: cigar factories; fish canning; window glass manufacture; laundries; shingle and plywood mills; and shoe factories. In her surveys there were more worker co-ops in the state of Washington than any other state.

By the time of her survey four years later in 1929, 17 of the 39 worker co-ops she had identified in 1925 had gone out of business while two of them were "no longer cooperative in any respect" (p. 73 of Bulletin No.531 in 1929). There were exceptions to this pattern and, as an example, Parker tells of a group of shoe workers who set up their factory 15 years previously and expanded each year subsequently.

Parker's explanation for the demise of these worker co-ops was the absence of a central organization or federation that might help a co-op in difficulty. That is, she observes that these co-

[42]The monetary interest of existing members of a consumers' cooperative might be to encourage more people to buy from the cooperative but for these additional people not to become members so that the increased net revenues are not shared among more members.

ops tend to do well in actual production, but they encounter "problems of capitalization, merchandising, accounting" that might be remedied with advice from a body that has expertise in these aspects of a successful firm. She notes that "such central organizations have been formed in foreign countries in which workers' productive societies have attained any degree of development" (Parker (1929, p. 74)).

Today, worker co-ops combining ownership with management are common in certain professions such as accounting, law, and investment banking.[43] These are not the sort of worker cooperative that Parker had in mind for her surveys. Closer to her concern for lower income workers were the plywood cooperative workers in the Pacific Northwest, but most of them have now closed. The reason for their closures has not to do with their performance but to do with the rise in the price of their basic raw material, timber. A reason for this rise is that the depletion of virgin forests led to logging restrictions that increased the price of lumber. This also affected the conventional capital-owned plywood mills in the same region. Today the dominant region in the U.S. for plywood manufacture is the South where more of the old-growth timber remains and environmental constraints are less restrictive.

The question that remains is why plywood worker co-ops have not flourished in the South. Is it because cooperative production is an innately social activity that requires high levels of trust and reciprocity and the South tends to score lower than the Pacific Northwest on indicators of such social capital or community governance?[44] Jones and Kalmi (2009) report a "very strong" correlation

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[43] On the reasons for the success of these, see Russell (1985 Chapter 5) and Hansmann (1990).

[44] On social capital, see Putnam (2000, Ch. 16 esp. Figure 80)). On community governance, see Bowles and Gintis (2002).

across countries between the incidence of cooperative associations and indicators of interpersonal trust. They interpret this correlation as implying that trust is "a prerequisite, rather than a consequence, of cooperative incidence". (p. 190)

From an online survey, Palmer (2019) locates 394 worker cooperatives that, in aggregate employ 6,734 workers and generate annual revenues of about $467 million This survey has been conducted since 2013 when the number of cooperatives was 305.[45]

In one manifestation, worker ownership is thriving today. An ESOP (employee ownership stock ownership plan) is a trust consisting of tax deductible contributions of cash or stock made by a corporation to its employee participants . The assets are invested in the firm's stock and, in this way, the employee participants in the trust became part owners of the firm. An individual receives his accumulation of ESOP shares when he leaves or retires. Typically, the employees do not become involved in the management of the firm. According to information submitted by companies to the U.S. Department of Labor, Kruse and Blasi (2020) calculate that 6,243 U.S. companies sponsored an ESOP in 2016 and there were almost eleven million people participating in them.

CONCLUSIONS AND FUTURE RESEARCH

The ultimate test of a type of organization is its ability to survive where, in an economy subject to unforeseen shocks, survival will probably require the organization to modify its form and adapt to its changing environment (Alchian (1950)). In a number of product markets, the consumer cooperative model has not merely survived but thrived.

[45] Drawing upon evidence from a number of countries, Pérotin (2012) provides an informed assessment of the state of research on worker cooperatives.

This model occupies a prominent place in banking and insurance markets and in agriculture cooperatives are prevalent. In the retail sector, by forming cooperative wholesalers that rival those in the capital-owned chain stores, cooperatives have adapted to the changes brought about by the self-service supermarkets. Indeed, I wonder how many shoppers at Price Rite Marketplace and ShopRite are aware they are shopping at a member of a cooperative.

