

# Social Provisioning, Embeddedness, and Modeling the Economy

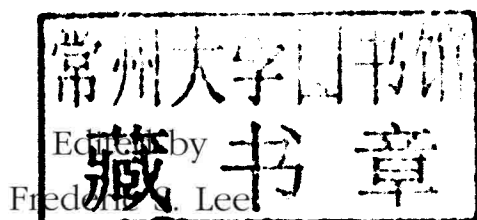
STUDIES IN ECONOMIC REFORM AND SOCIAL JUSTICE

Edited by Frederic S. Lee

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# Studies in Economic Reform and Social Justice

Social Provisioning,  
Embeddedness, and Modeling  
the Economy



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# Contents

Editor's Introduction— <i>Frederic S. Lee</i> . . . . .	1
Social Provisioning Process and Socio-Economic Modeling— <i>Tae-Hee Jo</i> . . . . .	6
A Simple Model of the Surplus Approach to Value, Distribution, and Growth— <i>Scott Carter</i> . . . . .	29
Demand, Structural Interdependence, and Economic Provisioning— <i>Gary Mongiovi</i> . . . . .	59
Modeling the Economic Surplus in a SAM Framework— <i>Erik K. Olsen</i> . . . . .	87
Integrating the Social Structure of Accumulation and Social Accounting Matrix with the Social Fabric Matrix— <i>F. Gregory Hayden</i> . . . . .	120
Social Structures of Accumulation: A “Punctuated” View of Embeddedness— <i>Terrence McDonough</i> . . . . .	146
Comparing Pension Systems in the Circular Flow of Income— <i>Andrew B. Trigg and Jonquil T. Lowe</i> . . . . .	160
Modeling the Economy as a Whole: An Integrative Approach— <i>Frederic S. Lee</i> . . . . .	194
Index . . . . .	227

## Editor's Introduction

*By* FREDERIC S. LEE\*

While economics is a social science, it often gets presented in textbooks as a science with little connection to the social. Moreover, models, arguments, and agents are articulated by mainstream and heterodox economists alike that are exemplars of non-social theorizing about what are clearly social activities. Hence, it is not any wonder that there exists the long running social embeddedness debate that permeates the interstices between economics and sociology, that is, economic sociology. There is, however, work done by economists that does bring the social into economic theorizing; but it is done by adopting a different view of economics as explaining the social provisioning process. That is, the conventional economists' view of economics is one of the allocation of scarce resources among competing ends given unlimited wants of individuals that are in themselves asocial; and the objective of the individuals is to increase their own self-centered utility. From this perspective, the economic activities that are engaged in to achieve an increase in utility lie outside society or are at least not embedded in social relationships that affect the self-centered utility objective of the individual. On the other hand, economics defined in terms of the social provisioning process is concerned with explaining and with proposing and advocating changes in the historical process of producing the social surplus that provides the flow of goods and services required by society to meet the reoccurring needs and promote the well-being of those who participate in its activities. So to do work from this perspective means doing social (as opposed to asocial) economics utilizing a theoretical framework in which the economy and its various activities are theoretically conceived and modeled in a way that they are socially enveloped.

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Economists working from the social provisioning perspective have examined what social provisioning means, discussed the relevance of the social embeddedness of economic activity for economics, and articulated different ways to examine and model the economy as a whole such as the social surplus approach, social fabric matrix approach (SFM-A), input-output modeling, social accounting matrix (SAM), social structures of accumulation, system dynamics, and stock-flow consistent modeling. However, they have done their work largely independent of each other, resulting in an underdeveloped socially-encased model of the economy as a whole; and without a better framework qua model of the social economy, further developments in the social provisioning perspective are uncertain. This concern prompted me to hold an *AJES*-sponsored workshop at the University of Missouri–Kansas City on 24–26 September 2010 to deal with the themes of social provisioning, embeddedness, and modeling the economy as a whole in an integrative fashion. The charge to the participants was to present papers that engaged with one or more of the themes and take on board the comments made at the workshop—that is, the point of the workshop was to bring scholars together and learn from each other. Twelve papers were presented at the workshop, of which eight are included in this issue of the *AJES*.

