Developing an Institutional Political Economy Framework Integrating Firms, Markets, and States

Wanki Moon
Department of Agribusiness Economics
Southern Illinois University
Carbondale, IL 62901
Email) wmoon@siu.edu

Abstract

Building on the long tradition of diverse schools of thought underlining the importance of institutions in determining economic outcomes, the paper develops an eclectic institutional political economy framework that views the economy as consisting of the four decision-making units including the firm, the market, the state, and foreign states. They represent major institutional arrangements accountable for resource allocation decisions at the firm, industry, national, and global levels. The paper restructures disciplinary and interdisciplinary schools/theories/approaches into a unified framework centered around the four principal decision-making units.

Key Words: Institutions, Institutional Political Economy, Firm, Market, State.

Selected paper prepared for presentation at the Southern Agricultural Economics Association's 2017 Annual Meeting, Mobile, AL Feb 4-7, 2017.

Developing an Institutional Political Economy Framework
Integrating Firms, Markets, and States

1. Introduction

The notion of institution has arisen in recent years as an influential frame of thinking both at the micro and macro levels, challenging/complementing neoclassical economic theories postulating a frictionless, therefore institution-free (zero transaction costs), and spontaneous markets-driven economy. The role of institutions in the history of economics can be traced back to the works of Classical Economists, Marxian Economists, Austrian Economists, German Historical School, American Institutional economists (Veblen, Commons, Mitchell), and other thinkers in the 20th century such as Friedrich Hayek, Karl Polanyi, and John Galbraith. More recently, New Institutional Economics (e.g., Douglass North; Oliver Williamson) positioned institutions systematically at the center in explaining economic performances over time and across states. According to them, the political-economic system in a state represents a collection of formal/informal institutions (as the rules of the game) and organizations (as the players of the game) and their interactions. They assert that institutions and organizations are endogenously determined; their interactions result in institutional changes; and therefore they should be subject to systematic inquiry rather than being assumed away as exogenously given.

Building on the tradition of the above schools of thought recognizing the role of institutions, the purpose of this paper is to develop an eclectic institutional political economy framework that views the economy as consisting of the firm, the market, the state and foreign states. The firm, the market, and the state represent the three principal institutional arrangements that would arise from a particular institutional environment (e.g., constitution, norms, customs, history, culture) of a nation-state. They are accountable for allocating scarce resources and

determining economic outcomes at the firm, industry, national and global levels. The firm is the main subject of study for the discipline of management; the market is for economics; the state is for political science; and studies of the relations among states are for International Relations (IR). Each of the four disciplines has developed its own unique epistemological and methodological body of knowledge based on the premise that it has a distinctive sphere of inquiry independent from others. Interdisciplinary approaches are intended to study interactions between firms, markets, and states: i.e., political economy focusing on the interaction between the market and the state; international political economy focusing on the interaction between the market and the state in international settings; and economics of the firm focusing on the interaction between the firm and the market. To name just a few of them, the three interdisciplinary fields include public-choice theory, positive political economy, critical political economy, Realism, Liberalism, Nationalism, Dependency Theory, World Systems Theory, Open Economy Politics, Transaction Costs Economics, or Agency Theory.

Disciplinary approaches underline the role of only one institutional arrangement (among the firm, the market, and the state) and give little consideration to others in shaping economic outcomes. While interdisciplinary approaches are intended to consider two or more institutional arrangements simultaneously; examine their interactions; and overcome the limitation of disciplinary approaches, few interdisciplinary theories allow two or more institutional arrangements to play active roles simultaneously. For example, public choice or Olson's collective action theories in political economy do not analyze interactions between the market and the state, but simply use the methodology of economics to analyze the state. In some cases, interdisciplinary theories postulate a predetermined configuration in terms of the relative roles of any combinations of two institutional arrangements. Consider realism and liberalism in

international political economy integrating international relations and international economics. Realism poses the state as the main player in international economic relations and the pursuit of national interest as the primary goal of the state. The firm and the market play subsidiary roles in the realists' view. Liberalism poses the individual as the principal unit of analysis and the pursuit of self-interest as the behavioral motivation coordinated by the market. States are not active players in the liberalists' view.

Disciplinary or interdisciplinary approaches may be appropriate for addressing some economic problems. But for others (e.g., agricultural trade, multilateral negotiations for trade liberalization in agriculture), it may be necessary to consider all institutional arrangements (among the firm, the market, the state, foreign states) relevant in analyzing the problems. This paper structures various disciplinary and interdisciplinary theoretical approaches into a unified framework from the perspective of institutions/organizations. There have been some previous efforts toward developing an integrated framework that would go beyond traditional disciplinary and interdisciplinary approaches and explain economic problems more realistically and holistically. For example, Caporaso and Levine (1992) developed a political economy framework integrating economics, politics and their interactions. Their framework provides a novel approach of understanding how politics and economics are connected to each other based on the premise that both disciplines have their own distinctive methodology of systematic inquiry. Chang (2002) criticizes neoliberalism (the currently dominant paradigm shaping economic policies around the world) for its failure to properly account for the roles of institutions and the state. He proposed an institutionalists' political economy as an alternative to neoliberal approach to political economy. His model highlights the limitations of the neoliberal conception of the market and the state.