Consumer cooperatives have emerged and have endured in markets where buyers and/or sellers are incompletely informed of the goods or services being exchanged. For example, in the sale of food and drink, producers tend to know more about the contents of their products than consumers know. If there is profit in so doing. producers may compromise the quality of their food and drink at the expense of poorly-informed consumers. An arrangement whereby the consumers own the store where these products are sold may attenuate this problem. The cooperative store and other cooperative stores may voice their concerns to producers and require these producers to label and change the contents of their foods and drinks. Of course, without the need of cooperatives, individual consumers may express their concerns and avoid the purchase of foods that are unlabelled or earn a reputation for adulterated food. However, this is a case where the voice of many retail stores is likely to be more effective in reducing the incidence of adulterated food and drink than the exit of individual consumers from the market.

This was the conclusion of Paul Douglas (1936, p. 434) who maintained "co-operation provides its members with a far higher quality of goods for their money than does private trade......The co-operatives are owned by the consumers and exist to serve them. There is no incentive for them to put sand in the sugar, chicory in the coffee, or water in the milk. Nor is there any reason for them to use false weights and measures. To do so would be to cheat themselves."

In this setting, cooperatives have served the interests of consumers and, in so doing, they corrected a market failure.

Incomplete information characterizes insurance and credit markets, too. The insurers often do not know the riskiness of those they are insuring while, at the time of purchasing the insurance policy, the policy-holders do not know the ease with which it will be to draw on their policy. Coupling the insurer with the insured, as with mutual insurance, mitigates this problem.

Credit unions are similar: the borrower and lender are uncertain about the degree to which the terms of the contract will be honored by the other party. Merging the borrowers with the lenders in credit unions alleviates this problem. In short, cooperatives have survived in markets where consumers view capital-owned enterprises as exposing them to unnecessary risks.

One might think that health care would be another sector characterized by asymmetric information that might prompt consumers' cooperatives, but in fact there appears to be only a few cooperative medical care organizations. Does this indicate that the cooperative model is unsuited to health care or does it testify to the influence of the AMA? Milton Friedman (1962, p.155) writes about "...the AMA's largely successful opposition to various types of group practice." and concludes "There is, however, no doubt that the tendency toward group practice has been greatly retarded by the AMA's opposition."

Cooperatives and Established Capital-Owned Businesses

In discussing medical care cooperatives above, I mentioned the campaign waged by the American Medical Association against cooperatives' health care. I also referred to the attempts of capital-owned burial associations to prevent the establishment of cooperative funeral and burial associations. Such obstacles have also been experienced by other parts of the cooperative movement.

In 1885, established capital-owned businesses in Texas persuaded their legislators to introduce a law that proscribed the chartering of any new cooperatives. In other cases, established capital-owned retailers prevailed upon their wholesalers to refuse supplying retail cooperatives. Associations of commercial bankers tried to prevent the creation of credit unions. Parker (1956, pp.352-58) cites instances in which retail cooperatives, credit unions, petroleum cooperatives, and telephone cooperatives were the target of non-market obstacles to their business. Capital-owned electricity utilities "strenuously" opposed the Rural Electrification Act for lending funds to organizations such as cooperatives and later they tried to "discredit" the activities of rural cooperatives (Person 1950, p. 75) .

Although nominally subscribing to the values of free market capitalism and, in particular, of competition, when it came to their incomes being challenged by competition from cooperatives, capital-owned businesses looked for reasons to induce legislators to shackle the cooperative movement. One reason that produced a response from legislators was the suggestion that cooperatives were harboring radical agitators and, indeed, in the 1920s Communists attempted to take control of some local cooperatives. The issue reappeared after the Second World War. (See Parker (1956, Ch. 18)). It is no longer an issue.

Cooperatives and Government

At the same time, it should not be thought that government was captured by capital-owned business. On a number of concerns, government and cooperatives collaborated with one another. This was palpable during Franklin Roosevelt's administrations when the government sought to raise the well-being of those in rural areas and to integrate the rural economy into the national economy.

Cooperatives were found to be a productive means of effecting these goals. President Roosevelt was explicit about his support of cooperatives. Having read a popular book about Sweden and its cooperatives, Roosevelt remarked that he was attracted to Sweden's ".....cooperative movements existing happily and successfully alongside of private industry and distribution of various kinds, both of them making money. I thought it was at least worthy of study from our point of view".

Hence, in June 1936, he sent his advisers to Europe to review "cooperative enterprise" and in February 1937 they produced a 321 page report.[46] Most of the report is devoted to a straightforward description of cooperatives in Czechoslovakia, Denmark, Finland, France, Great Britain, Norway, Sweden, and Switzerland. There is little advocacy in the report although one of the authors (Emily Cauthorn Bates) concluded (on page 137) that "widespread development of cooperative enterprise by the people offers vast possibilities" for America.