Tae-Hee Jo begins the issue with a first-of-its-kind discussion of what the social provisioning process means and its implications for modeling the economy. In particular, he finds that it resonates very well with various approaches in heterodox economics and that it is compatible to a greater or lesser extent with different kinds of socio-economic modeling: the social surplus approach, SFM-A, and systems dynamics. The next three articles by Scott Carter, Gary Mongiovi, and Erik Olsen deal with the social surplus approach. Scott starts with a discussion of what the social surplus means (such as whether it includes wage goods or not), tracing its development from the Physiocrats and Quesney to Marx and finally to Sraffa. The historical excursion ends with the decided conclusion that the social surplus includes wage goods. With this in hand, he proceeds to develop a social surplus model to examine income distribution and economic growth. The conclusion Scott reaches from this exercise is that the

social surplus approach is robust in that it allows for two conceptions of causality to “close” the system based on equating wages and profits with the production of the social surplus—the one from the income (wages and profits) side deals with the determination of prices and distribution of income, and the keep from the quantity side (social surplus qua effective demand) deals with the determination of output or the total social product. Gary begins his article with a historical discussion of the concept of social provisioning as used by classical and neoclassical economists and then articulates a surplus model along classical-Keynesian lines. In particular, he delineates a dual price-output Sraffa-Leontief-type model, but focuses on the quantity side. The fundamental property of the quantity model is that the decisions driving the social surplus (which consists of consumption and investment goods) drives total output and employment. Gary proceeds to develop interesting arguments about what determines consumption and investment demand in light of the fact that it cannot be in any systematic, deterministic manner related to prices, interest rates, and the rate of profit. Finally, in his article, Erik introduces SAM into the social surplus approach from a Marxian perspective. That is, the social surplus is the same as the final demand in national income and product accounts (NIPA). However, because the calculation of final demand and the incomes to purchase it does not take into account the Marxian notions of unproductive and productive labor, the NIPA does not represent the surplus, wages, and profits that are consistent with Marxian theory. What Erik does is use SAM to develop an algorithm that transforms NIPA into its Marxian counterparts. Once in place, it is possible to use Marxian theory to explain the production and distribution of the social surplus in capitalist economies.

What is missing from the previous three articles is historical contextualization (beyond just capitalism) and clear lines that connect cultural values, norms, and societal institutions to the decisions by the state, business enterprises, and households that drive the price-output models and through them the provisioning process. Greg Hayden deals with the latter omission with his social fabric matrix approach. He delineates how SFM-A connects the social as well as the technological and ecological to decisions affecting production, distribution, and eventually social provisioning. Greg goes further and argues quite



at length that much is to be gained from integrating SFM-A with the SAM approach. However, he admits that SFM-A is too general because it is too under-historically contextualized. This is where Terry McDonough and his article on the social structures of accumulation step in. He argues that capitalism is not a historically unchanging entity, but varies over time—that is, there are stages to capitalism. Thus, the social structures of accumulation approach provide the historical context for the social fabric, which in turn affects production and social provisioning. This of course means that the provisioning process is a historically changing process that cannot be adequately understood via ahistorical analysis and modeling.

To anyone familiar with the SFM-A, input-output modeling, and SAM, their integrative compatibility seems obvious as well as their application to real world issues. Andrew Trigg and Jonquil Lowe illustrate the applied theme with an analysis of defined-benefits and defined-contributions pensions using a circular flow of income model. The foundations of the model include circular production with a surplus, financial structure of the economy, and a social accounting matrix. Thus, their future research will involve modeling the social provisioning of pensions using a social accounting approach.

The final article of the issue is the editor's attempt to bring the different workshop themes together. Starting from the position that economics is about explaining the social provisioning process, the objective of the article is to model the economy as a whole in a way that it is socially encased, enveloped. That is, the model of the provisioning process is bracketed at one end by cultural values, norms, and societal institutions and at the other end by household social activities and government services. Thus, the beginning and end point of social provisioning is encased by the SFM-A historically contextualized by the stages of capitalism drawn from the social structures of accumulation approach. The model of the provisioning process itself is an integration of the social surplus approach, input-output and stock-flow consistent modeling, and SAM with a structure-agency methodology.

