AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

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

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

Help ensure our sustainability.

Give to AgEcon Search

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

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

Farms

1976

A CONTEMPORARY POLITICAL ECONOMY OF FAMILY FARMING*

by Paul W. Barkley

Making sense of two ill-defined concepts is not an easy task. It must be undertaken, however, because people inside and outside of agriculture are asking about the family farm and how it relates to the political economy. The source of confusion centers on the changing organization of agriculture and changes in the control of resources traditionally used by North American farmers to produce crops and livestock products. It is suspected that this changing control is bringing considerable change in output, efficiency, and the distribution of spoils in the industry but no one yet knows if this is so.

The fundamental changes in U.S. farming need not be recounted. Farm numbers have dropped, non-farm capital has substituted for home-grown capital, the use of stock resources has replaced the use of flow resources, and formal information gathering techniques have substituted for informal gossip. All this is known; some is only partially understood.

Similarly, the increased centralization of all economic activity, the increased interdependence between the agricultural and the non-agricultural sectors, the resurgence of world trade and the apparent world-wide fuel crisis are familiar attributes of our contemporary political economy. They impinge upon agriculture but they need not be described here. It seems appropriate to turn directly to the main problem: How is the family farm related to the contemporary political economy and what relationships exist between economic society and the agricultural industry? This question will be addressed by elaborating

*Invited paper, AAEA annual meetings,
Penn State University, Aug. 15-18, 1976.*

some definitions, commenting on production, exchange, and distribution within agriculture, and discussing agriculture's place in the political economy.

The Family Farm

Although there were family units producing agricultural products in antiquity, the family farm as we know it likely traces its origins to the Enclosures. The Enclosures broke the small fiefdoms of Europe, played a necessary role in releasing laborers for industrial pursuits, and gave land to individuals who could till it as they wished without subservience to the will or needs of the ruling class. In the 18th century, Thomas Jefferson developed ideas about the virtue and importance of men working land that they themselves possessed. Such organization brought incentive to produce, allowed individual freedom, and was expected to yield better husbandmen and better citizens.

Like the world around it, the family farm has changed. A century ago, it was a place where a family utilized its own resources to produce the products needed to maintain itself and the farm firm. If surpluses were produced, the farmer entered into exchange agreements by selling crops and buying capital equipment, staples, and other consumer goods. With the advent of mechanized equipment and the subsequent demise of the horse, the family had extra labor--labor that either fled to the city or was utilized through expanded farm operations.

Even two decades ago, a family farm was a place where a multi-generational family could utilize its own resources to initiate and complete a production cycle. The family controlled the resources, made the decisions, and enjoyed or suffered the consequences. Decisions

about producing the nation's food was dispersed among millions of small, family units. Now, the farm family is not expected to own the farm's resources nor is it expected to supply the labor needed to operate the farm. In a recent, highly over-dramatized article appearing in the revived Saturday Evening Post, Don Paarlberg defined the family farm as one "on which the greater part of the labor and decision making is supplied by the farmer and his family". When accompanied by data saying 95 percent of U.S. farms qualify as family farms and that these account for two thirds of the nation's total agricultural output, a comforting picture of families working together on independent units appears.

Paarlberg's definition--though somewhat standard in technical as well as popular writing--is extremely deceiving. It makes no provision for income goals or efficiency in resource use. There is room for suspicion that defining family farms as good then declaring that 95% of the nation's farms are in this class imputes goodness to a situation that includes much that is bad. Indeed there is poverty, inefficiency, illiteracy and immobility among Paarlberg's 95 percent. His definition draws attention away from this. The family farm as defined is apparently desirable but only on ethical, moral and romantic grounds--issues which have been systematically trained out of agricultural economists and left in the realm of politics, literature, and poetry.

Political Economy

The definition of political economy is less romantic but no more secure than that of the family farm.¹ Agricultural economists are asking for a return to this branch of the discipline but what do they have in mind? Are they asking for a return to the political economics

of the classical economists or are they asking for a return to the 1930's and 1940's when agricultural economics and agricultural economists had a stronger hand in determining the nation's agricultural policy? One must presume the former since only through the former can much discipline be brought to the latter.²

But what is the traditional political economy? The common feeling suggests that political economy is broader than just economics. It is felt to include some notion of how policies affect economic affairs and how, in turn, economic affairs bring about changes in policy.³ In the early nineteenth century, David Ricardo was practicing political economy when he observed the effects of the Corn Laws on the incomes of people, their employment status, and the value of land. Ricardo used this observation as a springboard to clarify the theory of rent. In this case, a public policy led to elaboration and explication of economic theory.

