

AN ABSTRACT OF THE THESIS OF

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The purpose of this research was to obtain detailed economic information on the suppliers to farmers markets. Sixty-two suppliers were interviewed at six farmers markets throughout the State of Oregon in the summer of 1981. From these 62 suppliers, ten suppliers were randomly selected for a second interview. In the second interview, specific cost and revenue data were collected on their production and marketing activities along with general socioeconomic information.

The objectives in this thesis were to understand and explain the motivations of the suppliers utilizing the detailed economic data obtained in the interviews. Earning a monetary return was proposed as the suppliers' motivation for producing and marketing their goods at the farmers market. Four cost-return analyses were conducted to determine if the suppliers were earning positive returns on their production and marketing efforts. The results of three of the four cost-return analyses indicated that the suppliers were not motivated solely to earn a monetary return for their efforts. This suggested that there were other motivations for producing and marketing their goods.

A humanistic approach was developed to explain and understand other possible motivations besides the pursuit of monetary returns. A theory of human needs titled existence, relatedness, and growth (ERG) was utilized to examine the various motivations of the suppliers' economic activity. Using ERG theory, five hypotheses were developed from the data gathered in the interviews. These hypotheses suggested that the suppliers produced and marketed their goods to satisfy certain needs. The data indicated that many suppliers were willing to forego higher monetary returns in order to satisfy higher needs of relatedness and growth.

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at Farmers Markets

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AN ECONOMIC ANALYSIS OF SUPPLIER MOTIVATIONS
AT FARMERS MARKETS

CHAPTER I

INTRODUCTION

Background

When man domesticated plants and animals thousands of years ago, agriculture was on a subsistence scale. Initial trade began between neighboring farmers due to shortages and surpluses on the individual farms. Markets eventually developed where farmers would come together to sell their surplus directly to consumers.

The first American farmers markets were very similar to those in Europe. Farmers would come into town in horse-drawn wagons to sell their crops directly to consumers. The first recorded market was established in 1634 in Boston by the order of Governor John Winthrop [Sommer, 1980].

The public market system reached its peak during the 19th Century and then rapidly fell in importance due to changes in production, marketing, transportation of agricultural commodities and changes in consumer preferences. Improved transportation and the development of refrigeration techniques made it possible to ship crops long distances. Suburban and urban sprawl consumed much of the local farmland that supplied farmers markets. New competition from food chain stores reduced the market segment small farmers counted on when they sold at farmers markets [McCrummen, 1978].

The new agricultural marketing system consisting of many channels of wholesalers, processors and retailers required farmers to produce fewer varieties of crops in larger quantities. It became inefficient to produce and trade in small quantities. Research at land grant universities developed varieties of crops for volume production that would withstand the long delay between harvest and sale, as well as special treatment to improve the appearance of food. Researchers focused on the problems of larger agribusiness firms. This contributed to the decline of small farmers [Sommer,1980].

Changes in consumer preferences affected the outlets of small farmers. Mass advertising by food chains altered buying and eating habits. Consumers abandoned local grocers who had been the mainstays for small farmers and instead shopped at supermarkets supplied by factory farms [Sommer, 1980].

With agricultural research geared toward mechanization and improvements in transportation, processing and storage, economies of size developed in farming. Farmers markets became an inefficient market channel because they required many varieties of crops to be sold in small quantities. This coupled with changes in consumer preferences caused farmers markets to decline [Sommer, 1980].

Several developments in the past two decades have brought renewed interest in farmers markets. Energy shocks beginning with the 1973 oil embargo have tremendously increased the costs of producing, transporting and processing agricultural goods. Farmers markets have an advantage since the produce is locally grown, less energy is used transporting the product, and there is little if any processing because the food is fresh [Burrill, 1979]. The embargo

raised concern among Americans over outside foreign influence on the flow and prices of commodities. According to Sommer [1980],

"The best protection against control of the American food industry by an international cartel is a healthy, decentralized system of small farms and local markets ... local producers selling to consumers at local markets would aid the nation in times of crisis and protect against cartels that would control distribution as well as production."

The "Green Revolution" started in the sixties when new strains of crops and fertilizers were developed resulting in unprecedented yields. This encouraged farmers to grow the most profitable crop variety. Local varieties of plants were replaced with new high yield plants. This effectively reduced the genetic pool and placed the world's food system in a more precarious position in its war with insects and micro-organisms. Sommer states, "Local markets are a means of preserving regional specialty crops and varieties unsuitable for the factory farm" [Sommer, 1980].

In the '70s, the public grew concerned over the plight of the small farmer and Congress responded by passing the Direct Marketing Act of 1976. Farmers markets can be of great benefit to small farmers since they can sell smaller quantities of produce and typically receive a higher price. Farmers markets may offer price advantages for both the consumer and farmer. Sommer found that prices at California farmers markets were 34 percent lower than those at supermarkets [Sommer, 1980]. A Vermont study found that prices at farmers markets were consistently 10-20 percent lower than retail prices. This same study found that consumers shop at farmers markets because they perceive the food as being fresher and of higher

quality. Direct contact with growers bring the consumers close to the production process. The personal marketing situation allows consumers to make buying decisions based on increased understanding of how and where the produce is grown. Farmers markets can offer a wide variety of entertaining activities including music, socializing and learning [Burrill, 1979].

As a result of the changes in the past two decades there has been a re-emergence of farmers markets across the nation. In the state of New York the number of farmers markets increased ten-fold during a five year period to over 90 today. New York City has 11 farmers markets [Stuhlmiller, 1980]. There are over 30 farmers markets in Massachusetts, 26 in Tennessee and Alabama, seven in West Virginia, over a dozen in Pennsylvania and 20 in Honolulu [Sommer, 1980]. Washington, Virginia, Louisiana, Michigan and California have all documented substantial growth of farmers markets [Grantham, 1978; Anderson, 1978; Roy, 1978; Brooker, 1977].

Problem Statement

In Oregon, the formation of farmers markets has followed national trends. There are roughly a dozen farmers markets in Oregon. Most are less than five years old. Many communities are planning to establish new markets. Despite favorable conditions and the advantages to consumers and farmers, farmers markets are difficult to organize. Market organizers experience difficulties when persuading farmers, city officials, members of the chamber of commerce, and other groups that the farmers market is desirable from a community standpoint.

Farmers are hesitant to join a farmers market due to a lack of cost and revenue information on marketing at a farmers market. The majority of farmers market literature appears void of any in-depth economic analysis on the suppliers at farmers markets.

The purpose of this thesis was to conduct an in-depth economic analysis on farmers markets. This research will provide information to farmers and market organizers for improved market decision-making.

Objectives

- 1.) Determine costs and revenues of suppliers at farmers markets.
- 2.) Understand the economic rationale for:
 - (a) Production decisions by the suppliers
 - (b) Why the suppliers sell at the farmers markets.
- 3.) Interpret:
 - (a) The behavior of the suppliers in:
 - 1) Their occupation
 - 2) Their future farmers market participation
 - (b) The possible future development of farmers markets in Oregon.

CHAPTER II

THEORETICAL CONCEPTS OF:

CLASSICAL, NEOCLASSICAL AND HUMANISTIC THOUGHT

Two economic approaches were utilized to accomplish the goals and objectives of this research. The first approach will use a standard cost-return analysis. The second approach will be a new method utilizing contemporary psychology from a humanistic perspective. The purpose of this chapter is to present microeconomic theory as it has been developed in classical, neoclassical and humanistic thought. This will enable the reader to develop an understanding of the philosophical, psychological, technical and social components of the respective schools of thought as well as a sense of the empirical and theoretical validity of each method.

Classical Economics

Adam Smith (1723-90) is considered the father of economics [Lutz, 1979]. He published *An Inquiry into the Wealth of Nations* in 1776 which marked the beginning of classical economics. The psychology Smith assumed was simple. People are motivated by self-interest which can be broken down into three primary motives: self-love and sympathy; the desire to be free and a sense of propriety; and the habit of labor and the propensity to exchange. These three motives act as checks and balances on each other [Barber, 1968].

Adam Smith sought to analyze social and economic relations as they were part of a well ordered mechanism functioning harmoniously in the world. He was writing during the Age of Enlightenment. This

age was dominated by Newtonian principles and the philosophy of Descartes. The universe was operative under mechanical laws that had elegant mathematical order and cause and effect relationships. There was a Natural Order, the harmonious intertwining of man and the world directed by mathematical, mechanical and universal laws. Reason could transcend the empirical world to arrive at universal logical truths [Schanbacher, 1980].

Smith developed economics in general terms of markets, wealth and national income and did not develop micro theory per se. There is, however, a micro theory implicit in the general classical approach. Men act in self-interest to pursue their own ends. J. B. Say, a later classical economist, stated that people produce commodities in order to exchange them for other commodities [Barber, 1968].

Smith's thoughts on value were revolutionary. Previously, the physiocrats believed value was in the production of material things. According to Smith, consumption was the sole end of production [Barber, 1968].

Smith postulated that commodities had a "use" value and an exchange value. Use value resulted from the nature of the commodity and did not change. Exchange value consisted of the amount of labor, capital and land required to produce the commodity. If the market value did not equal the true value, competition would eventually equate the two. Labor is the standard of value. It is the "basic or original" contributor to the economic process. The payments to capital and land (interest and rent) can be converted into payments to labor (wages). Thus, 50 units of labor could be equal

to 100 units of capital [Barber, 1968].

Neoclassical Economics

Many of the neoclassical economists said they were merely expanding and clarifying the work of Adam Smith. The work of Jevons, Walras, Bentham, Marshall and others did more than just expand classical thought. They incorporated philosophical and psychological elements that changed the very structure in subtle ways. They developed tools, methods and a theory of microeconomics which changed the scope and emphasis of economics. Their conception of value was more encompassing and abstract.

The neoclassical economists incorporated hedonism as a psychological element of assumption into their theories which was not in conflict with Smith's implicit psychology. When men behave in a hedonistic manner, they seek pleasure and avoid pain. Men are assumed to act rationally when pursuing their advantageous ends [Schanbacher, 1980].

Jeremy Bentham was one of the main proponents incorporating Utilitarianism as a philosophical element into neoclassical economics. Bentham interpreted Utilitarianism as the greatest happiness for the greatest number rather than happiness for the individual, to be the highest principle and criterion of morality. The moral value of an action is defined through its utility. Moral worth is thus ascribed to a person's conduct to the extent that, among the many possible ways of acting, he chooses that one which must promote the general well-being [Gutmann, 1963]. Utilitarianism and hedonism explicitly supported Adam Smith's proposition that per capita income

acts as a measure of national well being. Increasing per capita income would be a way to achieve the greatest good for the greatest number of people [Lutz, 1979].

Microeconomics was formally developed in neoclassical economics. They turned attention away from the general problems of classical political economy of development and growth toward the search for an optimal position given limited resources [Schanbacher, 1980].

Jevons felt the ultimate source of pleasure is in the commodities. The utility commodities yielded was assumed to be quantifiable. Cardinal utility implies that a consumer is capable of assigning to every commodity or combination of commodities a number representing the amount or degree of utility associated with it. Although a unit of pleasure or pain is difficult to conceive, it is the amount of these feelings that continually prompted people to buy or sell, labor or rest, produce or consume. These quantifiable effects of feelings must be estimated in comparative amounts — cardinally. Walras was more direct in assuming that utility existed in standard measures capable of reflecting intensity of satisfaction. Marshall went further stating that services also yielded utility. He further re-defined pleasure and pain into costs and benefits. This was important in that the consumer and producer could now be analyzed in the same framework with similar terms [Henderson, 1980; Barber, 1968].

Marginal utility and diminishing marginal utility are the two key concepts which enabled the neoclassical economists to develop the basic microeconomic analysis. Marginal utility is the change in the total utility resulting from the consumption of an additional unit of a good or service. Diminishing marginal utility occurs when

the changes in total utility become smaller as more units of a commodity or service are consumed. Figure 1 displays the static consumer optimizing process.

Line BB represents the resource or budget constraint of the consumer which can be allocated among goods X + Y. Indifference curve I is a level of utility which is constant for the various combinations of consuming goods X + Y. There are many undrawn indifference curves, each representing different levels of utility such that a curve farther away from the origin represents a higher level of utility than an indifference curve closer to the origin. In maximizing his utility given the budget constraint BB, the consumer purchases Y_1 units of Y and X_1 units of X to attain the highest indifference curve I^* . The ratio of the marginal utilities and the prices must be equal at the optimum point A such that no re-allocation of the budget would result in a higher level of satisfaction [Henderson, 1980]. Algebraically, this can be written:

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$$

The analysis of producer behavior is quite similar to consumer behavior. In Figure 2, the producer has a production function which utilizes inputs $X_1 + X_2$ to produce an output q . Isoquants Q_1 , Q_2 and Q_3 represent different levels of outputs such that $Q_3 > Q_2 > Q_1$. The producer like the consumer maximizes his production given his cost constraint CC by purchasing that combination of X_1 and X_2 that will yield a maximum output at point A.

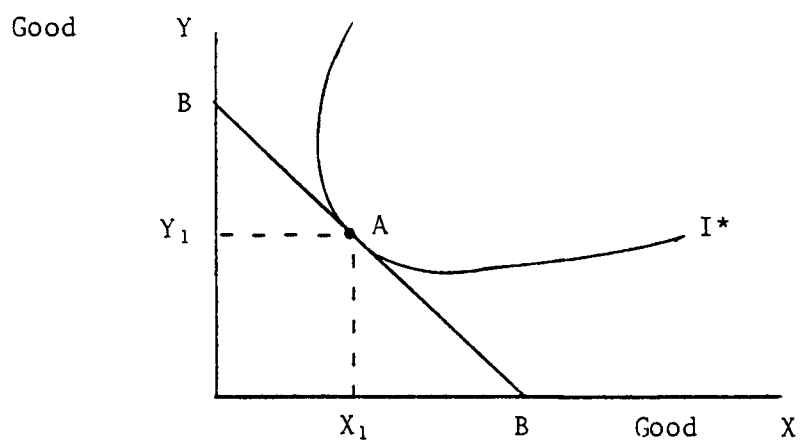


Figure 1. Consumer Optimizing Process.