The message of the workshop and the articles in this issue of the *AJES* is that the fruitful study of the social provisioning process requires a particular conceptualization or model of the economy as a

whole. This has two implications. First, using macroeconomic models in which there is a single asocial representative agent, no produced means of production, and no state and state money, for example, for economic analysis and policy recommendations concerning social provisioning is something akin to academic dishonesty, since such models have no real world, theoretical sensibility. Without it, the models are not any different from social disinformation myths that are promulgated to defend the status quo. Secondly, modeling is important, and it is important to construct the right kind of models. But this requires the use of mathematical equations and symbols, representable matrices, and complex graphs and diagrams. Hence many of the articles in this issue have many equations (and quasi-equations) and thus embrace a degree of mathematical formalism (that is empirically grounded). The aim of this issue of the *AJES* is to develop the right kind of model of the economy as a whole utilizing the right degree of formalism; and being the right kind of model, it is also the only kind that can be used to study the social provisioning process. A bold conclusion for a bold issue of the *AJES*.

FSL

# **Social Provisioning Process and Socio-Economic Modeling**

By TAE-HEE JO\*

**ABSTRACT.** The radical difference between orthodox and heterodox economics emanates from the different views of the capitalist socio-economic system. Economics as the science of social provisioning felicitously describes the heterodox view that the economy is part of the evolving social order; social agency is embedded in the social and cultural context; a socio-economic change is driven by technical and cultural changes; and the provisioning process is open-ended. Such a perspective on the economy offers ample methodological and theoretical implications for modeling the capitalist economy in a realistic manner. It lends itself especially to the micro-macro synthetic approach. Thus the objective of this article is twofold: 1) to examine how the concept of the social provisioning process can be clarified and expanded by virtue of recent development in heterodox methodology and 2) to discuss how methodological development would nourish the heterodox modeling and theorizing of the capitalist social provisioning process.

## **Introduction**

Ever-changing society is never stable because of conscious actions and interactions of social agency. A historical change in socio-economic structures is unpredictable but is always controlled by the dominant social agency of the time. Capitalist markets are formed and governed by social agency being vested with social-economic-political power. The vested interests are protected in the process of the provisioning of goods and services. To do so, resources are made

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available by the command of the dominant agency. While consumption is dependent upon those who make production decisions, production is dependent upon the expectation of profits. The provisioning of goods and services is thus a social process rather than an isolated rational decision-making process. Such a story is not told or adequately theorized by neoclassical economists who rely exclusively on the isolated optimizing behavior given scarce means. No institution in its broadest sense presents itself in neoclassical economics. Nor do embedded individuals and embedded economy.

The significance of the view that economics is the study of the social provisioning process lies in its relevance to the account of ever-evolving economy. With the social provisioning process as a method of inquiry into social reality, a theory assisted by an adequate model would provide deeper understanding of how provisioning of goods and services of a society is organized in accordance with existing values and social structures—including, but not limited to, class, gender, culture, power, politics, and environment. It is also well acknowledged now by many heterodox economists that, given the contested disciplinary landscape, the concept of social provisioning is a useful guidepost for the development of heterodox economics. Institutionalists, Post Keynesians, Marxians, social economists, feminists, ecological economists, among others, have made valuable contributions to the advancement of heterodox economics with the view of the social provisioning process (Gruchy 1987; Stevenson 1987; Dugger 1996; Lee 2008; Lawson 2003, 2006; Davis 2006; Power 2004).<sup>1</sup>

An important implication follows. The concept of social provisioning offers a way to promote much-needed cross-communication of ideas within various heterodox economics traditions as well as with other like-minded social scientists who are free of neoclassical values and methods. This can be the case since the social provisioning perspective is a worldview, as described in the opening paragraph and further detailed below, that reflects the concern of the historical development of human beings and society. In other words, the social provisioning perspective is the social ontology that looks into the foundations of socio-economic evolution.

The objective of this article is to conceptually elaborate the social provisioning process with close reference to the core principles

common to various heterodox economic traditions. This effort will render heterodox modeling distinctive from and alternative to orthodox-neoclassical modeling. To this end, this article is organized in the following order. The second section discusses the meaning of the social provisioning process and finds implications for modeling the socio-economic system. In the following section, selected heterodox models—the social fabric matrix, system dynamics, and the social surplus approach—are compared and contrasted from a social provisioning perspective. The final section concludes the article.

