A PERVASIVE DUALITY IN ECONOMIC SYSTEMS: IMPLICATIONS FOR DEVELOPMENT PLANNING

Khalid Saeed
Worcester Polytechnic Institute, Worcester, MA, US

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Summary

This section recognizes the existence of a pervasive duality in economic systems at the sectoral, national, and global levels. Using a generic system dynamics model of a dual economic system developed earlier by the author, it attempts to search for an operational policy framework to achieve sustainability through instruments that are feasible to implement within this reality and within the existing institutional framework. The critical policy that is needed to change income distribution in a dual economy is taxation of rent income, which penalizes absentee ownership. The policies needed to facilitate economic development include financial, institutional, and technological development instruments that are relatively well known, but ineffective when implemented without the critical policy of taxing rent income. These instruments are interpreted at the sectoral, national, and global levels, and the appropriate institutional arrangements for implementing them are outlined.

1. Introduction

As the world moves toward economic globalization, the intellectual perspectives on economic development have come to fall into two broad groups, free market and fairness. The proponents of free market often seek an illusive, perfect market system both at the global and the local levels, with proposals to intervene into the pricing mechanisms to correct distortions in resource use and to improve economic efficiency. Those for fairness often dwell on the issues of responsibility for past performance and justice at the global level, while striving to promote formal industrial production locally. Both sides unfortunately fail to see that the policy recommendations they make might be irrelevant to the economic systems actually in place, both at the global and the local levels.

Many of these recommendations also lie outside the scope of existing policy institutions operating mostly at local levels, and call for global measures that are often impossible to implement. There evidently is a need to reexamine the question of sustainability in the light of the economic systems actually in place.
This paper suggests that there exists a pervasive duality in the economic systems at the sectoral, national, and global levels, which makes most of the policy instruments suggested by both groups irrelevant, while their implementation leads to unexpected results. A generic system dynamics model of resource allocation and income distribution processes in a dual economic system developed by the author is used in this paper to outline taxation, expenditure, technological, and international trade policies to achieve sustainable economic development.

2. Past Development Effort and its Performance

Development planning has been driven by aggregate percepts of economic growth rather than by a comprehensive understanding of the complex information relationships formed through the interaction of multiple subeconomies existing at local and global levels. As a result of this, the performance of development policies has varied widely from country to country.

2.1. Development Policy Waves

The 1960s were a period of indiscriminate expansion in capital that exacerbated an already polarized income distribution pattern in most countries, fueling conflict between economic classes. The 1970s advocated public sector development, which not only created largely inefficient organizations, but also stymied entrepreneurship in the private sector. The 1980s sanctioned export-based development, with disregard to the terms of trade, which drained many developing economies and devastated their natural endowments. The 1990s witnessed the advocacy of free enterprise, free world trade, and free capital movements with disregard to the structure of the global economy. This was accompanied by a drive to privatize public finance, with the question of sustaining welfare often swept under the rug. The 1990s also saw an emphasis on environmental issues and global accords, but these remain somewhat disconnected from other policies.

2.2. Unforeseen Problems Created by Development Policy

This progression of policy waves continues to create unforeseen problems, which seem to be becoming worse. Foreign assistance over these waves led to staggering debt burdens whose management is a nightmare. Technology transfers effected a vulnerable rather than a sustainable production organization that has been unable to find solutions to the problems faced in the course of its operations. The so-called comparative advantage in labor cost actually created stagnation in local demand in many instances, leading to increased dependence on exports to industrialized countries. The drive to privatize public finance with disregard of the long-term welfare of the population is creating an infrastructure whose burden is regressive and encourages the development of a centralized economic base. The new free trade and capital movement paradigm appears to be exacerbating the distinction between the poor and rich countries through transferring value from the former to the latter.

2.3. Need to Link Policies to Specific Problems

There apparently is a need to reexamine the development process with respect to the economic systems that are actually in place, rather than basing it on hypothetical aggregate percepts of economic growth. It seems that the economic systems we are dealing with are pervasively dual at all levels rather than being undifferentiated and uniform. Policy frameworks appropriate for this dual structure differ widely from those appropriate for a uniform structure.

3. Existing Models of Economic Development

The economic models used as bases for designing development policies over the last decades of the twentieth century have ascended largely from time- and geography-specific experiences rather than from a careful study of the variety of behavioral patterns occurring over various time periods and across several geographic locations. Among these, the socialist and the capitalist models are most at odds. They differ in their assumptions about ownership and income distribution patterns, the basis for wage determination, the influence of technology on income growth, and the functions of entrepreneurship and innovation.

3.1. The Marxist Model

Marxist economic theory, which underpins the socialist model, assumes that ownership of capital resources is concentrated in a minority excluding the workers and that the majority of households receive no part of the profits. Thus, wage payments have a strong effect on household income. The Marxist theory views private ownership as a source of exploitation and postulates labor-wage rates determined by the consumption necessary for a worker to support production. The labor-wage rate is thus based on the real value of the commodities needed for a worker to subsist, which is more or less fixed, irrespective of the contribution of labor to the production process. Technological choices, which increase labor productivity, may only serve to increase the share of the surplus of product per unit of labor appropriated by the capitalist. Entrepreneurship is viewed as an asocial activity and innovation seen to originate from the need to boost the falling returns on capital. Based on these assumptions, the socialist system assigns control of the economy to the government.