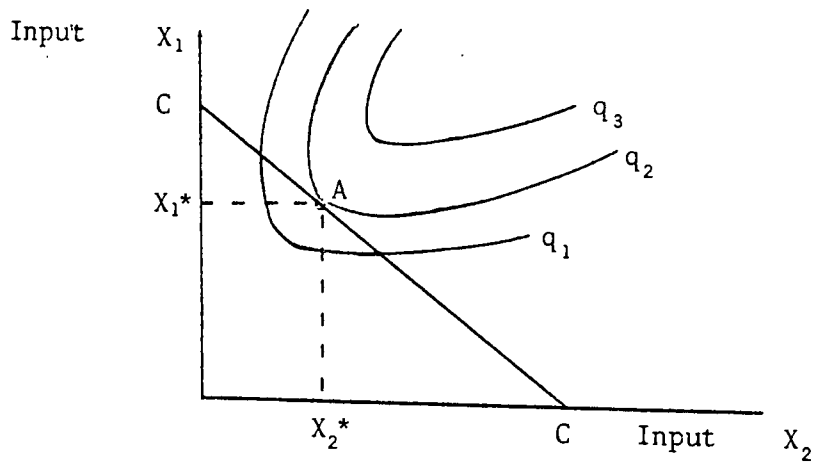


Figure 2. Producer Optimizing Process.

At point A the ratios of the marginal productivity of each input and its price are equal such that no other combination of inputs will generate a greater output. Algebraically:

$$\frac{MP_{x1}}{P_{x1}} = \frac{MP_{x2}}{P_{x2}}$$

[Henderson,1980].

Neoclassical economics breaks down economic activity into either production or consumption. Producers (entrepreneurs) take scarce resources of land, labor, and capital and utilize them to produce goods and services to be sold through a market. Consumers purchase these goods and services for consumption to derive utility.

Labor was no longer considered the prime determinant of cost or value. Labor is merely an input into the production process. If capital were substituted for labor to produce a good, the value would not necessarily change [Barber,1968].

Subtle changes have occurred in conventional economic theory since Marshall. The basic psychological and philosophical assumptions are no longer explicit. Lionel Robbins in 1935 defined economics as the science which studies human behavior as a relationship between ends and scarce means which have alternative uses. If the choices are consistent with the ends, then man is rational. The various alternatives and individual desires have degrees of importance can be placed in a certain order. In a given situation, one good will be preferred over another. According to Robbins, economics does not worry about utilitarianism and hedonism. This

was a new technique called revealed preference [Lutz,1979].

Revealed preference allows the economist to construct preference orderings on the basis of economic data alone. The consumer reveals his or her preferences in the way he or she shops. Armed with revealed preference theory, the economist can, by mere observation of shopping behavior, draw the preference orderings, and can do this (continued on the next page)

without any references to utility, inner satisfaction or willful intentions [Lutz, 1979].

The concept of value in economics has changed since Marshall developed it. There is no longer a distinction between use value and exchange value [Lutz, 1979].

Modern economists have replaced the distinction between use value and exchange value by noting that it is the marginal utility of a commodity that determines its material value, not the total utility derived from consuming all the available units of a commodity. It is the additional or marginal usefulness that determines the value of a commodity rather than the total amount of it that is consumed [Nichols, 1971].

The Humanistic Critique

Since the beginning of classical and neoclassical thought, humanistic economists have criticized mainstream thought. The following is a brief description of the critiques of conventional economic theory prominent humanistic economists have made as well as the contributions they have made to humanistic economic thought.

In their book, *The Challenge of Humanistic Economics* (1979), Lutz and Lux refer to Simonde de Sismondi as "the Pioneer of Humanistic Economics." Ironically, the Count Sismondi was initially an ardent supporter of Adam Smith. On a trip to England, the Count saw that production was increasing while the enjoyment of the population was diminishing. According to Smith, increasing the wealth of a nation through greater output of material goods should increase the general welfare of society. The Count sought this happiness in

every class but could not find it anywhere. Sismondi felt the object of economics should be man and not wealth. Wealth is only relevant to the extent that it enables all citizens to participate in its pleasure. Human needs and their satisfaction are the first goal of economic activity [Lutz, 1979].

Sismondi's main contribution to humanistic economics was the concept of a hierarchy of needs. Society must provide for bodily and subsistence needs of its people before higher needs can be taken care of [Lutz, 1979].

John Ruskin (1819-1900) made a forceful critique of the economic method employed in the conventional economics of his time. Conventional theory ignores the "irregular" part of human nature such as charity and concentrates on the "regular" part of human nature such as self-interest and the desire for progress.^{1/} The conventional economic method eliminated the inconstants. The method considered the human being merely as a covetous machine. Ruskin criticized economics for examining the laws of labor, purchase and sale so that the greatest accumulation of wealth could be made available [Lutz, 1979].

Such an economic method makes statements on proper course of social action impossible as long as it works with a fragmented and reduced concept of man. Political economy is aimed at a life of health and happiness and not abstract wealth. The value of commodities

^{1/} The "irregular" parts of human nature such as charity (sacrifice, benevolence, unselfishness) are unpredictable because of their irregularity. These irregularities can often contravene with the "regular" part of human nature.

is their ability to satisfy human needs. Proper distribution and consumption are just as important as the cost of production [Lutz, 1979].

Ruskin's contributions to humanistic economics are his insights on production. First, production of value or wealth has two components. It must be "useful" and there must be a human capacity to appreciate the output. More importantly, Ruskin realized the effect the process of production had on the laborer. The laborer should make good and beautiful things which will better him rather than bad and ugly things which can corrupt and break him down in the process of producing them. Wasting labor by depriving it of creativity, skill and imaginative energy through displacing labor, the increasing stock of capital goods tends to produce growing quantities of riches instead of better qualities of life [Lutz, 1979].

Like Ruskin, John A. Hobson (1858-1940) had problems with the psychological and philosophical basis of economics. Hobson had Marxist overtones in that he believed in an "ordered economic system." Goods should be produced according to ability or capacity to produce and distributed according to need or capacity to consume. It is an economy whose goal is to maximize higher liberty and justice. Hobson was aware of the positive and negative affects work had on the individual. He believed that a necessary if not sufficient ingredient of a humanized society is meaningful work. Hobson advocated job security and delegating to the ordinary worker more participation in the conduct and efficiency of business [Lutz, 1979].

Thorstein Veblen (1857-1929), like his humanistic predecessors, attacked "economic man." Veblen said, "A person is not a bundle of

desires that are to be saturated by being placed in the path of forces of the environment, but rather a coherent structure of propensities and habits which seek realization and expression in an unfolding activity." Veblen observed conspicuous consumption. People were not acting according to "rational economic man" [Lutz, 1979].

Gary L. Schanbacher [1980] outlines three contemporary humanistic positions in economics: Patchwork, Radical, and Pragmatic. According to Schanbacher, "Patchwork solutions, then, aim to flesh-out accepted theory while retaining its essential form. Humanistic critics follow this strategy generally emphasizing the importance of introducing multidimensional man to formal analysis and of integrating more realistic behavioral assumptions, especially under conditions of uncertainty." Schanbacher further states, "Patchwork theorists believe the behavioral assumptions of conventional economic theory are merely incomplete rather than false. Therefore, the most productive efforts serve to refine and advance the doctrines of conventional economic theory instead of fundamentally altering them."

Schanbacher considers the literature addressing imperfect competition, second best theory, institutionalism and the psychological work of George Katona to be examples of patchwork humanistic economics. Imperfect competition (oligopoly and monopolistic competition) theory is classified by him under patchwork humanistic thought because it incorporates the uncertainty of human behavior which is reflected in the actions of businesses. Second best theory is a patchwork process because it realizes there are material, technical, social and human constraints involved with many economic optimization problems. Institutionalism is a patchwork position because it contends

that most economic activity is determined by institutions which are largely psychological and are composed of customs and existing economic arrangements [Greenwald, 1965]. Katona's work incorporates many psychological factors that influence people's preferences and propensities which instills realism into the economic model.

On the other end of the humanistic spectrum are the radical humanists. They posit that man is a free responsible being who is conscious of his uncertain existence. While man is capable of accepting responsibility for his being, for becoming more fully human, he also is capable of deceiving himself into believing his life is determined by forces beyond his control. Through his actions, man shapes his future. His actions cannot be predicted from past behavior or events. However, when living as part of the crowd, man attempts to substantiate his essence in the material world and relationships with other men, to be reified [Schanbacher, 1980].^{2/}

The process of reification can be institutionalized by western society's prevalent mode of production. Within the system, man relinquishes freedom and avoids philosophical decisions. He is made into an inanimate object, and is analyzed in economics as such. Yet if man does not operate under mechanical laws, if authentic being requires freedom then fixed economic laws are not always applicable [Schanbacher, 1980].

Radical humanistic approaches to the study of economic phenomena are based on real types instead of ideal types. Over certain ranges of human behavior, economic activity may be predictable. Where

^{2/} Reify means to change a mental attitude or abstraction into a real thing.

freedom is introduced and rationality deleted from models, by traditional standards, theory may not exist at all. Radical humanistic economists believe that formal general theorizing may not be possible. If there is no universal essence of a consumer or firm apart from individual level experience, there can be no meaningful theory explaining them [Schanbacher, 1980].

In the middle of the humanistic spectrum are the pragmatic humanistic economists. Schanbacher writes, "'Pragmatic Humanism' mirrors concerns of economists who may be broadly characterized as thoroughly schooled in the mainstream tradition but convinced that basic humanistic revisions must be made to conventional economic theory. These economists are considered humanistic because they stress man as an important interactive agent in the economic arena, or because they advance themes generally relevant to the humanistic outlook. The humanists are pragmatic because they refuse to dismiss out of hand the incisive, insightful analytic and quantitative methods employed by conventional economic theory. They appreciate the elegance and geometric accuracy permitted by mathematical modeling in many areas of economic analysis, and fully realize that the more numerous and complex the human variable introduced into theory, the more tentative and uncertain its forecasts and conclusions become."

It is not clear in Schanbacher's thesis exactly what constitutes pragmatic humanistic economics. He cites several economists he considers pragmatic: Simon Kuznets, Wesley Mitchell, G. L. Shackle and Kenneth Boulding.

According to Schanbacher, Kuznets and Mitchell emphasize, in

their research, observation and empiricism rather than abstract reasoning.

G. L. Shackle believes there is an inherent weakness in any theoretical framework. Instead Shackle employs a classificatory system analyzing explanatory variables and psychological and philosophical underpinnings. Researchers following a taxonomic^{3/} method attempt to measure and categorize relevant data without being obligated to build theories. He envisions economics as a science comparable to law, medicine and chemistry.

Kenneth E. Boulding, according to Schanbacher, is the most widely known pragmatic humanistic economist. Boulding's pragmatic method incorporates more insight and method from the social and natural sciences to complement the mathematical tools and pure theory of conventional economic theory.

Critique of Humanistic Economics

Schanbacher says in his conclusion:

"Under both theory of the consumer and theory of the firm, individuals remain the basic decision units. Unlike Economic Man, the foundation of conventional economic theory, individuals are a tangle of conflicting emotions, affections, biases, objectivities, subjectivities, fantasies, etc. Theory which attempts to distill from this maze only data relating specifically to the economic dimension is doomed to failure. We require a General Theory of Humanistic Economics which draws together, in a systems dynamics framework, relevant aspects of a wide range of social and physical sciences. We currently have no such theory."

^{3/} Taxonomic classifies the laws and principles of natural objects.

Humanists have criticized conventional economic theory but have never offered a workable alternative. Contemporary humanists such as Boulding, Schumacher and Shackle call for a multidisciplinary approach, relying on observation and empirical classification, de-emphasizing pure theory and directing the use of economics to build a better society for human beings. These contemporary humanists offer the practicing economists little guidance and no tools for addressing the problems on which economists are employed.

A New Structure

In order to conduct an objective scientific economic analysis from a pragmatic humanistic perspective, a new structure must be developed. This structure must incorporate humanistic ideals and avoid the criticism conventional economic theory has received. The structure must also offer economists tools to conduct economic analysis.

ERG Theory

Lutz and Lux [1979] proposed using Maslow's hierarchy of needs as a framework for humanistic economics. However, Maslow's hierarchy has no empirical support [Hall, 1968; Alderfer, 1969]. Clayton Alderfer, a psychologist at Yale University, developed an alternative theory to Maslow's which has received significant empirical support [Alderfer, 1969, 1972; Wanous, 1977]. That theory is called Existence, Relatedness and Growth (ERG).

ERG is a theory about subjective states and desires. It is a content theory (versus mechanical theory) which is concerned with

what is within a person and his environment that energizes and sustains behavior [Alderfer, 1968].

ERG borrows much from Maslow's hierarchy of needs. Existence needs consist of material and psychological desires. Hunger and thirst are deficiencies in existence needs. Pay, fringe benefits, can satisfy existence needs. A basic characteristic of existence needs is that they can be divided among people in such a way that one person's gain is another's loss under conditions of finite resources. A person's satisfaction, beyond a bare minimum, depends upon the comparison of what he gets to what others get in the same situation [Alderfer, 1968].