A century later, the farm policies of the New Deal would have qualified as political economics on the same grounds. They were policies borne of privation in the agricultural industry. The economists who worked with these policies came to understand the theory of the firm and eventually saw the need for an intensive modern study of farm management. They, no less than Ricardo, were practicing political economy when they extended theory after observing the consequences of a policy problem.⁴

In more contemporaneous times, the massive sales of wheat to communist nations, the public interest in private land, the world food shortage, and distressingly high fuel costs may also bring the need for

inquiring how exogenous influences affect agriculture and how, indeed, happenings within the industry can impinge upon the outside world. If political economy is this broader view, surely it is a good thing.

However, political economy as seen by Ricardo, Malthus, Senior, Say and Mill was more than a two-way inquiry regarding the causes and effects of economic policy. It was the general study of production, exchange and distribution conducted in a society characterized by three distinct classes of people. With boldness that few of us would dare, Adam Smith divided economic society into classes of workers, capitalists, and landlords. Ricardo accepted this division and went on to say that "to determine the laws which regulate distribution among these classes is the principal problem of Political Economy".

The mainstream of economic thought that led from Smith through the classicals then on through Marshall, Pigou and into various U.S. traditions developed a revulsion for classes in society so classes of people were hidden behind a transparent veil called "factors of production". We continue to avoid class distinctions by depending upon the categorization of factor inputs and we almost always avoid questions of how income is divided among people by asking only how income is divided among factors. Had the discipline retained the class distinctions of the classical definition, the makeup of our profession and our collective inputs into policy formulation would be considerably different.

Political Economy--Production, Exchange, and Distribution

If political economy does dictate that economic analysis be conducted on a three-way basis, it makes sense to examine agriculture in each of the three contexts. Of these, most could be said about

production because the dramatic changes in agriculture have stemmed from changes in production practices. Most of these have come in response to major changes in technology. The three-field system, the steel plow, the internal combustion engine and the mechanical cotton picker each revolutionized at least a part of the industry.

Agricultural economists have done a very capable job of inquiring into production. They have consistently recommended that inexpensive inputs be substituted for expensive ones and they have stressed the tradeoff between high, variable incomes and low, stable incomes.

Family farmers, no less than corporate farmers or subsistence farmers, have been apt students for and of economists' efforts. They have substituted capital for labor and have fine-tuned along a continuum that stretches from complete specialization to extravagant diversification. U.S. farmers are to be congratulated for behaving as economists suggest they should in always searching for new and inexpensive ways to do old and expensive chores--they have learned to substitute science for art. In the present context, little needs to be said about the production process, political economy and family farming. Production is interesting primarily because changes in production have a demonstrable effect on the process of exchange and on the institutions surrounding the distribution of income among factor owners.

Exchange. All farmers enter into exchange relationships on either side of their production activities. Exchanges on the input side have increased in number and have become more complicated as various forms of productive capital have left the direct control of the family farmer and now reach him only through organized markets. Changes on the product

side are no less intense because farmers have become increasingly remote from final consumers and have relinquished control over several productive activities. A class of intermediaries has sprung up to perform low level processing functions that alter the form of agricultural commodities to fit consumer preferences. Farm operators, especially those in the family farm class, have continually heaped wrath on these processors but it is clear that the processors perform functions the consumer is willing to pay for and the farmer, as a farmer, is unable to perform. The wrath is surely unwarranted but it has become a part of the propaganda used to justify the family farm.

Processors of agricultural products can be used as a vehicle to point out one of the many paradoxical asymmetries evinced by farm operators as they consummate exchanges. The farmer has insisted upon high quality standards among the inputs that he purchases. While non-certified seed can be purchased in voluntary exchanges among neighboring farms, certified seed must be of a specific high quality and this quality must be guaranteed by the seller. Similarly, mixed feed-stuffs for animals must be clearly and honestly labelled and the chemical analysis of fertilizers must be shown on containers in which these inputs are sold. Since individual farmers have very little market power, they have banded together to obtain legislation insuring the quality of inputs. In cooperating, the individuals have abdicated some of their independence. They have paid for it in the form of higher input prices, but the uniformity of the input coming with mandated quality requirements has apparently been worth the price.