During Roosevelt's administrations, cooperatives were used to channel credit to farmers, to extend health care to rural residents, and to supply electricity to areas where private firms saw little return in doing so. Frequently, cooperatives existed before Federal government involvement, but they enjoyed support and growth from the Federal government in the 1930s and 1940s.

Many of the these programs exist today (often under different names from those when first established) within the U.S. Department of Agriculture where agencies such as the Rural Business-Cooperative Service and the Rural Utilities Service work with cooperatives to administer and finance water and waste programs and to extend telecommunications services to rural areas. Indeed, one wonders whether this work with cooperatives could be directed also to currently under-served urban

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[46] The book that stimulated Roosevelt's interest was *Sweden - The Middle Way* by Marquis Childs. Roosevelt's statement cited in the text appears in Leuchtenburg (1997). Hilson (2013) provides an account of this episode. The report is referenced under Baker, Jacob (1937),

areas.

The relationship between Cooperatives and Government also raises the issue of the appropriate taxation of cooperatives. This concerned the Royal Commission on the Income Tax in Britain in 1919-20. With respect to the taxation of a cooperative's dividends, Pigou (1920, p. 156-157) a member of this Commission pointed out

> " ....the awkward fact that co-operative societies have the power, if they choose, instead of selling to their members at market prices and returning to them a dividend on purchases, to sell them at prices reduced by an amount nearly equivalent to the dividend and pay no dividend. The existence of this power not only makes it plain that, from the point of view of the revenue, taxation of dividends would be a futile proceeding, but it also puts in clear light the essential nature of those dividends. They are, in essence, not a profit in any sense, but a refund made from an overcharge." [47]

Most of the members of this Commission accepted Pigou's argument about taxing dividends but felt that the income that a cooperative retained after dividend payments were paid should be subject to tax. In response, Pigou countered

> "...to decide that the proceeds of mutual trade are not profits from the income tax point of view when they are distributed in dividends on purchases, and are profits when they are not so distributed, is to make the nature of these proceeds depend, not on their origin - which is clearly the proper test - but on their destination which is no test at all. The contention of the majority of the Royal Commission seems to me to break down completely before this

[47] In quoting Pigou, I have used the word "dividend" in place of his "divis", the common word used in Britain at the time.

objection."

Pigou had no objection to the taxation of a cooperative's net returns from trade with non-members.

The issues taken up by Pigou and the Royal Commission help to explain why the money passing through cooperatives has been treated differently by tax authorities Thus the Federal government recognizes some cooperatives as not-for-profit organizations that are exempt from corporate income taxation, an exemption that applies only if dividends are lower than a stipulated ceiling, usually 8 per cent. This has been the case for some credit unions, mutual insurance companies, cooperative utilities, and farmer cooperatives.

Where More Information is Needed

Organizations that have the key features of consumers' cooperatives - the organization passes net revenues to its customers, not to its capital-investors - have demonstrated their viability in an economy where the capital-owned firm is dominant. There is more to be discovered about today's consumer-owned associations. For instance, what difference do patronage dividends make to a household's income? Because a household's consumption expenditures are distributed over a wide range of products and services, the dividends from any single store are likely to contribute little to a household's income. However, if the household buys groceries from a cooperative, buys insurance from a mutual insurance company, banks at a credit union, and buys electricity from an electricity cooperative, the sum of the patronage dividends would not be so small. Given the extensive presence of cooperatives in the farming community, the answer to this question is likely to be different for a farming household from an urban household.

Are there non-monetary consequences of membership in a consumers' cooperative? Is a member more likely to participate in other voluntary organizations in society? Is he or she more likely to vote in society's elections?

Another class of issues left unaddressed by the material above concerns the wages, hours, and employment conditions of workers in cooperatives. How do cooperative societies fare as employers.[48] Many of Parker's reports include information about the number of workers employed by the consumer cooperatives and on their wages. For instance, her report for 1936 included a chapter titled "Cooperative Associations as Employers" in which she presents information on hourly and annual earnings of cooperative workers and compares them with those in non-cooperative firms. In British Consumers' Cooperatives, the influence of employees has been described as "excessive" (Carr-Saunders *et al* (1938, pp. 195 and 293-5) and it would be interesting to determine whether this may be said of American Consumers' Cooperatives.