Relatedness needs involve relationships with "significant other" people. Family members, superiors, friends, co-workers are usually considered significant others. A basic characteristic is that their satisfaction depends on a process of sharing or mutuality. Acceptance, confirmation, understanding, and influence are elements of the relatedness process. Significant others include groups as well as individuals. Relatedness needs are different than existence needs in that existence needs require scarce resources. The process of existence need satisfaction prohibits mutuality. Relatedness needs are satisfied by also satisfying another person's desire for relatedness needs. The essential condition of the satisfaction of relatedness desires is a willingness of both (or all) persons to enable the other to express feelings and thoughts as fully as possible [Alderfer, 1969].

Growth needs impel a person to make creative or productive effects on himself and the environment. Satisfaction of such needs comes from

activities enabling a person to utilize his capacities fully and develop new ones. A person experiences a greater sense of wholeness and fullness as a human being by satisfying growth needs. Thus, satisfaction of growth needs depend on a person finding the opportunities to be what he is most fully and to become what he can [Alderfer, 1969].

Existence needs reflect a person's requirement for materials and energy and for the need to reach and maintain a homeostatic equilibrium with regard to the provision of certain material substances. Relatedness needs acknowledge that a person is not a self-contained unit but must engage in transactions with his human environment. Growth needs emerge from the tendency of open systems to increase in internal order and differentiation over time as a consequence of going beyond steady states and interacting with the environment [Alderfer, 1969].

Clayton Alderfer laid the groundwork of ERG theory and then developed propositions from the theory. It seems these propositions serve two purposes.

First, they can be empirically tested to verify or reject ERG theory. Second, these propositions are useful statements on human behavior, if they are valid, for the psychologist and for the economist (as will be shown later). Many propositions have emerged from ERG theory which have empirical validity [Alderfer, 1972]. Here are some that may be useful for economic analysis from a pragmatic humanistic standpoint:

- (1) The less existence needs are satisfied, the more they will be desired.

- (2) When both existence and relatedness needs are relatively dissatisfied, the less relatedness needs are satisfied, the more existence needs will be desired.
- (3) When both relatedness and growth needs are relatively satisfied, the more relatedness needs are satisfied, the more growth needs will be desired.
- (4) When growth needs are relatively dissatisfied, the less growth needs are satisfied, the more they will be desired; when growth needs are satisfied, the more they will be desired.^{4/}

ERG theory and neoclassical theory on consumer behavior are not mutually exclusive concepts. Both theories are analyzing human behavior from a different perspective and use different terminology. These four propositions listed above can be expressed in terms of indifference curves and the marginal rate of substitution between two goods. For instance, proposition 1 can be expressed using traditional indifference curve analysis found in most intermediate microeconomic textbooks. First assume that there are 2 goods: x, which is a fringe benefit

^{4/} Growth needs are unlike existence and relatedness needs in that growth needs, when they are satisfied, are desired even more. When existence and relatedness needs are satisfied, they are no longer a strong motivator for the individual [Alderfer, 1972].

and y, which satisfies the need for physical safety. In figure 3, the marginal rate of substitution of x for y (represented by the slope of the indifference curve) changes dramatically as less of x is consumed and more of y is consumed. At point B, on indifference curve I, the marginal rate of substitution is low. For an additional unit of x (more fringe benefits) very little of y (less physical safety) must be given up for the consumer to remain indifferent. However as less and less x is consumed (the less existence needs are satisfied), the more units of y must be consumed for the consumer to remain indifferent. At A, fringe benefits (x) are highly desirable since the marginal rate of substitution of y for x is higher than at point B. To consume one more of x, many units of y must be given up for the consumer to remain indifferent. Propositions 2, 3, and 4 lend themselves to similar indifference curve analysis.

The previous indifference curve analysis demonstrates that neoclassical consumer behavior and ERG theory are not mutually exclusive concepts. With certain assumptions these theories are quite similar. However, with and without these assumptions, the two theories do have significant differences. Neoclassical consumer behavior combines existence, relatedness and growth need satisfaction into utility. ERG theory incorporates the importance of the nature of the resources needed to satisfy the various levels of needs (existence needs require material

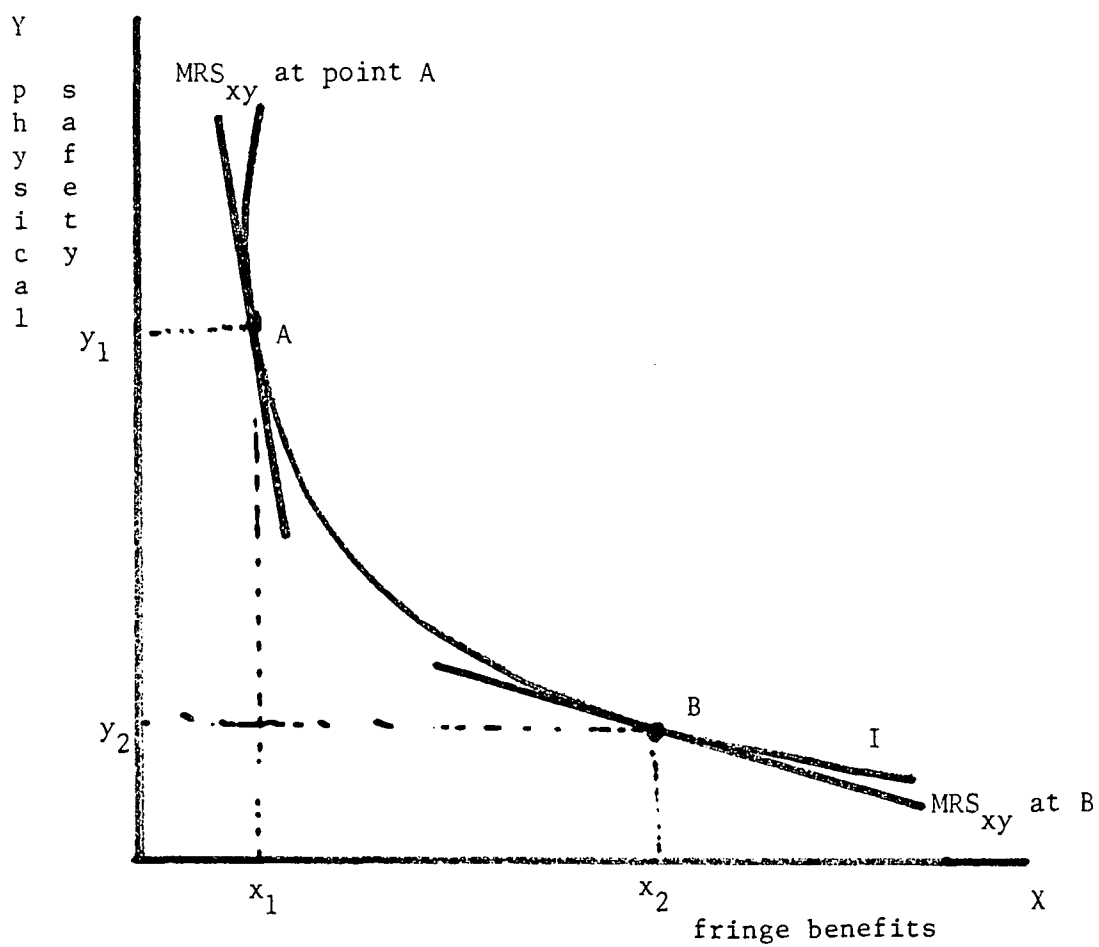


Figure 3. Proposition 1 and the marginal rate of substitution.

goods while relatedness and growth needs require less material goods and more abstract goods like time). Neoclassical consumer behavior makes no such distinction since all goods are consumed for utility. ERG theory recognizes that different needs can be satisfied in the process of working. Work, in a neoclassical framework, is a disutility. People must be induced to work with wages and salaries to compensate for the disutility experienced from working.

ERG theory is the basis for the new structure being presented here to analyze economic phenomena from a humanistic perspective. As indicated earlier, there are three humanistic positions, the patchwork, pragmatic, and radical. Under which position is this new structure?

The incorporation of ERG theory into economics is categorized under pragmatic humanistic economics. As mentioned earlier, it is humanistic in that it recognizes the hierarchy of needs. It is also humanistic in that self-centered and altruistic behavior, as well as (continued of the next page)

consistent and inconsistent human activity and motivation are explained in ERG theory. This incorporation is pragmatic in that it makes basic humanistic revisions to conventional economic theory but does not reject per se the mathematical models and analytical tools that have been well developed in conventional economic theory. The objective and quantitative methods used by Alderfer [1975] to measure human needs and their satisfaction are pragmatic in nature. While the incorporation is not radical, ERG theory accommodates the existentialists in that the essential human condition, with all its responsibilities, blind groupings, and inability of self determination, is captured in ERG's dynamic theoretical framework.

Analytical Approach

The humanistic structure contains an analytical approach consisting of three steps. While these three steps may be implicit in conventional economic analysis, there are differences in a humanistic analysis which will be discussed later.

Step 1: The general and specific problem (subject or phenomena) must be defined in a pragmatic humanistic framework utilizing ERG theory.

Step 2: The analysis must be tailored to the problem area (that is, type of people, group, organization, market, etc.) with their special needs in mind.

Step 3: Transform the results of the model (developed in Step 2) into objective terms so that comparisons and aggregations can be made.

Step 1 is standard for any economic analysis whether it is conventional or nonconventional. The problem must be placed in the proper context. Farmers raise crops for sale to earn income to satisfy existence needs. They choose farming as an occupation to satisfy relatedness needs. Farming provides a healthy family environment. Farm work brings them in contact with other people having similar socioeconomic backgrounds facilitating the satisfaction of relatedness needs. Farming satisfies growth needs for it provides an environment where farmers can assume responsibility, utilize existing talents and develop new ones.

Step 2 suggests that the model should be developed around the subject rather than having the subject forced into a model.^{5/}

The criticism of humanistic economics is that there are no concrete tools and methods which produce objective results for comparison and aggregation. With Step 3, the analytical approach of pragmatic humanistic analysis incorporating ERG theory avoids the criticism that humanistic economics has historically received. The objective results of the humanistic model must be suitable for comparison, aggregation and other analytical uses.

In Appendix I, possible tools and techniques for Steps 2 and 3 of the analytical approach are presented.

^{5/} It may be that if this structure is accepted as a theory and practice, models may be developed that have wide applicability and usage — time will tell.

In this chapter, a brief overview of classical, neoclassical and humanistic economics as well as ERG theory has been presented. The following chapter contains the preliminary data that was used to develop the analytical approach.

CHAPTER III

PROCEDURES AND ANALYSIS OF PRELIMINARY DATA

Methodology

Two sets of interviews were used to collect the data in this study. The first set of interviews was designed to obtain basic information on the suppliers' characteristics such as income, acreage, products sold, and motivations. The first interview instrument appears in Appendix II. Interviews were conducted at farmers markets in Woodburn, Salem, LaGrande, Corvallis, Albany and Newport. A total of 62 vendors were interviewed. This information was used to determine what was important to the vendors in terms of market participation, production, income sources, etc. By knowing the key variables on the supply side of the farmers market, the analytical approach was developed.

The people interviewed in the first set, form the population from which the second set of interview instrument appears in Appendix II.

The initial interviews at the six farmers markets were conducted from June 1981 through September 1981. Vendors were interviewed at each market after the period of peak business activity. Although most were quite cooperative, some were too busy with customers or had left before we had a chance to interview them. An average of ten vendors were interviewed at each market.

In the interview the following information was obtained: acreage devoted to farming, varieties of fruits and vegetables being

grown, the products being sold at the market, production and marketing motivations and income.

The second interview was designed to obtain detailed information from the suppliers about the costs of production and marketing; the opportunity costs of land, labor and capital; revenues, pricing strategies, education, previous occupations, skills, and other socio-economic information.

Included in production costs were land, property taxes, capital, wages, and materials. Marketing costs included paid labor, transportation, advertising, bags, sales license, and permits. Revenues included all marketing outlets such as roadside stands, wholesalers, canneries as well as farmers markets.

In the first interview set, the suppliers were asked if they would be willing to participate in a second interview. Forty-four of 62 respondents indicated a willingness to participate in a second interview. The sampling population (N) then was 44. This sampling population was broken down into 4 strata (S):

	number of respondents(r)
S _{1h} : low farm income to total income high farmers market income to total income	21
S _{h1} : high farm income to total income low farmers market income to total income	5
S _{hh} : high farm income to total income high farmers market income to total income	12
S ₁₁ : low farm income to total income low farmers market income to total income	6

The first interviews indicated that the relative contribution of both income from the farm and the farmers market to total household income might be a key determinant of the supplier's motivation in their production and marketing behavior. Initially 20 of the 44 respondents were planned to be interviewed again with a minimum of 4 interviews to be allocated among the remaining strata. Stratified random sampling with proportional weights (p) was used to allocate the remaining 4 interviews among the 4 strata. To compute this, the proportional weight of each strata was multiplied by 4 and rounded to the nearest integer. The additional interviews were added to the minimum of 4 interviews per strata to determine the total number of interviews per strata.

Strata	r	p (r/N)	Additional interviews per strata		Total inter- views per strata
_____	—	_____	_____	_____	_____
S _{lh}	21	.48	.48 x 4	2	6
S _{hl}	5	.11	.11 x 4	0	4
S _{hh}	12	.27	.27 x 4	1	5
S _{ll}	6	.14	.14 x 4	1	5
total	44	1.0		4	20

Once the total number of interviews per strata was determined, the respondents from each strata were randomly selected for the second interview.