Similar forces have motivated the purchasers of many farm products. Processors, like farmers, can be more efficient if they have regular streams of uniform raw materials (inputs) coming into their plants. About 25 years ago, many processors of farm products began to reach back to the farms in an attempt to make the flow of farm products regular and to insure that the products were uniform in size, shape, color, and quality. This made as much sense for the processor as input quality control had made for the farmer. In order to achieve certain gains in efficiency, processors had to insinuate themselves into production processes carried out on individual farms and insist that inputs of certain kinds be applied at certain times and that certain quantities of crops be delivered on certain days. The processor had to assume control of production. This was done in the era of vertical integration that swept through the vegetable, fruit, poultry, and livestock enterprises in the 1950's.

Vertical integration was unpopular with farmers. They apparently resented the encroachment on their capacity to make decisions and, ostensibly at least, would rather have maintained the capability of using the wrong inputs to produce an inferior product for sale on a day when it could not be processed. At the time it was happening, the erosion of this opportunity to err was viewed as precursor to the demise of the family farm. The response was clamorous with major farm groups as well as individual operators castigating processors for doing what farmers themselves had already done: Taking steps to insure the quality and quantity of a factor input.

The concept of the family farm did not vanish with the advent of vertical integration. Instead, it adjusted to accommodate the new form of business organization. After vertical integration took hold, the farm family became a labor pool using resources controlled by non-farm decision makers. Rather than threatening the family farm, integration of production and sale activities seems to have benefited those who at first condemned it. Successful farm operators accepted the superior managerial skills of the processors' fieldmen as part of the integration process. Now, the contract that allows involvement in a vertically integrated production process is almost a property right and has taken its place along with land ownership, water rights, peanut allotments, and the conservation reserve as part of the bundle of rights owned by the family farmer.

But the asymmetry of these essentially bargained exchanges on either side of the production process has escaped attention. The psyche of the farmer says that he is free to exist as a small unit and to make his own decisions. Society has indulged him in this fancy. Apparently this ideological bent allows the farmer to impose rules on the suppliers of his inputs but it does not allow the purchasers of his products to similarly impose on him. Here, perhaps, is the making of a noteworthy study of the farmer's role, his self-image, and how these characteristics affect his behavior in exchange.

Distribution. The third dimension of classical political economy relates to distribution. Of all the themes treated by economists, this is surely the most evasive and consequently it has received very little analytic attention. Lord Robbins' modern definition of economics

contains no hint about distribution and the marginal conditions of maximum welfare abstract from the issue to the point of threatening their own internal compatibility. The marginal analysis when conducted in a partial equilibrium framework is strict: Distribution is determined by factor rewards that in turn are determined by a factor's contribution to the production process. Under this scheme, the distribution of family income depends on the number of factors a family controls. This view of distribution is comforting to an analyst. It is objective, rigorous, free of value judgement, and it provides access to numerous analytic hypotheses. It has a serious flaw, however. While it can lead to determining when the distribution is not in accord with the rules of the margin, it cannot lead to prescriptions about what incomes ought to be. The same market mechanism that capably allocates resources does nothing to insure that a resource in its highest and best use will receive sufficient rewards to maintain itself.

For a time in the late 1960's, economics and agricultural economics came out of the distributional reverie supplied by the marginal analysis and began to describe poverty in agriculture but the conclusions of such efforts were not highly rewarding. The agricultural economists doing this work proved only that the poor in agriculture were poor because they could not command sufficient resources to be wealthy.

It is true that many agricultural and many farm programs began as income programs intended to buoy the returns to an economically beleaguered industry. However, given the peculiar institutional relationship that exists between the farm family and its resources, the labor share has seldom been the residual claimant of record. Net returns

in the short run--quasi-rents in the parlance of rent theory--have been inputed into the value of fixed resources. Moreover, family labor has likely been dreadfully underpriced thus exaggerating the claims other resources have on the farm's returns. The truly skilled manager who has been able to keep a small family farm solvent only through ingenious manipulations of factors may find that when external forces impinging on the farm's economy finally require liquidation, the skill that kept the farm running is not rewarded. The net returns to the operation--operator and all--are imputed to land and other fixed factors. The only access the farmer has to rewards for his flow of skill is to sell the stock resources that have been the object of that skill. The problem is especially distressing in cases where the land is not owned by the operator. The superior skills of the operator become high land prices that eventually accrue to the non-farming landlord.