The rest of the paper is organized as follows. The next section describes how institutional economics has evolved over the last decades. It depicts the relationship between institutions and organizations and the role of transaction costs in determining the performance of national economy and the efficiency of individual organizations (firm). The third section then develops an institutional political economy framework integrating firms (management), markets (economics), and states (political science and international relations). The fourth section presents an application of the institutional political economy framework developed earlier in this paper to provide an explanation of the nature of the factors determining the pattern of agricultural trade.

2. Institutions, Organizations (Institutional Arrangements), and Transaction Costs

The terms of institutions, institutional arrangements, or organizations are often used in the literature with ambiguities and confusions (Menard, 1995). This section delineates each of them and clarifies their relationships. North (1986, p 231) describes institutions broadly as

> "Institutions are regularities in repetitive interactions among individuals. They provide a framework within which people have some confidence as to how outcomes will be determined. They not only limit the range of choice in individual interaction, but they dampen the consequences of relative price changes. Institutions are not persons, they are customs and rules that provide a set of incentives and disincentives for individuals. They entail enforcement either of the self-enforcing variety, through codes of behavior, or by third party policing and monitoring. Because ultimately a third party must always involve the state as the source of coercion, a theory of institutions also inevitably involves an analysis of the political structure of a society and the degree to which that political structure provides a framework of effective enforcement."

The depiction above implies that institutional analysis of economic problems should be of both economic and political in nature. North (1990) defines institutions later more succinctly as, "humanly devised constraints that structure human interaction", which became an inspiring frame for facilitating new ways of thinking about the role of institutions in determining economic outcomes. He conceives institutions as consisting of formal rules (constitutions, statute and

common law, and regulations), informal rules (conventions, moral rules, social norms, values, culture), and the enforcement characteristics of each. The primary role of institutions is to lay the groundwork for competition and cooperation in an economy, thereby either facilitating or deterring interactions among individuals. Efficient institutions would protect private property rights; reduce the costs associated with measuring the values of the attributes of goods and services or the performance of individuals; policing and enforcing agreements; reduce opportunistic behavior; and enhance trust between individuals. Institutions therefore may reduce uncertainty in terms of the payoffs (benefits and costs) associated with an economic activity. Overall, institutions shape the incentive/reward/penalty structure and enforcement mechanisms for an economy and determine the way the economy operates through time.

Subsequently, institutions create incentives for individual members of the economy to form organizations so that they can take advantage of the opportunities opened up by the institutional environment. Arrow (1970) defines organizations as "structured groups of individuals seeking to achieve some common goals. Davis and North (1971) make a distinction between institutional environment and institutional arrangements; the former being analogous to institutions as defined earlier and the latter being analogous to organizations. As institutions provide structure for organizations to interact, organizations do so for individuals within each organization to interact. In today's world, there are a wide variety of different organizations including political (political parties, regulatory agency), economic (firms, trade unions, cooperatives), social (churches, athletic association), and educational nature of characteristics.

This paper develops an eclectic institutional political economy framework involving the three principal institutional arrangements of the state, the market, and the firm. The state is a special form of political organization. It plays a pivotal role in creating formal institutions (e.g.,

constitution, legal system, regulation) from which markets and firms would arise. The state then functions as an organization in charge of providing and changing rules/regulation within the constitutional framework. In a democratic country, the state represents the executive branch along with independent judiciary and legislative branches. The state would emerge under a certain institutional environments (e.g., culture, norms, tradition) with the first state surfaced about 10,000 years ago when the dominant form of economic activities made a transition from gathering and hunting to settled agriculture (North, 1981). While the form of the state varied widely over time and across regions, the state in the early years was to provide rules to order internal structure with the coercive authority to enforce the rules and to compete with other states. North (1981) defines a state as "an organization with a comparative advantage in violence, extending over a geographic area whose boundaries are determined by its power to tax constituents." North (1981, pp 20-32) identifies two theories of the state. First, the neoclassical theory of the state is represented by the contract theory of the state with the state functioning as a social planner attempting to maximize societal economic welfare. Second, the predatory/exploitation theory views the state as extracting income from the rest of the constituents to serve the interests of the ruling/elite group or class. Under this view, the constitution would be designed to serve the interests of the rulers and perform the following three roles: "specify a pattern of wealth and income distribution; specify a system of protection in a universe of competing states; and lay the framework for a system of operating rules to reduce transaction costs in the economic sector." The state plays an essential role in bringing about political, economic and social order. While the state may take various forms, their common goal should be to supply a certain level of public goods and to raise enough taxes for that purpose.