Due to a lack of time and funding only 10 of the 20 suppliers were interviewed. Fortunately these 10 interviews were evenly spread among the 3 categories (hobby, part-time, full-time) used later in the research. The information contained in the 10 interviews provided enough data for the purposes of this research.

Analysis of the First Interview Data

The following is a condensed summary of most of the information obtained in the first interview set.

Over one-third of the vendors used an acre or less in the production of their product (Table 1). This reflects the large number of hobby gardeners who often had gardens the size of a few hundred square feet. Seventy-seven percent of the farmers had 25 acres or less in production. Thirty-eight percent farmed between 2 and 25 acres. This group is composed mainly of part-time farmers and full-time farmers using small scale labor and intensive agricultural (continued on the next page)

Table 1. Acreage Used in Production.

Size Category	Acreage	Number of Farmers ^{a/}
Small farms	0 - 1	21
	2 - 5	12
	6 - 25	8
Midsize farms	26 - 75	1
	76 - 150	2
Large farms	151 - 250	5
	251 - 500	3
	500 +	1
TOTAL		53

^{a/} Only 53 of the 62 respondents were farmers. The remaining respondents were craftsmen or bakers.

technology. Large scale farmers were also well represented as one out of six vendors had over 150 acres. These farmers markets could likely accommodate any size farmer since both small and large sized farms were well represented.

About half of the vendors considered themselves as hobbyists (Table 2). That is they grew vegetables or made arts and crafts not for income but for recreation or personal use. One quarter of the vendors produced their product on a part-time basis. These suppliers had another major source of income. The sale of this product provided supplementary income.

Almost a quarter were full-time suppliers who sold some of their product through the market. While these people may have had other sources of income, the products they were producing and selling required most of their labor and was the main source of income.

About 45 percent of the suppliers exclusively sold surplus production at the market (Table 3). Often farmers grow more produce than their main marketing channels require. This surplus might otherwise rot in the fields if it were not sold at the farmers market. Hobby gardeners may plant in the spring with no intention of producing more than domestic consumption requirements. However, when the harvest arrives they find themselves with a sizeable surplus. So they take the surplus to market.

Over one-third of the vendors produced specifically for sale at the farmers market. These people allocated a percentage of the planting, baking, or other production for sale later at the market. The respondents were usually successfully selling at the market. Sometimes the farmers (or bakers and craftsmen) planted for the market

Table 2. Vendor Status at the Farmers Markets.

Vendor Status	Number of Vendors
Full-time	14
Part-time	15
Hobby	29
Other ^{a/}	1
TOTAL ^{b/}	59

^{a/} One woman, for reasons which she could not adequately explain, did not come under any category. She sold religious items and considered selling at the market a religious activity.

^{b/} Three respondents were not sure if they were hobby or part-time suppliers, or part-time or full-time suppliers. As a result gave no response.

Table 3. Production Motivation.

Production Motivation	Number of Vendors
Produced specifically for sale at a farmers market	22
Surplus production sold at the farmers market	28
Both surplus and specific production sold at the farmers market	12
TOTAL	62

but had a surplus of other crops which they also sold at the market. There were 12 people in this category.

About half of the suppliers did not plan to sell at the market in advance but did so because of surplus production. The other half intended to sell at the market. They produced goods specifically for sale at the farmers market. This flexibility of the market to accommodate the vendors' surplus without long-term commitment was an attractive feature for suppliers with variable production in a local economy.

All income groups but one were represented (Table 4). Five of the 58 respondents (four did not reveal income for the sake of privacy) earned less than \$5,000 in calendar year 1980. This large number of vendors under the poverty level of income might indicate an urgent need for economic opportunity in this state. The farmers markets may represent such an economic opportunity. Over half of the respondents were in the middle income bracket of \$15,000 to \$34,999. Since any income derived from the farmers market would constitute a very small percentage of total household income for most of the respondents, these vendors may sell at the market for other reasons such as recreation. It is interesting to note that two relatively high income people sold at the market.

There was a wide variety of products sold at the six farmers markets (Table 5). Two-third of the vendors sold vegetables. Almost half sold fruit while one-third sold berries when in season. Over ten percent sold arts and crafts. Unusual items for sale included alfalfa sprouts, greeting cards and trees. Usually there was at least one vendor at each market who sold flowers. Over one in six

Table 4. Number of Vendors in Each Income Class.

Income Class (in dollars)	Number of Vendors
0 - 4,999	5
5,000 - 9,999	8
10,000 - 14,999	16
15,000 - 24,999	18
25,000 - 34,999	9
35,000 - 49,999	0
50,000 +	2

Table 5. Products Produced and/or Sold by the Interviewed Vendors at Six Oregon Farmers Markets.

Product	Number of Vendors	
	Producing and Selling ^{a/}	Selling Only
Berries	29	18
Fruits	30	27
Vegetables	44	40
Plants	15	11
Grains	5	2
Baked Goods	6	6
Arts and Crafts	8	8
Nuts	2	2
Flowers	6	5
Cards	0	1
Hay	2	0
Sprouts	1	1
Jams and Jellies	1	3
Trees	1	1
Herbs	3	2
Honey	2	3

^{a/} The vendors often produced items that were sold through other marketing channels or used solely for personal consumption.

people sold house or garden plants. About ten percent sold baked goods which appeared to be a popular item among "hungry" customers.

The number of products produced outnumbered the amount of products merchandized for sale at the market. Farmers usually grow many crops both for commercial and domestic use. Not all of these products are sold at the farmers market. Some products are sold through wholesalers and processors while other products are grown for personal consumption.

The number of vendors selling jams, jellies and honey was greater than the number of vendors producing these items. Usually a friend or neighbor of the vendor produced these goods and the vendor sold them.

Twenty-six people felt they had a successful market day by the volume of products they sold (Table 6). These respondents often commented that when they sold all of the products brought to market at a good price they were successful. Less than one-third judged success by the amount of profit they earned at the market. Profit is gross receipts less costs. Whether "costs" included just "out of pocket" marketing cost or included both cash and non-cash marketing and production costs is not certain. These vendors at least had some notion of cost and subtracted these costs from revenues to determine the amount of profit earned at the market. Fifteen judged success by "something else." This "something else" was usually the fun they had making new friends, by providing a quality product directly to the consumer or socializing with other vendors.

Most of the vendors indicated that selling the goods they brought to market was basic for success (50 of 65 responses depended

Table 6. Criteria for a Successful Market Day.

Criteria	Number of Vendors
Profit	17
Gross Receipts	7
Volume	26
Something Else	15
TOTAL ^{a/}	65

^{a/} Some vendors judge success by two criteria. Being unable to determine which was most important they gave two responses. Thus, the total is greater than 62.

on sales).

CHAPTER IV

CONVENTIONAL ANALYSIS

The economic analysis of supplier motivations consisted of 2 approaches. The first approach utilized conventional cost-return analysis and is presented in this chapter. The second approach was the pragmatic humanistic approach and will be presented in the following chapter.

Four analyses were conducted on the data collected from ten suppliers in the second interviews. Two of the analyses focused on the production of the goods produced by the suppliers, including goods sold at the market. The other two analyses focused on the decisions to sell at the farmers market.

The purpose of the cost-return analyses was to determine whether or not these suppliers were motivated to earn a monetary return in their production and marketing activities. The suppliers were analyzed in a production framework.

The cost-return analyses on production activities covered the goods sold at the farmersmarket and other goods not sold at the farmers market. All of the goods produced by common inputs were incorporated into the analysis. For example, one supplier owned 15 acres of land on which he had three categories of output. He raised livestock and grew fruits and vegetables. While not all of the products were sold at the market, common inputs were used to produce all of them. These common inputs were a tractor, a barn, land and various tools and equipment. His production decisions often simul-

taneously involved all three product categories. Thus, it was necessary to conduct the cost-return analysis on the output of all three categories.

Goods produced by the suppliers, utilizing no common inputs with the goods sold at the farmers market, were not incorporated into the cost-return analyses. These goods might be produced for different reasons. Some goods were produced for income. While others were produced for food and/or recreation.

Results of Production Analysis With Investment Evaluated at 15 Percent

The first analysis in this section on the suppliers production decisions included a 15 percent opportunity cost for investment. The suppliers could liquidate their investment in land and capital, and invest in money market funds or certificates of deposit. These instruments offered yields close to 15 percent at the time of the data collection. The data was collected during the summer and fall of 1981.

With investment evaluated at 15 percent, six suppliers lost money in 1981 (Table 7). Three suppliers earned positive returns to their labor and management input. Two vendors, numbers five and six had substantial losses of \$13,476.73 and \$8,112.95, respectively.

An examination of the data revealed that high land costs were partly responsible for the losses of vendors five and six. Their land had a market value between \$2,500 and \$4,500. Prices on agricultural commodities would have to be much higher before these farmers would earn positive monetary returns (with the opportunity

Table 7. Cost-return Analysis on Production Decisions With Investment Valued at an Opportunity Cost of 15 Percent, 1981.

(1) ^{a/} Vendor Number	(2) Value of Personal Consumption of Product	(3) Total Revenue	(4) Total Cost	(5) ^{b/} Return to Operator Management and Labor
1	94.50	2,379.95	4,566.65	(2,092.20)
2	180.46	200.00	557.00	(176.54)
3	94.50	410.00	836.00	(331.50)
4	860.00	80.00	193.00	747.00
5	145.37	6,629.00	20,251.00	(13,476.63)
6	643.80	1,667.00	10,423.75	(8,112.95)
8	142.00	12,900.00	7,807.00	5,235.00
9	357.58	6,000.00	4,290.20	2,067.38
10	1,006.14	2,600.00	8,167.25	(4,561.11)

^{a/} Vendor number 7 was excluded because data on total revenue was unavailable.

^{b/} Column 5 was calculated by adding columns 3 and 2 and subtracting column 4.

cost of investment taken into consideration).

Suppliers with small scale operations (hobby gardeners) tended to lose money. Vendors two and three (Table 7) lost \$176.54 and \$331.50, respectively. These people had equipment that was seldom used to full capacity which increased per unit costs.

The result that 67 percent of the suppliers had negative monetary returns was an unexpected result. It would seem that these suppliers would go out of business if they lost money in the production of their goods. Perhaps there were two explanations. First, 1981 could have been a year of low agricultural prices and high input prices (costs). Thus, in a "normal" year, the majority of the suppliers would have made money. Second, included in total costs was a 15 percent opportunity cost for investment. Since the suppliers owned the investment, this 15 percent cost would represent a payment to themselves. Farmers had a tendency not to consider their land and capital (investment) as a cost. Therefore, they felt they were earning a monetary return (although they did realize they could have been earning more money by selling their investment and finding employment off the farm).

While the data were collected for only one year, 1981, (and thus the risk that the data did not represent a normal year was taken) the data was probably representative of costs and revenues for the past several years. Prices at direct marketing outlets, such as the farmers markets, were typically higher than wholesale prices. Thus, revenues from these revenue sources were not affected by the depressed agricultural commodity prices of the past few years as much as wholesale prices were. Agricultural input prices have

leveled off during the past few years [1981 *Handbook of Agricultural Charts*, USDA, 1981]. However, this research would have benefited through the utilization of several successive years of data.

Total returns included the value of the personal consumption of the products (Column 2, Table 7) and the total revenues obtained from the products (Column 3, Table 7). Total revenue was calculated by adding revenues of goods sold through the farmers market, wholesale transactions, other direct marketing outlets such as U-PICK operations or roadside stands, and retail outlets. Vendors provided the revenue data for the various marketing channels in the second interview.

To estimate the value of domestic use of the product, statistics were gathered from the 1981 *Handbook of Agricultural Charts* [USDA, 1981]. Out of total food expenditures (including both food prepared at home and food eaten outside the home) the following percentages of per capita expenditures of food prepared at home were:

<u>Item</u>	<u>Percentages</u>
Cereals and baked goods	8.6
Meat, poultry, fish, and eggs	23.7
Dairy products	9.3
Fruits and vegetables	9.6

These selected items listed above represented food categories prepared at home. For example, 8.6 percent of the total food budget was spent on cereals and baked goods consumed at home by the average household for 1981.

In the 1981 *Handbook of Agricultural Charts* [USDA, 1981] were

estimates of the average food budget in dollars for different categories of households. A household which consisted of a couple 55 years or older with no dependents spent, on average, \$1,969 on food in 1981. Married couples, ages 20-54 with two children, ages 6-11 spent an annual average of \$3,744 on food. Most major categories of households had average food budgets listed in the USDA handbook.

Estimates were made of decreases in the food budget which were due to the consumption of goods by the household. These estimates were based on the personal interviews with the suppliers. Estimates varied according to amount of goods consumed in the household. For example, if a hobby gardener grew enough vegetables to supply the household with fresh fruit and vegetables for one-fourth of the year and frozen or canned fruit and vegetables for another quarter of the year, the garden's output would then reduce the household's food budget by half of 9.6 percent or 4.8 percent.

A further example might clarify the manner in which the value of the personal consumption of goods produced by the suppliers (Column 2 in Table 7) was calculated. Vendor number one had a wife and no other dependents in the household. Both were over 55 years old. Households in this category spend \$1,969 per year on food. They grew enough fruits and vegetables to satisfy one-half of their needs year round.^{1/} The value of the personal consumption for their garden was calculated as $(1969)(.096)(.5) = \$94.50$.

^{1/} It was estimated that this garden produced enough output to satisfy one-half of their year round needs for fruits and vegetables. Other estimates for decreases in food budgets were not always the same percentage (50 percent).