In sum, political economy as traditionally construed, is a discussion of production, exchange, and distribution. While the field of study has many interesting facets and these form interesting interfaces with the family farm, a discussion of the contemporary political economy of family farming is not a particularly fruitful exercise when carried out on a farm-by-farm basis. The real value of studying the two in the same context comes from society's point of view.

The Social Significance of Family Farms

Examining the social significance of family farms requires a modification in approach. Instead of concentrating on the family as a labor pool and decision-making unit for a single farm, the focus changes to the way in which factors are held--the property rights possessed by

the farmer. This nation has always placed high regard on private ownership of land and other natural resources. The private ownership of land, however, opens considerable opportunity for society to exploit the owner of the resource. Contemporary writers are quick to point out that the family farm is "resilient"; that it is able to withstand low prices, poor weather, and inferior inputs. While it is true that individual farms and U.S. agriculture as a whole weathered the economic catastrophe of the 1930's without significant reductions in output, it is misleading to credit the industry for this occurrence. It is more correct to say that society found it easy to exploit the people and resources committed to farming.

In contemporary U.S. society, the small holder who uses his own family's labor in conjunction with his own fixed capital and land is in an ideal position to be exploited. His variable costs are low and, once a crop is in and a biological process started, the costs of continuing the process until harvest are extremely low. Low variable costs provide incentive to maintain output even if product prices fall to disastrously low levels. After harvest, fixed costs must be paid but even they are subject to deferral. Thus, the nation's family farmers consume the depreciation on all forms of capital, pay themselves extremely low wages, and even defer payment of taxes knowing that this deferral can be continued for two or more years before the threat of foreclosure emerges. During this time, production will certainly continue, the family farm will appear to prosper, and the nation will have its food.

This elementary point regarding continuation of production is made in all basic textbooks. The more important relationship between the

economic organization of the agricultural industry and the economic performance of the society is, however, too frequently ignored. Stability in the general economy is not insured by keeping agriculture resilient. However, reasonable stability in the food supply is. To date agriculture has been kept resilient by maintaining or encouraging small units on which operators have relatively high equities and relatively low variable costs. The family farm is the ideal form of organization for providing this combination of resource control and resilience. An agriculture organized in this fashion becomes a perfect shock absorber for not only its own errors but also for the errors imposed upon it through other forces in the economy.

But resource control in agriculture is changing. Vertical integration changed the control of inputs on (usually) small parcels of land. Now, land ownership patterns are changing, the threat of corporate management has been growing in intensity, and control of credit has become awesome both through its concentration and through its archaic rules designed to protect the banker rather than his customer. With all these forces operating to fragment control of agriculture's productive resources, the legitimate question becomes: Who is in charge? Like the farmer's relationship with the processor, his relationship with the fragmented controllers of factor inputs is asymmetrical. Any one "controller" can order production stopped but no one controller can order production to start. The farmer becomes more than risk taker and laborer; he is the initiator who must pool various resource controllers and solicit their cooperation in what is becoming an increasingly joint venture. This role of the farmer as a multidimensional negotiator

is not understood nor is it, I think, being investigated with any degree of intensity.

The Consequences

Bringing these diverse themes together into a cohesive lesson for agricultural economists requires mixing economics with folklore and these in turn with an important part of the American political and agricultural traditions. It is relatively easy to comment on definitions. The definition of the family farm has changed in the past and is certain to continue to change in the future. Families will continue to work together and make decisions. The political economy of the decision-making process will also change as added segments of the agricultural industry are standardized, as vertical integration continues to expand on the produce side, and as supply cooperatives continue to usurp farmers' decision-making power on the factor side of the production process. Even though negotiated and bargained exchanges will become fewer in number, the ones that are left will become more difficult to make. If agricultural economists continue to be involved in decision making, it will become necessary to learn whether 20 easy, daily decisions are, in aggregate, more difficult than a single decision that allows avoidance of the twenty! This sounds like a trivial exercise but it has the makings of a fascinating riddle and it may pave the way for extremely useful research regarding the relationship between the decision-making process and the allocation of resources on family farms.