3.2. The Neoclassical Model

Neoclassical economic theory, which is the basis for the capitalist model is, on the other hand, silent on the ownership of capital resources, by default assuming it to be widely distributed. Thus, the labor-wage rate may bear little relationship to the income of households, who are also recipients of profits. It is assumed that private ownership of productive resources is a means for market entry, which creates unlimited potential for economic growth, although private investment is not subject to self-finance due to the presence of a perfect financial market. Neoclassical economic theory also postulates that short-run, labor-wage rates depend on worker availability, while they are determined in the long run by the marginal revenue product of labor. Neoclassical models of economic growth, however, often make the simplifying assumption that equilibrium continues to prevail in both factor and product markets over the course of growth. Thus, only minor fluctuations may occur in wages, profits, and prices in the short run, and these can be ignored. The belief in the existence of such equilibrium is further strengthened by the Keynesian argument for the ineffectiveness of market mechanisms due to the dependence of prices on long-term wage contracts and production plans that may not respond easily to short-run changes of the market. These mechanisms of wage determination imply that technological choices that increase labor productivity would have a positive effect on wage rates and household income, because they increase the marginal revenue product of labor. Furthermore, entrepreneurship is important for new entry into economic activity, and innovation is supposed to benefit society through increased productivity. With these assumptions, the capitalist system advocates minimal government intervention in the economy.

3.3. The Revisionist Models

There also exist a number of revisionist models of political economy that attempt to understand the nature of interdependence of the multiple subeconomies observed to coexist in many developing countries in violation of the theoretical premises of the neoclassical model, according to which all production factors must eventually move to the most efficient sector. These models often attribute the development of disparities among the various subeconomies to exploitive mechanisms that tend to maintain the upper hand of stronger influence groups. The revisionist analyses have largely led to making moral appeals for government policy to target the poor and the disadvantaged in its development efforts.

3.4. The Institutionalist Models

Last, but not least, there are Institutionalist (sometimes also labeled as Post-Keynesian) economic models that advocate understanding behavioral relationships that actually exist and drive economic patterns actually experienced, albeit these models are largely qualitative and descriptive.

3.5. Limitations of Existing Models

Indeed, each economic system can be endorsed with the help of selected historical evidence, and this has been fully exploited to fuel the traditional debate between the neoclassical and Marxist economic schools. Interesting artifacts of this debate include the normative theories of value suggested by each system to provide moral justifications for the various wage systems, which have little practical significance for development policy. This is unfortunate, since contradictions of evidence should clearly indicate the existence of fundamental organizational arrangements in the economic system, which are capable of creating the multiple behavioral patterns on which the various economic models are based. Once identified, such arrangements may also serve as entry points for the design of evolutionary changes in an existing pattern. To quote a notable Institutionalist economist, Professor Joan Robinson:

Each point of view bears the stamp of the period when it was conceived. Marx formed his ideas in the grim poverty of the forties. Marshal saw capitalism blossoming in peace and prosperities in the sixties. Keynes had to find an explanation for the morbid condition of “poverty in the midst of plenty” in the period between the wars. But each has significance for other times, for in so far as each theory is valid, it throws light upon essential characteristics of the system which have always been present in it and still have to be reckoned with.

4. A Model of Resource Allocation and Income Disbursement in a Dual Economic System

Present-day developing economies are characterized by their duality. In each stage of their development, there often exist two subeconomies side by side. In the agricultural stage, large-scale commercial farms coexist with the small, self-employed, peasant sector. In the industrial stage, large, formal, industrial firms coexist with the self-employed entrepreneurs in the self-employed sector. In the transition stage, this duality becomes more complex. The rural economy, in which large-scale commercial farmers coexist with the small, self-employed peasant sector, also coexists with the urban economy, in which large, formal, industrial firms coexist with the self-employed entrepreneurs in the self-employed sector. An aggregate formal sector, including the commercial farms in the rural sector and capitalist firms in the urban sector, attempts to maximize profit. On the other hand, an aggregate informal sector, including small peasant farms in the rural sector and informal family work units in the urban sector, attempts to maximize consumption. This classification has been referred to variously in the literature, for example, as formal and self-employed or commercial and peasant sectors, capitalist and worker sectors, capitalist and subsistence sectors, modern and traditional subeconomies, but all those contexts recognize the existence of an economic duality. Due to this duality, economic growth may not necessarily signal a general improvement in welfare, when the distribution of income in the dual economy and the transfer of value between the formal and self-employed sectors are also taken into consideration. Any policies implemented in the face of this duality would cause a reallocation of resources between the formal and the self-employed sectors. Neglecting this duality will give unexpected results, as has been borne out by experience.

4.1. Duality as a Conceptual Framework for a Policy Model

The concept of economic dualism has existed for almost half a century, although ignored in formal models, perhaps due to the modeling complexity it entails. It manifests in the side-by-side existence of a modern capitalist economy and a traditional informal economy in the developing countries. Its various forms include commercial and peasant farming in agricultural economies, formal and informal firms in industrial economies, and a modern industrial sector and a traditional agricultural sector in a national economy. It has been suggested that the side-by-side existence of advanced industrial economies and the developing economies is yet another manifestation of dualism at a global level. Well-meaning developmental instruments based on aggregate models of economic growth have been implemented in the face of this pervasive duality.

Although the concept of duality is now recognized in the economic literature, it has rarely been translated into a holistic model that should serve as an apparatus for a policy search for development. Such a model must incorporate the behavioral relations concerning saving, consumption, investment, wage determination, and disbursement of income recognized in the pioneering works on economic duality, although in a rather fragmented way. A system dynamics model developed by the author of this section integrates these various behavioral relations.

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Biographical Sketch

Khalid Saeed chairs the Social Science and Policy Studies department at the Worcester Polytechnic Institute in the US. He holds a dual Ph.D. in System Dynamics and Economic Development from the Massachusetts Institute of Technology and is widely recognized for his work on computer modeling and experimental analysis of developmental, organizational, and governance-related problems. He has written two books and numerous articles on sustainable development and system dynamics modeling. Dr. Saeed received the Jay Wright Forrester Award for his work on sustainable development in 1995.