Included in the total cost of production were land, wages, machinery, buildings, materials (i.e., fertilizer, seed, water and other variable inputs), and property taxes on investments used in the production of the goods. Marketing costs at the farmers market were included in total costs. For other marketing outlets (wholesale, retail) only a truck and fuel were utilized. Both the truck and some of the fuel were included in production costs. Some fuel and packaging were typically not included as costs in the cost-return analysis because of inadequate vendor records. In most cases these costs were insignificant.

The contribution of the fixed costs (investments) to total cost was calculated by multiplying the market value of the fixed cost times the opportunity cost of 15 percent.

The labor of the suppliers was not included as a part of the total cost of production. Instead, the calculated monetary returns represented a payment to operator labor and management. There are several reasons for using this form of calculation. As self-employed people, none of the suppliers paid themselves a wage or salary. To be included as a cost, a wage would have to be determined for them under complicated circumstances and assumptions. The questionnaire respondents had various levels of education ranging from eighth grade to graduate school. They had various skills. Some farmers had skills in trucking, sheet metal, construction, and tool and die making. These professions had variable wage rates and in most cases had high levels of unemployment during the study period.

Results of Production Analysis With
Investment Evaluated at Ten Percent

The second analysis on production incorporated the same cost and benefit items as the first analysis except that a ten percent opportunity cost on investment was used. The results were the same at this reduced opportunity cost. Six suppliers lost money and three had positive returns to operator labor and management (Table 8).

While this five percent reduction of opportunity cost for investment did not change losses into positive returns for any of the suppliers, it did significantly lower the total costs for most of the suppliers. For example, vendor number one had almost a \$1,300 reduction in total costs. Vendors number five and six had over \$2,500 reduced from costs which represented a 13 percent and 28 percent reduction in total cost for each respectively. The total cost for vendors eight through ten were also reduced greatly.

Land and capital (buildings, machines) were the two major investment categories. Vendor number six had 15 acres with a market value of \$56,250 and \$2,275 additional capital investment in categories such as irrigation systems and equipment investment. A five percent reduction in opportunity costs (from 15 percent in the first analysis to ten percent in the second analysis) for that vendor equaled a \$2,926 reduction in total cost.

The 15 percent opportunity cost of investment used in the first analysis reflected the option available to the suppliers. They could liquidate their investments and purchase money market funds which yielded approximately 15 percent at the time of the analysis. A ten percent opportunity cost served two purposes. First, the results

Table 8. Cost- return Analysis on Production Decision With a Ten Percent Opportunity Cost of Investment, 1981.

(1) Vendor Number	(2) Value of Personal Consumption of Product	(3) Total Revenue	(4) Total Cost	(5) ^{a/} Return to Operator Management and Labor
1	94.50	2,379.95	3,377.00	(902.55)
2	180.46	200.00	492.00	(111.54)
3	94.50	410.00	523.00	(18.50)
4	860.00	80.00	163.00	777.00
5	145.37	6,629.00	17,641.00	(10,866.63)
6	643.80	1,667.00	7,498.00	(5,187.20)
8	142.00	12,900.00	6,907.00	6,135.00
9	357.58	6,000.00	3,390.50	2,967.08
10	1,006.14	2,600.00	5,934.00	(2,327.86)

^{a/} Column 5 is calculated by adding columns 2 and 3 and subtracting column 4.

of both analyses could be compared to analyze the sensitivity of the change in total cost to changes in the opportunity cost of investment. Second, with falling interest rates, the ten percent opportunity cost of investment might be a more realistic rate today and in the longer run.

Cost-Return Analyses on Market Participation

The first analysis in this section excluded vendor labor costs, while the second included vendor labor costs. Vendor labor cost was the time the vendor utilized in order to market his goods at the farmers market.

Most of the vendors did not consider their time as a marketing cost. Thus, in order to accurately examine their marketing decisions, one cost-return analysis deleted vendor labor costs. The purpose of the second cost-return analysis was to examine how the returns to vendor management were affected when the true cost of vendor labor was included in the cost-return analysis.

Production costs were not included in the total marketing costs. About two-thirds of the suppliers sold surplus production. This surplus production either could not be sold through the alternative marketing channels or could not be consumed by the household. These suppliers considered the cost of production for these goods as sunk costs. For example, one vendor grew vegetables and sold them to local grocers and wholesalers. What production he could not sell through these channels or consume himself would rot if not sold at the farmers market. Production costs were no longer relevant in his market decision making because if the products went unsold, they

had no value. Marketing costs and not production costs entered his decision making process.

Results of Marketing Analysis

Excluding Vendor Labor Costs

In the first analysis, with labor costs excluded, ten out of ten suppliers earned a monetary return since marketing revenues exceeded marketing costs (Table 9). Marketing costs included transportation, permits, licenses, scales, signs, etc. For the most part, this analysis compared cash receipts at the market (revenues) with cash outlays for gas, bags, vendor fees, etc. The only major non-cash outlay included was depreciation on the transportation vehicle.

Vendors seven, eight, and nine earned substantial monetary returns of \$2,114, \$4,338, and \$3,676, respectively, at the farmers market (Table 9). As each had less than \$15,000 household income in 1980, the net monetary returns earned at the market was critical in meeting their cash income needs. Only two vendors (numbers two and four) earned less than \$100 at the farmers market for the season. However each of these vendors supplied at the market only two or three times during the time period of the study. If they had supplied on a regular basis, as vendors seven, eight, and nine did, they probably would have earned a larger sum of money.

Table 9. Cost-return Analysis of Farmers Market Participation With Vendor Labor Cost Excluded, 1981.

(1) Vendor Number	(2) Marketing Revenue	(3) Marketing Costs	(4) ^{a/} Returns to Vendor Labor and Market Management
1	425.00	59.00	366.00
2	200.00	146.00	54.00
3	410.00	73.00	337.00
4	80.00	16.00	64.00
5	864.00	159.00	705.00
6	300.00	137.00	163.00
7	3,000.00	886.00	2,114.00
8	4,540.00	202.00	4,338.00
9	4,000.00	324.00	3,676.00
10	450.00	87.00	363.00

^{a/} Column 4 is determined by subtracting column 3 from column 2.

Results of Marketing Analysis
Including Vendor Labor Costs

The second cost-return analysis on farmers market participation included vendor labor cost in the total marketing costs (Table 10). One vendor occasionally hired personnel for sales. The wages were included in the marketing costs. The cost of vendor labor was calculated by multiplying the number of labor hours allocated for both preparation and selling by the minimum wage (\$3.50 per hour). While the time of some of the vendors was undervalued at this wage rate, the minimum wage was chosen so that no vendor's time would be overvalued.

With labor costs included, only six suppliers were earning monetary returns to vendor management. Four suppliers incurred losses. In other words, once labor costs were included, the positive return level drops from 100 percent of the vendors to 60 percent. This may help to explain why most of the vendors produce and sell their own product as opposed to hiring someone to sell the product for them at the market. If a more accurate wage rate could have been used (one that reflects their opportunity cost of labor on the open market), the profitability of their farmers market activity would likely fall.

About 75 percent of the people who lost money at the market (with vendor labor costs included) were in high income brackets (\$35,000+). They seemed to sell at the market to enjoy the festive atmosphere and not to earn income.

Table 10. Cost-return Analysis of Farmers Market Participation With Vendor Labor Costs Valued at \$3.50/Hour, 1981.

(1) Vendor Number	(2) Labor Cost	(3) Marketing Cost	(4) Marketing Revenue	(5) ^{a/} Returns to Vendor Market Management
1	85.00	59.00	425.00	281.00
2	154.00	146.00	200.00	(100.00)
3	500.50	73.00	410.00	(163.50)
4	63.00	16.00	80.00	1.00
5	134.75	159.00	864.00	570.25
6	175.00	137.00	300.00	(12.00)
7	<u>b/</u>	886.00	3,000.00	2,114.00
8	743.75	202.00	4,540.00	3,594.25
9	5,250.00	324.00	4,000.00	(1,574.00)
10	183.75	87.00	450.00	179.25

^{a/} Profit is column 4 less 2 and 3.

^{b/} The owner of the business hired people to sell at the market. Vendor labor costs are included in marketing costs.

Only 33 percent of the vendors had sizeable vendor labor costs of \$500 or more.^{2/} Eighty-nine percent of the vendors had labor costs which were higher than the other market costs combined. In several cases, vendor labor costs were approximately 200 percent to 1,500 percent greater than marketing costs. This reflects not only the importance of labor in the direct marketing aspect of farmers markets but also that the overhead and variable costs (excluding vendor labor costs) were quite low.

Objectives Accomplished?

The results of the four cost-return analyses were presented in this chapter. Were the objectives of the research accomplished? Specifically, was the second objective met to explain the behavior of the suppliers in both producing and marketing their goods?

For the suppliers, earning a monetary return appeared to be a valid explanatory variable of behavior in only one of the four cost-return analyses. One hundred percent of the vendors earned monetary returns at the farmers market when vendor labor and production costs were excluded. Earning monetary returns was not a motivator in both of the analyses on production behavior. Two-thirds of the suppliers lost money, in production, when investment was valued at an opportunity cost of 15 percent and ten percent. When

^{2/} These costs, of course, were not cash expenses but rather vendor marketing labor valued at \$3.50 per hour.

vendor labor costs were included in farmers market related marketing costs, 40% of the vendors lost money.

This suggests that there are other motivating factors that the analyses did not include. One factor might be the satisfaction or pleasure (analogous to utility) obtained while producing and marketing these goods. Forty percent of the suppliers analyzed were hobby gardeners. It might be argued that they were interested in the satisfaction they experienced while producing and marketing their goods. The same argument could be made for some of the part and full-time suppliers as well. Thus, the farmers market activity could have been analyzed as a consumptive activity instead of a productive activity. Another factor could have been that these suppliers were holding onto their land as an investment anticipating that it would appreciate in value. Consequently, they would forego negative returns in the short run for large capital gains in the long run. Additional motivators which the humanists have proposed (presented in Chapter II) are the topics of the following chapter.

CHAPTER V

PRAGMATIC HUMANISTIC ANALYSIS

The Approach

In this chapter, the suppliers' motivations will be analyzed in a pragmatic humanistic framework incorporating ERG theory. Several general and specific hypotheses were developed from both the data collected in the second interviews and the results of the cost-return analyses in Chapter IV. General hypotheses were formulated to explain the common economic behavior of all the suppliers. Specific hypotheses were formulated to explain the economic behavior of selected groups of suppliers (i.e., hobby, part- and full-time suppliers) in the production and marketing of their goods.

Results of the Pragmatic Humanistic AnalysisHypothesis 1

Hobby farmers participate in the farmers market to satisfy relatedness and growth needs.

Household income data and the results of the cost-return analyses (presented in Chapter IV) provided the main basis for Hypothesis 1. Four hobby vendors were analyzed. Two of these vendors lost money when vendor labor costs were included (Table 11). Of the two people who made money, one earned \$280 at the farmers market with a 1980 gross household income between \$25,000-\$34,000. The other earned \$1.00 at the farmers market out of a 1981 gross income between

Table 11. Supplier Income and Net Monetary Returns From Farmers Market Activity, 1981.

(1) Vendor Number	Returns From Farmers Market		(4) Household Income for 1981	(5) Contribution of Returns to House- hold Income ^{a/}
	(2) Including Vendor Labor	(3) Excluding Vendor Labor		
1	280.00	366.00	25,000-34,999	1.5%
2	(100.00)	54.00	35,000-49,999	0.2%
3	(163.50)	337.00	35,000-49,999	1.0%
4	1.00	64.00	5,000-9,000	1.2%

^{a/} Column 5 is calculated by dividing column 3 by column 4. The lower limit of income was used to make a conservative estimate of the contribution.

\$5,000-\$10,000 (this was the vendor's share of the households income. The income of the vendor's spouse, estimated to be \$20,000. was not included).

All four hobby gardeners earned money when the cost of both vendor time and production were not included in the cost-return analysis (Table 11). However, when these returns were placed in proportion to the household income, one can conclude that these returns were insignificant (Column 5, Table 11). These hobby vendors earned, on average, one percent of their household income at the farmers market. If production costs were incorporated into the cost-return analysis, these hobby suppliers probably would have earned much less than one percent of their household income at the market, if any.

The data on household income and returns from the farmers market (Table 11) suggested elimination of existence need satisfaction as a motivator of the hobby vendors for supplying at the farmers market. They all had adequate income to purchase the goods and services necessary to satisfy their existence needs. Any additional income would probably have been spent on goods and services for other needs. Since their income earned at the farmers market was insignificant in relation to their household income, these hobby suppliers were likely motivated by relatedness and growth needs.

When the hobby suppliers were asked why they sold at the market, the vendors in essence indicated they wanted to satisfy some of their relatedness needs (Table 12). The process of selling directly to the customer along side other farmers (bakers, craftsmen) created an environment which enabled the vendors to satisfy the desire to interact with members of the community. Vendor number one enjoyed selling

Table 12. Selected Questionnaire Responses Related to Hypothesis 1, 1981.

Vendor Number	Reason for Selling at the Farmers Market	Criteria for Success	Important Factors Influencing Entry Into the Market in 1981	Important Factors Affecting Market Participation in 1982
1	Sell Direct to the Customer	Volume	Best Marketing Opportunity	1. Profit 2. Best Marketing Opportunity
2	Fun	Gross Receipts	1. Best Marketing Opportunity 2. Social Festivity	1. Enjoyable 2. Best Marketing Opportunity
3	1. Fun 2. Supplemental Income	Profit	1. Surplus 2. Marketing Outlet 3. Community Spirit	1. Profit 2. Marketing Outlet 3. Enjoyable
4	Visit with People	Enjoying the people	1. Surplus 2. Social Festivity	1. Like the Idea of the Market 2. Shop in Town

directly to the customer. Vendors two and three sold at the market to have fun while vendor number four liked to visit with people at the market.