But other problems intervene. It is clear that power is being concentrated within the agricultural industry and within the ancillary industries that supply agriculture with inputs and purchase its products.

The Lorenz curve that results from plotting land holdings against farm size is creeping away from the diagonal as is the curve plotting farm receipts against farm numbers. Bigness is emerging. This nation indulges in another of its fantasies when it is forced to ponder the effects of this concentration of power on the organization of agriculture and the relationship between agriculture and the remainder of the economic system.

But the concentration of control raises legitimate fears. In concentrating, those who make decisions are removed from the resources and are likely to be motivated by the economic forces that influence firm behavior--product prices, profits, internal rates of return, and pay-off periods. If agriculture is organized on these lines, the great loss will not be the loss of moral and cultural virtues of family farms but the loss of the capacity of the small holder system to maintain production in a time of economic adversity. An agriculture in which resource control is centralized may be more efficient, more productive, more responsive to the demands of food consumers, and it may provide higher incomes to all persons involved in the ownership of resources used in the production process. However, it does not have that most desirable of all characteristics: guaranteed stability in output.

In this setting it is legitimate to ask whether the family farm should survive with any more than a rhetorical dimension. It should because the social consequences of not having an exploitable food producing class are too high. If, however, the institution is to be preserved, it will have to be preserved on non-economic grounds.

One way to preserve the family farm is to make it the object of religious-like veneration among all citizens. Some careful distinctions will need to be made in such a movement. The object of veneration should not be the stolid simplicity of the man, woman, and pitchfork as in Grant Wood's painting "American Gothic". That painting gives virtue to the people who run the farm. The object in a present-day context will be the farm as a farm. Moreover, the adulation will need to be accorded the sole proprietorship in agriculture rather than just any sole proprietorship. Although the small farmer has much in common with the small restaurateur, the independent corner grocer and the independent fuel dealer, society must concentrate with special attention on the farmer. He must plant and harvest each year and society's stake in this process must not be confused with society's stake in the record shop, the back country lawyer, or the local Hallmark card dealer.

A Program of Work for Agricultural Economists

It would be foolish to recommend that agricultural economists--either individually or as a professional Association--ignore the family farm or treat it as only a political or romantic construct. If indeed 95 percent of all U.S. farms are family farms, the sheer force of their number dictates that members of this profession become aware of their existence and build them into research, teaching, and policy programs. The ways in which this can be done are numerous but some themes appear more important than others. The most important centers on the generality of the family farm. It is general in location (all parts of the U.S. have them), and quite often general in the sense that it produces a mixture of crops and livestock. The plea to inquire into family farms

is a plea for generality among researchers. Researchers in agricultural economics have become extremely specialized--so much so that in pursuit of specialty, many have lost sight of all but a few characteristics of agriculture or of the way in which agriculture fits into the economy as a whole. Our extremely awkward agricultural policy of the past decade is an outward manifestation of this loss of integration and loss of purview. Four lines of research can be suggested to correct this problem.

First, the economic role of the family farm in U.S. economic society must be better understood. While intuition and the deductive logic of production, efficiency, and welfare economics tell us that the family farm is a good thing in terms of its ability to absorb adversity, there is no hard evidence showing how much adversity can be absorbed. Looking ahead to a world with high possibilities for unrest and instability, this kind of information would be more than just useful. The adversity absorption coefficient for American agriculture could be found by close inquiry into cost structures, alternative sources of income, tax delinquency laws, bankruptcy provisions, and family income plans. Such studies should concentrate on the farms rather than on the individual enterprises. Society needs to know when its farms will shut down.

Accompanying this inquiry is a second theme--this one related to Ricardo's prime interest in political economy. How will income be distributed among those in agriculture as various shut-down points are approached? Although much economic research is related to and depends upon specific classes of resources, knowing the functional shares among those classes is not particularly revealing in the case of agriculture. The farmer, especially if he is made in the classic mold of family

farmers, is at once capitalist, land owner, and laborer. It does little good to know that two thirds of the product (income) goes to labor if it is not known how an individual is himself distributed among the classes. What happens when returns to family labor drop to intolerably low levels while returns to capital remain high? What kind of income maintenance programs will need to be designed to keep appropriate sets of resources from being broken apart? Answering these questions will require extremely innovative research.