A valuable study of consumers' cooperatives would be one in which they operate in markets in which capital-owned firms also exist and observe how consumers cooperatives and the capital-owned businesses respond to similar shocks.

To what extent do the cooperatives' members play an active role in the governance of their society? Are most passive members who value the monetary benefits, but who are uninvolved in the process of management? If they are uninvolved, does this matter? Is it sufficient for the movement to thrive for there to be an active minority of members who assume these responsibilities?

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[48] My anecdotal experience from shopping at Recreational Equipment, Inc. (better known as REI) is that employees of a consumer cooperative tend also to be members of that co-op and their pay is thereby augmented by dividends related to their purchases at the store.

Finally, as further indication of the adaptability and durability of the cooperative model is the fact that they are visible, if not conspicuous, in many other countries in various economic and social environments. All in all, to date, the evidence supports Paul Douglas' (1936, p. 433) assessment that consumers' cooperatives provide "great economic advantages". Perhaps they also bring social advantages.

In view of this favorable evaluation of consumers' cooperatives, should public policy actively encourage and support them today? As indicated above, this was the posture of public policy in the 1930s and 1940s when it was widely believed that cooperatives had features that were conducive to a good citizenry, features such as the voluntary participation of individuals in business, the democratic mechanism for arriving at decisions, and the accompanying sharing of incomes. We are all consumers so, if one is so inclined, each of us could find a consumers' cooperative to join and, thereby, become a part owner of a firm.

Anecdotally, I have noted two neighboring groceries that do not call themselves cooperatives and yet they have adopted Rochdale's principle of paying dividends to their customers in proportion to their patronage. Imitation is the sincerest indicator that capital-owned stores can pay to the Rochdale Pioneers.

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Parker (t) means the survey conducted in year t

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Table I : Number, Membership, and Sales of Retail Consumers' Cooperatives, 1920-1950

(1)	(2)	(3)	(4)
year	Number of Coops	Number of Members	"Real" Sales
1920	713		4.2
1925	455	104,838	7.0
1929	958	136,600	6.5
1933	253	88,301	3.7
1936	2,626	416,900	22.9
1939	2,745	568,000	25.6
1940	2,735	613,500	27.4
1941	2,962	655,000	32.4
1942	3,012	701,000	35.3
1943	3,135	764,000	39.8
1944	3,270	854,500	46.4
1945	3,475	1,379,200	59.5
1946	3,390	1,153,000	73.5
1948	2,785	1,441,,000	98.7
1949	2,720	1,562,000	98.5
1950	2,195	1,654,250	100

"Real Sales" is an index number of total dollar sales of these retail cooperatives deflated by Officer's (2007) consumer price index and converted to a base of 100 in 1950. The nominal amount of sales of these retail cooperatives in 1950 was $863.7 million. Membership in 1920 is missing because Parker's survey for 1920 identifies the number of different types of consumer cooperatives but not the membership of these co-ops.

Table II

Major Cooperative Groceries, 2018

co-op name	Total Revenue in millions$	location
Wakefern Food Corp.	13,130	Keasbey, NJ
Associated Food Stores	9,658	Kansas, City, KS
Affiliated Foods, Inc.	1,504	Amarillo, TX
URM Stores	1,110	Spokane, WA
Piggly Wiggly Alabama Distributing Company	688	Bessemer, AL
Associated Grocers, Inc.	629	Baton Rouge, LA

from National Cooperative Bank, Co-op 100 List

https://impact.ncb.coop/hubfs/assets/resources/NCB_Co-op_100_2019_WEB_FINAL.pdf

Table III

Number of and Membership in Insurance Companies and Credit Unions, 1925-2019

Mutual Insurance Companies			Credit Unions		
year	number	policy-holders in thousands	year	number	members in thousands
1929	3	78.8	1925	419	108.0
1933	9	100.4	1929	974	264.9
1936	1,800	6,800	1935	2,600	597.6
1940	1,900	7,200	1940	9,479	2,815.6
1945	2,000	10,550	1945	8.882	2,843.0
1950	2,000	11,750	1950	10,580	4,609.0
Mutual Life Insurance Only			1955	16,193	8,153.6
	number	% mutual	1960	20,148	12,058.2
1960	155	10.8	1970	23,678	22,818.7
1970	153	8.6	1980	17,350	36.856.8
1980	135	6.9	1990	12,860	55,695.5
1990	117	5.3	2000	10,316	77,587.9
2000	221	17.4	2010	7,339	90,228.7
2010	121	13.2	2017	5,573	111,300.0
2019	109	14.1	2019	5,236	120,400.0