### **Social Provisioning Process**

#### *Conceptualizing the Social Provisioning Process*

Almost all economists, either heterodox or otherwise, believe that they are explaining the real world. But it is well known that the level of inquiry and the way of making a theory are radically dissimilar. Orthodox economics of our time is primarily concerned with building a model *qua* theory based upon axiomatic assumptions such as scarce resources, hedonistic-rational *homo economicus*, the isolated decision-making process, and disembedded economy. A good model is then expected to yield a higher degree of predictability by ascertaining the empirical regularity between quantitative variables. A century-old tradition of model construction in a formal-mathematical fashion has led orthodox economics to the high state that only trained economists fully understand what the model explains. The reality is obscured rather than explained; or it is the manufactured reality that is explained by refined models.

Take an evolutionary game model as an example. It is designed to address a strategic decision-making process by incorporating bounded rationality, mutative behavior, path-dependence, and the interactive influence between agents over time. These are not considered in the static game model (McKenzie 2009). With the help of the development in computational technology like simulation, it becomes easier to show the complex evolutionary process that leads to an evolutionary stationary solution. But still fundamental problems of a game model remain untouched. One of the critical problems is that the initial

model setting can be manufactured so as to obtain a particular outcome. In addition, an evolutionary game model does not question how a set of agents' strategies, a payoff function, and the rule of the game are constructed and changing because it begins with the "elimination of society, relationships therein, and historical movements thereof" (Henry 2009). Consequently, the model world is too limited to explain the changes in real history and thereby the "evolutionary approach loses all its analytical power the moment it allows humans to do what they have been doing throughout history" (Varoufakis 2008: 87).

On the contrary, heterodox economists have not been bothered much by the mathematical model. In its place, the emphasis is put on social reality (of the model). It is the quantitative rigor that is to be sacrificed, if either the rigor or the reality is to be chosen. This is due largely to the fact that the reality that heterodox economists—Post Keynesians, Marxians, and Institutionalists, in particular—perceive is much deeper than what orthodoxy does. That is, social reality is layered and open. The structure of society is open in historical time because of conscious social agency and the persistent causal mechanisms that are not always observable. For the sake of explaining ever-changing society, therefore, both "intensive" (causal-substantive) and "extensive" (positive-empirical) investigations are required. Such a methodological position further implies that social transformation (or elaboration at a lesser degree) can be made not through the manipulation of empirical variables but through the changes in structures driven by agency (Polanyi 1968; Archer 1995: ch. 10; Danermark et al. 1997: 10, 165; Park 2001; Dow 2005: 388).

We find such a realistic reasoning in a variety of heterodox traditions. Consider Marx:

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given state of the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the general process of social, political and intellectual life. (Marx 1970: 20–21)

Consider now Veblen:

The economic life history of any community is its life history in so far as it is shaped by men's interest in the material means of life. This economic interest has counted for much in shaping the cultural growth of all communities. Primarily and most obviously, it has guided the formation, the cumulative growth, of that range of conventionalities and methods of life that are currently recognized as economic institutions; but the same interest has also pervaded the community's life and its cultural growth at points where the resulting structural features are not chiefly and most immediately of an economic bearing. The economic interest goes with men through life, and it goes with the race throughout its process of cultural development. It affects the cultural structure at all points, so that all institutions may be said to be in some measure economic institutions. (Veblen 1961: 76–77)

Therefore, the complex and evolving social reality requires that

[h]e [an "ideal" political economist] must reach a high standard in several different directions and must combine talents not often found together. He must be mathematician, historian, statesman, philosopher—to some degree. He must understand symbols and speak in words. He must contemplate the particular in terms of the general, and touch abstract and concrete in the same flight of thought. He must study the present in the light of the past for the purpose of the future. No part of man's nature or his institutions must lie outside his regard. He must be purposeful and disinterested in a simultaneous mood; as aloof and incorruptible as an artist, yet sometimes as near the earth as a politician. (Keynes 1972: 173–174).