Three of the hobby vendors were housewives whose children had moved away. They needed other activities to develop self-esteem and self-actualization (both of which were growth needs). To help themselves satisfy these growth needs, the hobby gardeners utilized their agricultural and horticultural talents through their hobby gardens. The hobby gardens, in turn, offered them the opportunity to develop new talents of private entrepreneurship and salesmanship (growth need satisfaction). To satisfy such needs they had to be successful. They had to sell their products and make a "profit." Their conception of profit was often not the standard economic definition of profit. In their mind, profit was cash receipts less cash outlays for marketing activities only.

Three quarters of the hobby vendors indicated that sales related values were the criteria of success at the market. These hobby vendors felt that they would be failures at private enterprise (salesmanship) if they did not sell their goods. They indicated that they entered and participated in the market because it was the best marketing outlet. The data analysis indicated that the hobby vendors did want to be successful business people. This implied they were motivated by growth need satisfaction at the farmers market.

The question that must be asked is which need, relatedness or growth, was the primary motivator at the farmers market? While the data was inconclusive, vendor interviews at the market and in their homes indicated that relatedness needs were the primary motivators.

These vendors were more interested in experiencing the social festivity and selling directly to the consumer along side other farmers than they were in earning a return to their marketing effort.

Hypothesis 2

Part-time vendors supply at the farmers market for monetary returns and thus to purchase goods and services to satisfy existence needs.

There were three part-time vendors in the study group. Two of the three vendors earned between \$10,000-\$15,000 in 1980 (Table 13). At this income level, those suppliers had greater uncertainty as to securing the provision of adequate resources to satisfy existence needs than those suppliers in higher income brackets. Earning a monetary return at the farmers market was important for the two part-time suppliers earning less than \$15,000. Activity, by necessity, was a motivating factor for their market participation.

The contribution of monetary returns to household income was critical for only one of the three part-time suppliers. Vendor number nine earned 36.8 percent of his household income at the farmers market (Table 13). The other two suppliers, numbers five and ten, earned less than four percent of their household income at the farmers market.

The second interview for vendor number ten gave the general indication that the money earned at the farmers market would help purchase goods and services for existence need satisfaction (inspite of the fact that only 3.6 percent of the vendors' household income

Table 13. Supplier Income Data and Net Monetary Returns From Farmers Market Activity, 1981.

(1) Vendor Number	Returns From Farmers Markets		(4) Household Income for 1980	(5) Percent of Total Income Due to Farming	(6) Contribution of Returns to Household Income ^{a/}
	(2) Including Vendor Labor	(3) Excluding Vendor Labor			
5	570.25	705.00	Over 50,000	15%	1.4%
9	(1,574.00)	3,676.00	10,000-15,000	50%	36.8%
10	179.25	363.00	10,000-15,000	25%	3.6%

^{a/} Column 6 is calculated by dividing Column 3 by Column 4. The lower limit of income was used to make a conservative estimate of the contribution.

was earned at the farmers market).

All three part-time suppliers indicated that earning a monetary return was important in each of the selected responses (Table 14). Vendors five and nine stated that making money for supplemental income was one of their reasons for selling at the farmers market. Vendor number ten sold at the market because it was a good outlet for his produce. These responses were directly related to earning monetary returns.

Additional data for Hypothesis 2 came from the "criteria for success" response (Table 14). Two of the three part-time vendors judged success by the amount of profit or monetary returns they earned at the market. The third vendor indicated that he had a successful day by the volume of goods he sold for the day. While volume was not synonymous with earning a monetary return, further questioning indicated it was highly correlated.

All three vendors indicated that the factors which influenced participation and entry into the market were related to monetary returns. Vendors five and nine responded that "profit" was a factor for participation in 1982. Vendors nine and ten indicated that an influencing factor for both entry and participation was that the farmers market was their last marketing opportunity.

Both the income data (Table 13) and the response data (Table 14) were used to formulate Hypothesis 2. The part-time suppliers were motivated to earn monetary returns at the farmers market. The underlying psychological motivators for pursuing monetary returns were existence and growth needs. Two vendors, nine and ten earned less than the 15,000 in 1980. They needed the monetary returns to purchase

Table 14. Selected Questionnaire Responses Relating to Hypothesis 2, 1981.

Vendor Number	Reason for Selling at the Farmers Market	Criteria for Success	Important Factors Influencing Entry Into the Market in 1981	Important Factors Affecting Market Participation in 1982
5	1. Make money 2. Advertising for U-Pick	Profit	1. Advertising 2. Community Spirit	1. Advertising 2. Profit
9	1. Good Outlet for Product 2. Fellowship 3. Supplemental Income	Volume	Best Marketing Opportunity	1. Profit 2. Best Market Opportunity 3. Enjoyable
10	1. Good Outlet for Produce 2. Fun to be Around People	Profit	1. Best Marketing Opportunity. 2. Surplus	1. Like the Idea of a Market 2. Best Market Opportunity

goods and services for food, housing, medical, and other basic necessities to satisfy existence needs. Vendor number five earned over \$50,000 in 1980. Earning a monetary return helped to satisfy his growth need for self-esteem and promote his other agricultural marketing activity (U-Pick).

Hypothesis 3

Suppliers, who have not secured adequate resources for existence need satisfaction (income of less than \$15,000), will be motivated by earning monetary returns at the farmers market.

Four suppliers earned less than \$15,000 for 1980. With an annual income of less than \$15,000 the vendors were not assured that basic existence needs would be met in the future. Based on ERG theory, these vendors would be motivated in their economic activity to earn a monetary return which could be used to purchase goods and services to satisfy existence needs.

The returns earned by these low income suppliers were large enough to purchase a substantial amount of the goods and services required to satisfy existence needs. Vendors seven, eight, and nine earned \$2,114, \$4,338, and \$3,676, respectively, when vendor labor costs were excluded (Table 15). These figures constituted a significant percentage of total income. For instance, vendors eight and nine earned 28.9 percent and 24.5 percent, respectively, at the market, approximately one-fourth of total income. These percentages were calculated differently than the percentage for Hypothesis 1 and 2. The upper limit of the estimate income was used to calculate a

Table 15. Supplier Income Data and Net Monetary Returns From Farmers Market Activity for Hypothesis 3, 1981.

(1) Vendor Number	Returns From Farmers Market		(4) Household Income for 1981	(5) Contribution of Returns to House- hold Income ^{a/}
	(2) Including Vendor Labor	(3) Excluding Vendor Labor		
7	2,114.00	2,114.00	10,000-14,999	14.1%
8	3,594.25	4,338.00	10,000-14,999	28.9%
9	(1,574.00)	3,676.00	10,000-14,999	24.5%
10	179.25	363.00	10,000-14,999	2.4%

^{a/} Column 5 was calculated by dividing Column 3 by Column 4. The upper limit, 14,999 was used as the denominator. This limit was used to ensure the percentage of contribution was not larger than the true percentage.

conservative percentage of the contribution of returns from the farmers market to household income.

Vendor number ten earned only 2.4 percent of the household income at the farmers market. While this is a small percentage, the second interview indicated that the monetary returns would be used to purchase the "normal" basic necessities (existence needs). Vendor number ten did not mention that the money was to be used to purchase luxury goods or for a vacation, etc.

When these low income suppliers were asked why they sold at the market, two responded that it was a good market outlet and the other two responded that they supplied for the extra income (Column 2, Table 16). These reasons imply that they sold at the market to earn a monetary return. This was further supported by their criteria for success which were: gross receipts, volume, and profit. These criteria were crucial to earning a monetary return.

The important factors influencing participation and entry into the market were consistent with the above responses for the criteria of success and reasons for selling at the market. All four low income suppliers indicated that "profit" and "best marketing outlet" were important factors. Again, these factors were necessary to earn a monetary return.

While earning a monetary return for existence need satisfaction was a primary motivator for these low income suppliers, they were also partially motivated to satisfy some relatedness needs. Vendor number seven considered the interaction among consumers and fellow producers to be recreational. Vendors eight and ten had "fun" selling directly to the customer along side of other vendors. Vendor

Table 16. Selected Questionnaire Responses Relating to Hypothesis 3, 1981.

Vendor Number	Reason for Selling at the Farmers Market	Criteria for Success	Important Factors Influencing Entry Into the Market in 1981	Important Factors Affecting Market Participation in 1982
7	1. Extra Income 2. Recreation	Gross Receipts	1. Community Spirit 2. Advertising	1. Like the Idea of the Market 2. Profit
8	1. Income 2. Fun	1. Gross Receipts 2. Volume	1. Develop Marketing Talents 2. Best Marketing Outlet	1. Profit 2. Enjoyable 3. Best Marketing Opportunity
9	1. Good Marketing Outlet 2. Fellowship 3. Supplemental Income	Volume	Best Marketing Opportunity	1. Profit 2. Best Marketing Opportunity 3. Enjoyable
10	1. Good Outlet 2. Fun	Profit	Best Marketing Opportunity	1. Like the Idea of the Market 2. Best Marketing Opportunity

number nine sold at the market not only because it was a good marketing outlet, but also because he enjoyed the fellowship among other vendors. Thus, the satisfaction of relatedness needs was a secondary motivation for selling at the farmers market for the low income suppliers.

Hypothesis 4

People with adequate resources (\$25,000+) to satisfy existence needs will be motivated to participate in the farmers market by relatedness and growth desires.

Five suppliers were in the high income brackets (Table 17). Three vendors earned more than \$35,000 in 1980, while one vendor earned over \$50,000. Being in high income brackets, they were assured of adequate provisions of goods and services for the satisfaction of existence needs. ERG theory suggests that their economic activity was motivated by higher needs of relatedness and growth.

In addition to income data, marketing data was utilized to formulate Hypothesis 4. Sixty percent of high income suppliers lost money at the market when their labor cost was included in the cost-benefit analysis as described in Chapter IV. If vendor labor costs were excluded from the cost-benefit analysis, the returns nevertheless contributed an insignificant percentage to the vendor's household income (Column 6, Table 17). Thus, the satisfaction of existence needs could not have been dependent upon the returns from the farmers market activity.

Since existence needs did not motivate these high income vendors,

Table 17. Supplier Income Data and Net Monetary Returns From Farmers Market Activity for Hypothesis 4, 1981.

(1) Vendor Number	Returns From Farmers Markets		(4) Household Income for 1980	(5)	(6)
	(2) Including Vendor Labor	(3) Excluding Vendor Labor		Percent of Total Income Due to Farming	Contribution of Returns to Household Income ^{a/}
1	280.00	366.00	25,000-34,999	"close to 0 percent"	1.5%
2	(100.00)	54.00	35,000-49,999	"close to 0 percent"	0.2%
3	(163.50)	337.00	35,000-49,999	10%	0.1%
5	570.25	705.00	50,000+	15%	1.4%
6	(12.00)	162.50	35,000-49,999	100%	0.5%

^{a/} Column 6 was calculated by dividing Column 3 by Column 4. The lower income limit was used so that the percentage would be larger.

what needs did motivate them? Analysis of the data indicates that both relatedness and growth needs were motivating them. The question then became which need was the strong motivator. Suppliers' responses to the questions (Table 18) such as "fun," "experiencing the social festivity," and "selling directly to the customer" suggested that they were indicating motivation from relatedness needs. The responses of "profit," "best marketing opportunity," and "advertising" may have indicated that the suppliers were motivated by growth needs. They were interested in a successful business activity. A successful business activity for suppliers in high income brackets gives self-esteem to the supplier. Eighteen responses indicated that growth needs were motivating them. Three responses could not be identified with any one need category as a motivator. For instance, the response "supplemental income" could indicate that existence, relatedness, or growth needs were a motivating factor since income can be used for all three. The responses of "making money" and "surplus" also could not be identified with any one need category.

The high income suppliers might have been motivated by growth needs at the market more so than by relatedness needs. Ten responses indicated that the high income suppliers were motivated by relatedness needs at the market. Eighteen responses indicated that growth needs were motivating the suppliers. While three responses were ambiguous.

The mere number of responses did not conclusively establish that growth needs were the primary motivators for high income suppliers. Some responses were ranked over other responses. For instance, vendor number three indicated that "having fun" was a more

Table 18. Selected Questionnaire Responses Relating to Hypothesis 4, 1981.

Vendor Number	Reason for Selling at the Farmers Market	Criteria for Success	Important Factors Influencing Entry Into the Market in 1981	Important Factors Affecting Market Participation in 1982
1	Like to Sell Direct the Customer	Volume	Best Marketing Opportunity	1. Profit 2. Best Marketing Opportunity
2	Fun	Gross Receipts	1. Best Marketing Opportunity 2. Experiencing the Social Festivity	1. Profit 2. Enjoyable
3	1. Fun 2. Supplemental Income	1. Fun 2. Profit	1. Surplus 2. Best Marketing Opportunity	1. Profit 2. Best Marketing Opportunity
5	1. Make Money 2. Advertising	Profit	1. Advertising 2. Community Spirit	1. Contacts for Real Estate 2. Profit
6	Fun	Volume	Experience the Social Festivity	1. Best Marketing Opportunity 2. Enjoyable

important criterion for success at the market than profit. More research is needed to determine whether relatedness or growth needs are primary motivators.

Hypothesis 5

People will accept less income (resources to satisfy existence needs) for a job which enables relatedness and growth needs to be satisfied.

The results of the cost-return analyses in the previous chapter (Tables 7 and 8) were a starting point in formulating this hypothesis. With assets valued at an opportunity cost of both 15 percent and ten percent per year, six of the nine suppliers analyzed were foregoing greater monetary returns. If these six suppliers had liquidated their investment and purchased money market funds they would have earned a greater return on their investment.