The observations on the insurance companies from 1929 to 1950 are from Parker's BLS Bulletins. After 1950, the observations relate to mutual life insurance companies only. The column headed % mutual is the per cent of all life insurance policies in force written by mutual companies. They are constructed from https://www.statistica.com/statistics/194334/number-of-mutual-life-insurance-companies-since-1950/ and https://www.statista.com/statistics/194335/total-number-of-life-insurance-companies-in-the-us/

The observations on credit unions are from Parker's survey for 1946 (Table 3, p.18). After 1945, they are taken from annual reports of the National Credit Union Administration.

Table IV

Number (N) and Membership(M) of Housing Cooperatives 1925-1950 and the Number of Housing Cooperatives and Condominiums 1979 - 2017

years from 1925 to 1950			years from 1979 to 2017			
year	N	M	year	# co-ops	# of condos	percent co-ops + condos
1925	32	2,300	1979	346	1,039	1.81
1929	45	2,400	1989	727	3,204	4.20
1936	50	3,500	1999	588	4,438	4.89
1946	125	10,000	2000	651	6,580	6.47
1950	175	25,000	2017	975	7,152	6.72

The entries in 1929 and 1936 are from Parker (1944, p. 21). The entries for 1925 are from Parker (1925, pp. 90-5) The entries for 1946 and 1950 are from Parker (1946) and Parker(1950).

The column headed "percent co-ops + condos" is the number of housing cooperatives and condominiums as a per cent of all year-round occupied housing units. The entries from 1979 to 2017 are drawn from the American Housing Surveys

https://www.census.gov/programs-surveys/ahs.html

Table V

Number (N) and Membership(M) of Electricity Cooperatives & Telephone Cooperatives, 1929-50

(1)	(2)		(3)	
year	electricity		telephone	
	N	M in thousands	N	M in thousands
1929	50		4,500	300
1936	275	82.5	5,000	330
1940	700	575.0	5,000	330
1946	830	1,596.0	33,000	675.0
1950	906	3,252.0	33,000	675.0

The entries from 1929 to 1940 are from Parker (Bulletin 843 for the year 1944, p. 21). The entries for 1925 are from Parker (pp. 90-5) The entries for 1946 and 1950 are from BLS Bulletins for these years on pages 1 or 2 of each Bulletin. Membership in the electricity co-ops in 1929 is not reported.

Table VI

Number, Membership and Total Revenue of Three Types of Rural Cooperatives in 1997

	Number	Thousands of Members	Total Revenue in millions$
Rural Telephone Coops	229	1,476	1,264
Rural Electric Coops	744	11,063	23,378
Rural Credit Unions	633	3,953	15,929

from USDA, Farmer Cooperative Statistics, 1997, RBS Service Report 56, pp. 39-40

Table VII

Number (N) and Membership(M) of Medical Care Cooperatives and

Funeral & Burial Cooperatives1929-1954

(1)	(2)		(3)		
year	Medical Care		Funeral & Burial		
	N	M	N	M	Index of Real Sales
1929	6	-	5	800	12.7
1933	1	1,602	38	3,321	17.8
1936	4	5,143	30	20,000	47.5
1942	41	115,000	41	27,500	68.1
1944	68	140,000	40	36,400	65.4
1946	105	165,700	44	37,700	66.6
1948	130	198,000	41	30,290	85.3
1949	105	111,000	40	32,120	81.3
1950	50	133,000	44	34,950	100
1954	24	333,451			

The entries from 1929 to 1944 (except 1933) are from Parker (1944, p. 21). Membership of the medical care associations in 1929 is not reported. The entries for 1933 are from Parker (1933, p.4). The entries for 1946, 1948, 1949, and 1950 are from Parker's surveys for these years on pages 1 or 2 of each Bulletin. The entries for Medical Care in 1954 are from Flexner and Ericson (1957, Table 12, p. 36). The nominal amount of sales of funeral and burial cooperatives in 1950 was $585,750.