Despite the well-known theoretical differences between Marx, Veblen, and Keynes, there is a common theme that unites these "worldly philosophers" and that sharply distinguishes heterodox economics from orthodox economics. They offer causal explanations of the social provisioning process. This is in radical contrast to the currently dominant orthodox view that "Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses" (Robbins 1932: 15).<sup>2</sup>

Then what do we mean by the social provisioning process? In brief (further discussion follows below), it means that all the economic activities are occurring in a social context—cultural values, class/power relations, norms, ideologies, and ecological system. With this theme, a serious inquiry into economic matters requires the deeper

understanding and thicker explanations of the foundations of society. Marx, for example, explains how the capitalist mode of production controlled by a minority ruling class gives rise to social ills (alienation and exploitation), disorder (crisis), and irrationality (commodity-money fetishism). Veblen intensively explicates how a social evolution is conditioned by underlying dichotomous forces—business principles and social principles—and how the ruling class maintains its vested interests. Keynes furthers these ideas by advancing the theory of monetary production and the principle of effective demand to the extent that the production of surplus goods and services as a material basis of society is determined by the demand decisions made by the business enterprises and the capitalist state (Henry 2009, 2011; Howard and King 1992: ch. 5; Bortis 1997: ch. 3; Lee and Jo 2011).

It was Allan Gruchy who popularized the concept of the social provisioning process. He defines that

economics is the study of the on-going economic process that provides the flow of goods and services required by society to meet the needs of those who participate in its activities . . . [Economics is] the science of social provisioning. (Gruchy 1987: 21)

Gruchy (1987: 21–23) continues that the social provisioning process is cultural, historical, technological, open and thereby economics is to be interdisciplinary and pluralistic so as to explain potential material abundance as a basis of social progress. That is, as many heterodox economists have long recognized, human society is organized by both market and non-market activities; economic activities take place, and thus have meanings, in a social context. Polanyi (1968) addresses this point very clearly.

[The economy is] an instituted process of interaction between man and his environment, which results in a continuous supply of want-satisfying material means . . . The human economy, then, is embedded and enmeshed in institutions, economic and noneconomic. The inclusion of the noneconomic is vital. For religion or government may be as important for the structure and functioning of the economy as monetary institutions or the availability of tools and machines themselves that lighten the toil of labor. (Polanyi 1968: 145, 148)

Therefore, as Veblen maintains, both “speculative” (mathematical) and “scientific” (causal analysis) analyses are necessary. The former is a



logical exercise that is distant from real life experience (hence ceremonial and institutional), and the latter is workmanlike knowledge closely associated with material exigency (hence, technical and instrumental). Mathematical/statistical formulations reflect, continues Veblen, no more than observed “idle quantitative concomitance” of the reality, while cumulative causation “is a fact of imputation, not of observation, and so cannot be included in data” (Veblen 1961: 32–35).<sup>3</sup>

Not surprisingly many other heterodox economists find social provisioning germane to heterodox economics. For example,

“Social provisioning” is a phrase that draws attention away from images of pecuniary pursuits and individual competition, and towards notions of sustenance, cooperation, and support. Rather than be naturalized or taken as given, capitalist institutions and dynamics become subjects to be examined and critiqued. (Power 2004: 6)

And Frederic Lee defines heterodox economics explicitly from the social provisioning perspective:

[H]eterodox economists extend their theory to examining issues associated with the process of social provisioning, such as racism, gender and ideologies and myths. Because their economics involves issues of ethical values and social philosophy and the historical aspects of human existence, heterodox economists make ethically based economic policy recommendations to improve human dignity, that is, recommending ameliorative and/or radical, social and economic policies to improve the social provisioning and hence well-being for all members of society and especially the disadvantaged members. (Lee 2008: para. 7)

### *Implications for Modeling*

Then one would ask: Why is the concept of the social provisioning process important for heterodox economics? We find that there are at least four implications that are relevant to the present purpose—that is, linking the social provisioning process and socio-economic modeling.

Firstly, heterodox economists can do away with impersonal market fundamentalism. Placing social provisioning at the center of an inquiry, one starts a study with a purview of the capitalist socio-economic system that includes social agency, socio-economic structures, and causal mechanisms. Then economic activities, both