The suppliers were cognizant that they could be earning greater monetary returns, yet they were willing to accept a lower return on their labor and investment. ERG theory provided some insight for the apparent willingness on the part of suppliers to accept lower returns. Jobs or occupations which offer a high degree of independence and responsibility enable the worker to satisfy some growth needs and desires. Clayton Alderfer, the developer of ERG theory, found in his research that some workers would accept a lower wage and fewer fringe benefits for a job which offers more independence and responsibility [Alderfer, 1972]. The suppliers, being sole proprietors of their business, had a high degree of independence

and responsibility and therefore could satisfy some growth needs.

Thus, they were willing to accept lower returns on their labor and for their investment. Furthermore, Alderfer discovered that relatedness need satisfaction was important to the worker in terms of duration of employment, morale, productivity, and pay satisfaction. If the worker could satisfy his relatedness needs with significant others^{1/} on the job, he would not require as high a wage or salary as he would require if his relatedness needs on the job were not being satisfied.

The reasons the vendors gave for initially producing their product were consistent with Alderfer's findings. Of the seven vendors who indicated that they initially produced their product for income, only one vendor said that income was the primary reason (Table 19). Four vendors indicated that income was a secondary motivation while two said that income was third in importance. Five vendors indicated that producing the product was "something they always wanted to do," with three vendors stating this was a primary reason. These vendors were satisfying growth needs through activities which enabled them to use and develop talents. Five vendors indicated that they initially produced the product as a hobby or for recreation (four of the vendors were still hobby gardeners). Hobbies provided growth need satisfaction for them.

^{1/} "Significant others" is a term Alderfer uses to describe the people through which a person satisfies his relatedness needs. The significant others for a worker would be his boss (superior), co-workers (peers) and any people he supervises (inferiors).

Table 19. Reasons the Vendors Indicated For Initially Producing Their Product, 1981.

Reason	Number of Vendors Indicating That the Reason Was:		
	First in Importance	Second in Importance	Third in Importance
Income	1	4	2
Hobby or Recreation	1	1	3
Could Not Get Into Another Occupation	0	0	0
Something They ALWAYS WANTED To Do	3	1	1
Food	1	0	1
Tradition	1	0	0
Change of Occupation	0	1	0
Healthy Lifestyle	1	0	0
Good Location for a Family	1	0	0

Overview of Objectives

Five hypotheses were formulated to explain the production and marketing activities of the suppliers. According to these hypotheses the suppliers, in producing their goods, satisfied existence, relatedness, and growth needs and desires. The extent to which each need category contributed to economic behavioral motivation in the occupation depended upon the suppliers' financial background and the degree of responsibility and independence involved in producing the good.

The behavioral motivation for participating in the farmers market also depended on both the financial background and the commitment of the supplier to the production of the good (i.e., full-time, part-time, or hobby). For both production and market behavior, those in high income brackets (over \$25,000) were motivated primarily by relatedness or growth needs and desires. Those in low income brackets (less than \$15,000), however, were motivated primarily to satisfy existence needs.

Hypotheses 1 and 2 offered explanations for market participation decision by hobby and part-time suppliers. Hobby gardeners sold at the farmers market to satisfy higher needs of relatedness and growth. Part-time suppliers sold at the market to earn supplemental income to satisfy existence needs. With the current statewide recession resulting from depressed lumber prices, more people might supply at the farmers market for supplemental income. Consequently, the supply side of the market may be strengthened from the participation of part-time suppliers (making the outlook for farmers markets in Oregon better).

Income was discovered to be an important factor. Suppliers earning less than \$15,000 were motivated by existence needs (Hypothesis 3). While suppliers earning more than \$25,000 were motivated by relatedness and growth needs at the farmers market (Hypothesis 4).

Hypothesis number 5 was formulated to explain why people forego higher monetary returns in their production and marketing activities. By foregoing higher returns, these suppliers were able to satisfy higher needs of relatedness and growth.

The future of the farmers markets in Oregon depends on the market's ability to satisfy both the needs of the suppliers and the consumers. Eight of the ten suppliers indicated that they were planning to participate the following year. Two were uncertain. Since the majority of the vendors were returning, it seems that their needs were being satisfied. Relatedness needs were the main motivator for selling at the market, while existence and growth needs were secondary motivators.

These hypotheses postulated that one or two needs were motivating the suppliers in specific production and marketing activities. It must be noted that many economic activities satisfy all three levels of needs. The interviews with the suppliers suggest that some of them were satisfying a portion of their existence, relatedness, and growth needs at the farmers market. The hypotheses only indicated which need(s) were the dominant motivator(s).

At times the data were ambiguous. Interview responses which indicated that earning a monetary return was a motivator such as "profit", "income", and "best marketing opportunity" were interpreted differently in the formation of the hypotheses. For low income

suppliers, these responses were interpreted as an indication that existence needs were a motivating factor. At the higher end of the income spectrum, these responses denoted a motivation for growth need satisfaction. This income distinction for interpreting responses was subjectively based on ERG theory and could possibly be inaccurate and unwarranted.

CHAPTER VI

CONCLUSION

Overview of the Research

The cost-return analyses and pragmatic humanistic analysis were used to accomplish several objectives which were: (1) to determine the costs and revenues of the suppliers at the farmers markets, (2) explain the behavior of the suppliers in occupational and market participation decisions, and (3) predict the behavior of the suppliers and predict the future of farmers markets in Oregon.

In the first approach, two cost-return analyses were conducted on the production decisions. The first analysis incorporated an opportunity cost of assets at 15 percent and the second used a ten percent opportunity cost of assets. The results are summarized in Table 20. In addition, two cost-return analyses were conducted on the suppliers' market participation decisions. The first did not include vendor labor costs, while the second analysis did include such costs. The results of these two analyses are also summarized in Table 20.

In both analyses on production, 67 percent of the suppliers lost money whether investment was valued at an opportunity cost of 15 percent or ten percent (Table 20). High land prices, low agri-

Table 20. Results of the Cost-return Analyses of Production and Market Decisions of Suppliers at Farmers Markets, 1981.

Cost-return Analysis On:	Number of Vendors Earning a Positive Return	Number of Vendors Losing Money
<u>Production</u>		
Investment opportunity cost of 15 percent	3	6
Investment opportunity cost of 10 percent	3	6
<u>Marketing</u>		
Vendor labor cost excluded	10	0
Vendor labor cost included	6	4

cultural prices, and small inefficient production processes contributed to the loss of money by so many suppliers.

All of the vendors earned monetary returns at the farmers market when their labor was valued at zero opportunity cost (Table 20). Only 60 percent of the vendors earned monetary returns at the market when their labor was valued at \$3.50 per hour, i.e., minimum wage. Hence, 40 percent were losing money when their time was valued at the minimum wage rate. However, most of the vendors did not consider their time as a cost. For the most part, when cash receipts exceeded cash expenses, vendors felt they earned a "profit." The cost-return analysis excluding vendor labor costs showed positive monetary returns.

With the guidance of ERG theory, five hypotheses were developed from the data gathered in the second interviews. These hypotheses were:

Hypothesis 1

Hobby farmers participate in the farmers market to satisfy relatedness and growth needs.

Hypothesis 2

Part-time vendors supply at the farmers market for monetary returns in order to purchase goods and services to satisfy existence needs.

Hypothesis 3

Suppliers who have not secured adequate resources for satisfac-

tion of existence needs (income of less than \$15,000) will be motivated by monetary returns at the farmers market.

Hypothesis 4

People with adequate resources (over \$25,000) to satisfy existence needs will be motivated to participate in the farmers market by relatedness and growth desires.

Hypothesis 5

People will accept less income and fewer fringe benefits for a job which enables relatedness and growth needs to be satisfied.

Hypothesis 1 was proposed because the hobby vendors in this study were motivated in supplying at the market not to earn money to purchase resources in order to satisfy existence needs. Rather, they satisfied the higher needs of relatedness and growth. At the market, these hobby vendors enjoyed either the social interaction (relatedness need satisfaction) or the excitement of venturing into private entrepreneurship for the first time (growth need satisfaction).

Hypothesis 5 proposes why some of the suppliers were not earning monetary returns in their production and marketing activities. These people were satisfying higher needs of relatedness and growth through these activities. Thus, they were willing to accept lower returns on their productive resources (including labor).

While the part-time suppliers seemed to enjoy the festivity of the market, Hypothesis 2 proposes that they were motivated by mone-

tary returns at the market more so than the hobby or full-time suppliers. Part-time suppliers produced and marketed for supplemental income. The earning of supplemental income was a secondary motivator for hobby and full-time suppliers.

There were several people in the study group who earned less than \$15,000 in 1980. These vendors were not assured they would have adequate resources to satisfy their existence needs. Thus, it was important for the low income supplier to earn money at the market so they could purchase goods and services necessary to satisfy their existence needs (hypothesis 2).

On the other end of the income spectrum were vendors who earned \$25,000 or more in 1980. These people did not have to worry that the basic necessities of life could be secured. Hypothesis 4 proposes that these people were more interested in satisfying the higher needs of relatedness and growth in the marketing of their goods.

Comparison of the Conventional and Pragmatic Humanistic Approaches

The basic economic activity that the conventional and pragmatic humanistic approaches were analyzing was the suppliers' motivation in both producing and marketing their goods. These suppliers had scarce resources of land, labor, and capital, plus their own entrepreneurship. They had to make decisions as to how these resources would be allocated and utilized among the various productive and marketing alternatives.

The cost-return analyses, were based on the assumption that the suppliers allocated their scarce resources to earn monetary re-

turns in a time period of one year. For the production aspect the suppliers had two alternatives (although there are a multitude of alternatives in reality). One alternative was their current productive activity (i.e., farming). The second alternative was to liquidate their assets and to invest in money market funds and/or certificates of deposit (this implied that the second alternative was the most profitable of all other alternatives). Cost-return analyses were conducted on their current allocational decisions in the time period for which the data was collected. If returns were greater than costs, then the current allocation of resources yielded a higher monetary return than liquidating their assets and investing in money market securities. So, if they lost money, they could improve their returns by liquidating their assets and invest in money market securities, or they could minimize losses by not selling at the market. In a sense, the cost-return analyses tested the assumption that suppliers allocated their resources to earn monetary returns.

The pragmatic humanistic approach utilized ERG theory to examine and explain the economic behavior of the suppliers in production and marketing activities. The suppliers allocated their scarce resources to satisfy a hierarchy of existence, relatedness, and growth needs. Suppliers first had to ensure that their existence needs were satisfied. Once they had adequate goods and services to satisfy existence needs, they allocated their resources so the higher needs of relatedness and growth could be satisfied.

Pragmatic humanistic economics has a more dynamic approach to the phenomena of supplier's marketing and production activity. In-

stead of looking at the motivation of economic activity as the pursuit of monetary returns, the pragmatic humanistic approach recognizes several motivating factors. Suppliers allocated their resources to satisfy a hierarchy of needs, where each need level required different types of resources. Existence needs required tangible goods like food and shelter. Up to a point, the suppliers were motivated by monetary returns so that income derived could be used to purchase goods to satisfy existence needs. After existence needs were adequately provided for, earning a monetary return was not as strong a motivator. In fact, monetary returns were often sacrificed to satisfy higher needs of relatedness and growth.

Critique of the Conventional Analysis

The cost-return analyses based on neoclassical theory had several conceptual and operational problems. A decision rule was adopted that if returns exceed costs then the suppliers were acting rationally, they were earning a monetary return. The first difficulty in formulating this method was that suppliers were consumers who maximized utility.^{1/} Suppliers had to make decisions in which monetary returns were sacrificed to increase the level of utility and vice versa. Yet if utility maximization were incorporated into the method, the analysis would be rendered infeasible because of the opposing motivations, earning a monetary return and utility. A second conceptual difficulty with the conventional model was the determination of the proper opportunity cost of assets as well as

^{1/} Utility is the satisfaction consumers experience while consuming a good or service.

the suppliers' opportunity cost of time. Considering the state of Oregon's economy, could these farmers get a job off the farm if they sold their assets? Could these farmers get a fair price for their farm, liquidate their assets, and reinvest them? The soundness of the assumptions rest on these questions. Finally, the analysis was constrained by the time framework. Should only one year be used? Do these suppliers allocate their resources on a yearly basis or do they plan five or ten years ahead?

The main criticism of the conventional analysis was the failure to adequately explain the behavior of the suppliers.^{2/} In both analyses on production, six of nine suppliers lost money (Table 20). Thus six suppliers behaved "irrationally" through their production decisions. This result was unacceptable. Hence, the pragmatic humanistic analysis was developed to attempt to explain the behavior of the suppliers.

Critique of Pragmatic Humanistic Economic Analysis

The main problem in the pragmatic humanistic analysis was that data was collected before the structural basis of the analysis was developed for this research. However, adequate data was gathered to formulate the hypotheses. The analysis would have been greatly enhanced had the levels of existence, relatedness, and growth need satisfaction been actually measured. Such an endeavor would still

^{2/} It must be noted that cost-benefit analysis is not synonymous with neoclassical theory. The previously mentioned conceptual and operational problems are not entirely due to inadequacies of neoclassical theory. These problems may be attributed to cost-benefit analysis.

be difficult because of the problems of measuring relatedness and growth needs.

The formulation of the hypotheses was not as objective as it could have been. While personal contact was made with each of the ten suppliers at least twice (and as often as a dozen times) and the questions in each survey were designed to minimize the bias judgments about the various needs and their degree of satisfaction may have been inaccurate.