Table VIII

Number, Membership, and Sales Volume of Agricultural Cooperatives by Type in 2017

	≥50% of revenue			any revenue
	(1)	(2)	(3)	(4)
operating type	number of co-ops	membership in thousands	total sales in millions $	number of co-ops
farm marketing	1,010	604.4	108,528	1,205
farm supply	777	1,250.8	83,004	1,346
farm service	84	34.9	29.8	1,614

The entries are from USDA, *Agricultural Cooperative Statistics 2017*, USDA Rural Development, Service Report 81, December 2018. Columns (1), (2) and (4) from Table 13 and column (3) from Table 3. A co-op may undertake marketing for farmers, and supply them with materials and provide services to farmers. In columns (1), (2), and (3) co-ops have been allocated to that activity that provides most of its revenue. In column (4) the number of co-ops are categorized according to whether they undertake any business of a given type.

Table IX

Number (N), Membership(M) and an Index of Real Sales for all Farm Supply Cooperatives and for Cooperatives Selling Petroleum 1925-1950

year	Farm Supply			Coops Selling Petroleum		
	N	M	"Real" Sales	N	M	"Real" Sales
1925	1,217	0.25	11.6	10	3.6	2.6
1929	1,454	0.47	16.1	198	55.3	3.8
1933	1,648	0.54	14.8	616	127,2	9.8
1936	2,112	0.95	26.5	1,150	325.0	30.4
1939	2,600	0.89	35.0	1,200	450.0	15.6
1940	2,649	0.90	37.6	1,250	480.0	39.9
1941	2,657	0.98	38.4	1,350	645.0	73.2
1942	2,726	1.17	47.5	1,375	650.0	72.8
1943	2,742	1.27	53.5	1,400	735.0	78.3
1944	2,778	1.52	61.3	1,425	810.0	92.4
1945	2,750	1.61	66.9	1,500	910.0	97.0
1946	2,772	1.86	74.3	1,500	965.0	92.4
1948	2,976	2.26	93.9	1,350	900.0	96.2
1949	3,082	2.41	97.7	1,375	990,0	95.9
1950	3,113	2.51	100	1,350	1,025.0	100

Farm Supply: The observations for year t correspond to the year starting 1 July in t-1 to 30 June in year t. They are from Table 13 of USDA *Historical Statistics 1913-1950 I.*

Coops Selling Petroleum : Observations from 1929 to 1944 taken from Parker (1944, p.22). For 1925 and for the years after 1944 the observations come from Parker's surveys of those years. Membership figures are in thousands. The index of real sales includes sales between cooperatives. The nominal amount of sales in 1950 of coops selling petroleum was $0.4 billion.

Table X

Number (N), Membership(M) and an Index of Real Sales for all Farm Supply Cooperatives and for Cooperatives Selling Petroleum 1951-2017

year	Farm Supply			Coops Selling Petroleum	
	N	M	"Real" Sales	N	"Real" Sales
1951	3,283	2.9	100	2,677	100
1956	3,375	3.4	119	2,739	119
1961	3,222	3.7	134	2,798	131
1966	2,949	3.2	160	2,733	140
1971	2,731	3.0	179	2,704	160
1976	2,731	3.1	297	2,983	240
1981	2,356	2.9	359	2,911	400
1986	1,971	2.3	233	2,497	296
1991	1,689	2.0	213		222
1996	1,403	1.8	239		261
2001	1,266	1.8	221		308
2006	1,146	1.6	247		425
2011	934	1.4	389		586
2016	827	1.28	321		460
2017	777	1.25	317		449

From 1951 to 1977, the observations reported on Farm Supply cooperatives for year t correspond to the year starting 1 July in year t-1 and ending 30 June in year t. After 1977, they are for the calendar year. They are from Table 16 of United States Department of Agriculture, Rural Development Cooperative Programs *Historical Statistics 1951-1999* and *Historical Statistics 2000-2012* Table 17 (2015) Part III. Membership figures are in thousands. Coops selling petroleum products are from Table 19 of *Historical Statistics 1951-1999* and Table 20 of *Historical Statistics* Table 20. Membership of Petroleum Coops is not provided in these sources. The nominal amount of sales of coops selling petroleum in 1951 was $0.4 billion.

Table XI : Worker Cooperatives in 1925, 1929, and 1933

	number of co-ops		number of shareholders		number of employees	total employment in reporting coops
		R	M	MW		
year	existing	reporting	all	working in plant	E	(MW) + E
1925	39	21	2,438	465	807	1,272
1929	20	11	1,405	421	236	657
1933	18	8	1,181	447	650	1,097

Under "number of co-ops", "existing" means the number of cooperatives known to exist and "reporting" means the number of co-ops responding to Parker's survey. The observations are taken from Parker's surveys for 1925, 1929, and 1933.