Third, the problem of asset control in agriculture is a pressing one. It is somewhat interesting to know whether assets controlled by the Boeing Company or by the Coca-Cola Company or by Mutual of Omaha are any more or any less productive than those controlled in blocks suitable for 160 acre implements. It is more essential, however, to learn about the institutions that govern the acquisition and the abandonment of control. These institutions will become important regardless of how resources are controlled or who controls them. Researches into institutions affecting agricultural production is very tedious because only a few agricultural economists have the training or the patience to undertake them. The main body of institutional research in agricultural economics has emphasized the institutions surrounding natural resources--especially land and water. It will take some effort to transfer this skill to studies of institutions that affect labor, credit, managerial skill, and the exercise of power in market exchanges.

Finally, the agricultural economist must recognize that the family farm exists in a context and that this context impinges upon the decisions made within the farm and the industry. Some agricultural

economists should be asked to study this context and in doing so they should inquire into the public benefits of the essentially private firm. This last inquiry will be broadening if a handful of scholars are able to make progress in understanding the publicness of private enterprise. Perhaps the over-extended specialization among us will weaken and we will find ways to put our researches to good use.

In this study of context there will be the utmost temptation to call in other disciplines to inquire into decision making, social significance, and the political acceptability of various family farm themes. At some point these temptations must be honored. For now, however, it appears that the economist has ample work within his own discipline. The economic problems should be understood before we submit to the difficulties of interdisciplinary research.

In sum, the family farm exists as an economic entity, as a political entity, and as a romantic entity in the U.S. economy. It will continue to exist in a political economy and professional agricultural economists will be well served by looking at the whole farm from the point of view of the classical attributes of political economy. Moreover, these activities regarding production, exchange and distribution will need to be addressed from some point of view other than the view held by the individual farm operator. That view is too specialized, too narrow, and does not lead to an adequate policy base. The social importance of family farms needs to be addressed. Society has a large stake in the institution and has maintained the institution by turning public vice into private virtue. The terms of this coexistence need explication. It is our job to bring substance to that view so that the family farm

becomes recognized for its ability to absorb miscalculation and adversity; for its role in a confusing and fast moving political economy.

FOOTNOTES

*Paul W. Barkley is Professor of Agricultural Economics at Washington State University. The author is indebted to A. H. Harrington and L. F. Rogers for helpful critiques of a near-final draft. Early discussions with D. W. Holland, M. E. Wirth, and C. F. Feise also contributed to the substance of the paper.

1. Contemporary definitions of "political economy" are hard to find. Reflective comments on the theme can be found in Jalladean, Schultz, and Heilbroner.
2. One of the more urgent pleas was made by Breimyer.
3. Interestingly, Alfred Marshall took the opposite view. After defining economics to be "a study of the economic aspects and conditions of man's political, social and private life; but more especially of his social life." Marshall suggests that economics ". . . shuns many political issues which the practical man cannot ignore: and it is therefore a science, pure and applied . . .". From this, Marshall draws the conclusion that "(The discipline) is better described by the broad term 'Economics' than by the narrower term 'Political Economy'." (Emphasis added.)
4. Perhaps the best example of this was provided by T. W. Schultz in 1939.

REFERENCES

- Briemyer, Harold. "Man, Physical Resources, and Economic Organization." American Journal of Agricultural Economics, 55 (1973):1-9.
- Heilbroner, Robert L. "On the Possibility of a Political Economics." Journal of Economic Issues, Vol. IV, No. 4 (1970), pp. 1-22.
- Jalladeau, Joel. "Restrained or Enlarged Scope of Political Economy? A Few Observations." Journal of Economic Issues, 9 (1975), pp. 1-13.
- Marshall, Alfred. Principles of Economics. New York: The Macmillan Company, eighth edition, 1949, pp. 42-43.
- Paarlberg, Don. "The Future of the Family Farm." The Saturday Evening Post, March, 1976, pp. 42+.
- Ricardo, David. "Principles of Political Economy." Works and Correspondence of David Ricardo, Sraffa edition, Cambridge: Cambridge University Press, 1951, Vol. 1, p. 5.
- Schultz, George P. "Reflections on Political Economy." Challenge, 17 (1975), pp. 6-11.
- Schultz, T. W. "Theory of the Firm and Farm Management Research." Journal of Farm Economics, 21 (1939):570-586.