A general critique of pragmatic humanistic economics might be that the scope of analysis is too broad. The analysis expands into sociological, psychological, even philosophical areas of study that many economists argue is outside the realm of economic analysis.

Further Research

Since the data were collected prior to the design of the humanistic framework developed in this thesis, research based on a broader sample should be undertaken. For instance, the tools developed in Appendix I require that the levels of need satisfaction be measured. Objective and consistent methods to measure need satisfaction should be developed. Once the level of need satisfaction is known, one could determine, economically, how efficiently resources were being allocated to satisfy human needs.

There is a need for future research to establish the validity of the five hypotheses developed in this research. Data that were collected could only be used to propose these hypotheses and not to test them. In addition, the data collected in both interview sets were gathered for only one year. A more accurate data set would be

obtained by surveying the same six markets and interviewing the same ten people for three or four successive years. Both the literature on farmers markets and related research seem to indicate that this data was a fairly accurate representation of the population.

The analytical framework combining humanistic economics and ERG theory should be expanded. One possible expansion is into the area of welfare economics. Currently, the theory of welfare economics does not satisfactorily address both equity and efficiency [VanKooten, 1981]. Pragmatic humanistic economics may be better able to successfully address issues of equity and efficiency. Both rich and poor are weighted equally since resources are not allocated on a "willingness to pay" principle in which resources are allocated to people who are both willing and able to pay. Rather, in humanistic economics, resources are allocated based on human needs (which are equal for both rich and poor). The efficient solution, in humanistic economics, occurs when resources are allocated to achieve the greatest benefits (satisfy the most human needs) at the least cost (in human terms).

ERG theory could also be used as a basis to develop consumer and production theory along the lines of humanistic philosophy and psychology. Once this is accomplished, a theory of markets based on humanistic consumer and production theory could be formulated.

Alternatively, ERG theory could be used to integrate production and consumption activities such that economic activities consisting of both aspects of production and consumption could be more richly analyzed. This would enable the human cost(benefit) of production

to be incorporated into economic analysis. An economic science which addresses the effects of work on the laborer would provide society with a method to build an economy in which more of its citizens could engage in meaningful and fulfilling work.

Humanists have provided constructive critiques of mainstream economic thought almost from the beginning of economics, starting with Adam Smith. The criticisms have remained largely ignored by the majority of economists because the humanists have offered no practical alternative. Thus, historically, the humanists have had little impact in economics. This research was intended as an initial step in the development of a practical humanistic alternative to economic analysis.

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ADDITIONS

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APPENDIX I
TOOLS AND TECHNIQUES

APPENDIX I

TOOLS AND TECHNIQUES

In this appendix, the humanistic structure will be further developed to make the humanistic analysis more versatile and useful to the economist. Steps II and III of the analytical approach are the focus of the developments in the appendix. Efficiency and cost-benefit analysis, commonly used in conventional economics, will be defined in humanistic terms for possible usage in model development for Step III. Ratio-analysis will be proposed as a technique for usage in Step III as a means for comparison and aggregation.

To incorporate efficiency into the structure it must be redefined in a pragmatic humanistic sense. In conventional economics, efficiency is a comparison between costs and benefits. Something is economically efficient if no other alternative can reduce the costs, while maintaining the benefits, or increase the benefits, without increasing the costs [Freeman, 1979]. In this humanistic structure, efficiency will be measured by the effectiveness a production process or market has in satisfying the human needs of both the producer and the consumer (user) in relation to the cost in human and material terms. Factors in determining efficiency are human involvement, material input, types of organizations (firms, unions, agencies, institutions) involved in the production or trade of a good or service, the degree of competition, and the environmental impact.

The question might arise as to how one objectively compares human costs and benefits with material costs and benefits to deter-

mine the efficiency of a production process or market. Human costs and benefits are the final measure. Efficiency is the ability to produce the most human satisfaction at the least human cost. Material goods are evaluated by their ability to satisfy human needs. In light of a humanistic definition of efficiency, cost-benefit analysis must be defined in humanistic terms.

Cost-benefit analysis is a primary analytical tool in conventional economic theory. It could also be a tool in pragmatic humanistic economics with some changes. First costs and benefits must be considered in more than monetary terms. Money would be viewed in the light that it may purchase goods and services which may satisfy a human need or desire. Cost is defined as the frustration of a human need or desire. For example, a resource allocated to the satisfaction of a need has the opportunity cost of satisfying another need. The need is essentially frustrated. A benefit is the satisfaction of a human need or desire. The value of a resource is its ability or potential ability to satisfy a human desire or need.

Ratio Analysis

Economists sometimes use ratios to transfer the results of a cost-benefit analysis into statistics which can be compared to other cost-benefit analysis. For the analytical approach, a ratio was developed and is proposed here as a method for comparison and aggregation. In general two considerations are important in the analytical approach: the degree of need satisfaction and the amount of resources allocated to the satisfaction of the need. These two considerations are incorporated into the ratio.

The techniques used by Alderfer measure the degree of need satisfaction.^{1/} The degree of satisfaction will be used as a numerator in the ratio.

The denominator will be composed of either time, in hours or days, and/or resource usage, in dollars or resource units. Dollars may be more useful since they reflect the scarcity value of a resource. Consider the following ratio:

$$SD = \frac{\text{degree of need satisfaction (in \%)}}{\text{dollar value of good and service utilized}}$$

"SD" stands for satisfaction-dollar ratio. For example, if a person requires, on average, \$10 per day to satisfy his existence needs for nourishment 100 percent, the SD ratio would be:

$$SD = \frac{1.00}{10} = .1$$

If another person living in the same state or county (with the same standard and cost of living) required only \$5/day to feed himself, the SD ratio would be:

$$SD = \frac{1.00}{5} = .2$$

For activities requiring time the following ratio applies:

$$ST = \frac{\% \text{ of need satisfaction}}{\text{amount of time (hours, days)}}$$

"ST" stands for satisfaction to time ratio. For instance, a farmer participating in a farmers market may satisfy 80 percent of

^{1/} An area of future research would be to adapt Alderfer's measuring techniques to this analytical approach. As of now its scope of need measurement is too narrow.

his desire to interact with significant others in his community. Another activity, such as a church social, may satisfy 50 percent of his desire to interact with significant others in the community. Both activities require three hours. The ST ratios would be computed as follows:

$$ST_{\text{farmers market}} = \frac{.80}{3} = .267$$

$$ST_{\text{church social}} = \frac{.50}{3} = .167$$

For aggregation purposes when many people are considered, averages could be used. For example, suppliers at farmers markets on average satisfy their relatedness need to interact with the community by 80 percent. They require, on average, six hours to set up their displays, sell at the stand, and close up. If there are 20 vendors, the market "produced" the aggregate relatedness satisfaction of:

$$ST \times N = \text{total SATISFACTION}$$

$$N = \text{number of people}$$

$$\frac{.80}{6} \times 20 = 2.67$$

While the ratios do not have any absolute significance, they contain valuable information. For example, say on average two units of a resource are required to satisfy 90 percent of a growth need for individuals in the study group or community. The "satisfaction to resource" ratio would be:

$$SR = \frac{.9}{2} = .45$$

The SR ratio of .45 implies that a unit of this resource can satisfy an average of 45 percent of this particular growth need. More specifically two units satisfy 90 percent of this growth need. It does not have information as to the contribution of a third unit of this resource would make towards the satisfaction of the need.

Notice that this number produced by the ratio is a direct measure of the value of a resource. Resources have value in that they can satisfy human needs. The numerator contains information on the ability a resource has to satisfy a human need. The denominator denotes the amount of resource utilized to produce the estimated amount of satisfaction as measured in the numerator. Satisfaction of the poor man is measured the same way as the satisfaction of the rich man. The ratios are egalitarian in nature. The ratios overcome indirect measurement problems associated with extracting the value of a resource to consumers from market data i.e., option value, consumer surplus, cost-benefit analysis [VanKooten, 1981].

APPENDIX II

QUESTIONNAIRES

Questionnaire / First Interview Set

1. About how many acres are your presently farming (including acres owned and leased)? _____ acres
2. Do you consider yourself a:
 - 1 _____ full-time farmer
 - 2 _____ part-time farmer
 - 3 _____ hobby farmer
 - 4 _____ other (_____)
3. What are you growing and/or selling this year?

	<u>Growing</u>		<u>Selling</u>	
	yes	no	yes	no
berries	1	2	3	4
fruits	1	2	3	4
vegetables	1	2	3	4
garden plants	1	2	3	4
house plants	1	2	3	4
grains	1	2	3	4
baked goods	1	2	3	4
crafts, arts	1	2	3	4
other	1	2	3	4

4. Is your produce grown specifically for sale at the farmers market or was it surplus? Explain.
 - 1 specific _____
 - 2 surplus _____
 - 3 both _____
5. Why do you sell at the farmers market? _____

6. When participating at a farmers market do you judge success by profits, gross receipts, volume or something else?
 - 1 profit
 - 2 gross receipts
 - 3 volume
 - 4 something else
7. What was your approximate total household income before taxes in 1980? (hand card)^{a/} Just call your answer by letter please.

a b c d e f

^{a/} _____
 The card had the income categories with the respective letters. This was a device to obtain a response on a very private matter.

8. Of your total income in 1980
- (a) What percent was farm income? _____
- (b) What percent was earned at farmers market? _____
9. What is the nearest city to your farm? _____
10. Will you participate in a second interview later on in the year?
(explain content of interview)
- 1 yes
- 2 no

Name _____

Address _____

Phone _____

Questionnaire / Second Interview Set

What year did you start selling at a farmers market? _____

How many years have you participated in the farmers market (FM)? _____

How many times per year do you sell at the FM? _____

How many hours per week do you spend marketing your goods through the farmers market (including travel and set-up time)? _____

Are there any people other than yourself involved in the marketing of your product? _____ What is their relationship to you? _____

What do you pay them per hour? _____

What are the marketing alternatives for the produce you sell at the farmers market? _____

Are you using them now? _____ If not, why not? _____

How else would you be spending your time if you were not selling at a farmers market (i.e., work, recreation)? _____

What is this time worth to you in dollars/hr? _____

We are estimating the cost of selling at a farmers market. Please estimate the costs of the following items on a per unit basis along with the amount of units you use (a unit is the smallest element that is bought or sold).

	<u>Amount</u>	<u>Dollars</u>
Transportation of food, materials, and personnel to and from farmers market/per day	_____	_____
Signs for product display	_____	_____
Packaging/preparation	_____	_____
License and/or permit to sell	_____	_____
Membership fee	_____	_____
Bags	_____	_____
Produce stands	_____	_____
Scale	_____	_____
Racks	_____	_____
Hoses	_____	_____
Garbage cans	_____	_____
Cover/awnings	_____	_____
Chairs	_____	_____
Tables	_____	_____
Other costs	_____	_____

Production CostsLand

How many acres of land do you use in the production of your product? _____ acres

How many are not used? _____

What is a fair market value of your land today? _____

Do you own or lease your land? _____

What could you lease your land for? _____

What was your property tax in 1980-81? _____

What other uses do you have for your productive land (lease, sell, mine, etc.)? _____

Capital Investment in Buildings, Equipment and Machinery Used in the Production of Your Good.

Item (Year, Make and Model)	Yr. purch.	New or Used	Purch. price	Estimated current value	Current estimate of salvage value	Remaining yrs. of useful life	% of time used in the pro- duction	Comments

Leased Land, Equipment and Machinery Used in Production.

Item	Annual Lease Payment	Other Lease Expenses	Comments

Labor

How many hours per week do you spend producing your product? _____

How many weeks per year? _____

Please indicate how many other people are involved in the production of the product along with the wage rate and total hours (include family members).

_____ number of people _____ wage rate _____ total hours

We are interested in the amount of time spent managing your production. How much time do you spend per month (in hours) organizing all the inputs discussed earlier into the product? _____

How much is that time worth? _____

How many hours per week do you spend bookkeeping and record keeping? _____ hrs.

How many hours per week do you spend supervising your personnel? _____ hrs.

Decision Making

Indicate whether or not you entered your current occupation for each of the following reasons:

	<u>Yes</u>	<u>No</u>	<u>Rank</u>
Income	_____	_____	_____
Hobby/recreation	_____	_____	_____
Could not get into another occupation	_____	_____	_____
Something they (you) have always wanted to do	_____	_____	_____
Other _____	_____	_____	_____

Indicate if the following factors entered your decision to enter the market:

	<u>Yes</u>	<u>No</u>
Community spirit and/or support for a project	_____	_____
Best marketing opportunity	_____	_____
Experiencing social festivity of markets	_____	_____
Other _____	_____	_____

Will you join the market again next year? _____

If yes, are these valid reasons?

	<u>Yes</u>	<u>No</u>
Profit	—	—
Best marketing opportunity	—	—
Enjoyable	—	—
Like the idea of market	—	—
Other	—	—

If no, are these valid reasons?

	<u>Yes</u>	<u>No</u>	<u>Rank</u>
Not enough money	_____	_____	_____
Too much hassle	_____	_____	_____
Better market options	_____	_____	_____
Other	_____	_____	_____

Revenues

What were your total receipts at the farmers market in 1981?

<u>Period</u>	<u>Item</u>	<u>Price</u>	<u>Reason why the price was changed</u>
Beginning of season	_____	_____	_____
Middle of season	_____	_____	_____
End of season	_____	_____	_____

How do you establish a price?_____

Sociological Information

How old were you on your last birthday?

City and state where you were born.
City State

How many levels of education have you completed?

What were they (i.e., high school)?

Please indicate your present and past significant jobs and occupations.

If you were not pursuing this present occupation, what kind of work (hobby) would you be doing?