Firms refer to profit-seeking business organizations producing goods and services: some goods and services are produced for consumers as the end-users; others are produced as intermediate goods/services that would be used as inputs for other goods/services. That is, some firms deal with consumers as the end-users of their goods/services, while other firms supply their goods/services to firms further down in the supply chain of a good. The market is a pricing mechanism with two types: (i) linking the firms producing final goods/services to consumers (consumer markets), and (ii) linking upstream and downstream firms within the vertical supply chain for a good (business-to-business markets). In addition to the option of procuring inputs from the market (i.e., from the firms producing the inputs they need), the downstream firms have the option of producing necessary inputs or intermediate goods/services in-house. Even the firms in the most upstream stage in a supply chain (e.g., farm producers) require inputs such as labor, capital, and land, which they may decide to own permanently or procure from the market as needed on a daily, weekly or monthly basis, or develop long-term contracts with the owners of the inputs. Firms' decision of whether or not to use the market would depend upon the size of tangible and intangible costs associated with the market transaction, known as "transaction costs (which will be addressed in detail shortly)." In brief, all business firms face the important decision of whether to use or bypass the market in the process of producing their goods/services. If firms decide to use the market (decides to procure inputs from upstream firms), the role of the market relative to firms would grow in allocating scarce resources in an economy. If firms decide to produce inputs within themselves or own labor/capital/land permanently, they are bypassing the market and the role of the firm relative to the market would expand in an economy.

Indeed, the firm and the market represent two distinctive organizations that are in competition with each other for greater dominance in allocating scarce resources in an economy. Such a conception of the linkage between the firm and the market is originally due to Coase (1937) and on top of our conventional understanding that firms simply constitute one part of the two-sided market with consumers filling the other part of the market. The market in the conventional frame is a mechanism allocating scarce resources across different industries and even across different countries based on price signals generated from competitive markets consisting of sellers and buyers pursuing self-interest with property rights clearly assigned and protected. Insofar as the market is competitive and economic agents are rational, it tends to possess two properties: (i) it would achieve efficiency in terms of forcing sellers to use the least amounts of inputs possible in producing a given unit of good; and (ii) it has a self-correcting mechanism (i.e., it is an autonomous sphere that can stand alone independent from the state). There are confusions about whether the market is an institution or organization. Given that institutions define the context in which goods and services are produced or in which buyers and sellers interact, the market can be considered a specific institutional arrangement. Menard (1995) indicates that the market has both the characteristics of institutions and organizations. The individual members of an organization may have their own objectives, which may be in conflict with the common goal.

The discussion thus far shows that institutions and organizations play fundamental roles in the operation of national economies. The often-overlooked fact is that real resources are required in order to create and operate them and coerce obedience to their rules. Such costs known as “transaction costs” play a critical role when using institutions/organizations as an

analytical framework in explaining economic performance and change. North (1990) describes the nature of transaction costs,

> "The costliness of information is the key to the costs of transacting, which consists of the costs of measuring the valuable attributes of what is being exchanged and the costs of protecting rights and policing and enforcing agreements. These measurement and enforcement costs are the sources of social, political, and economic institutions."

As such, transaction costs represent the costs of making exchanges to be perceived as feasible and beneficial by each participant in a transaction and making transactions to occur. Transaction costs-free economy (as envisioned in neoclassical economics) is as unrealistic as the physical world without friction. Hence, the total costs of production in a society include the costs of transforming the physical attributes of a good and the costs of transacting (defining, protecting, and enforcing the property rights to goods). The costs of transformation are borne entirely by the private party while the costs of transacting are institutional costs borne in part by the society. Overall, the notion of transaction costs by North plays a critical role in dictating the ease with which markets operate and in determining the performance of an economy. An economy with institutions that lowers the costs of transacting should become wealthier than economies with institutions resulting in high transaction costs. In fact, transaction costs are low in most developed countries indicating that they have efficient institutions. In other countries, transaction costs are too high, preventing markets from emerging and specialization and division of labor to advance.

The size of the transacting sector tends to grow as an economy undergoes structural changes. It has grown in the US over the last century. Wallis and North (1986) estimated that the transaction sector in the US economy accounted for about 45 percent of GNP in the 1970s. North (1990) indicates that formal and informal institutions lowering the costs of transacting in economic and political markets are the key to improving economic prosperity. Relative to

economic markets, he notes that it is much more likely to have inefficient institutions in political markets given that it is hardly straightforward to measure what is being exchanged in political markets and therefore to enforce agreements.

There are transaction costs at the individual firm level in addition to direct production costs. The importance of transaction costs at the organization (firm) level was first recognized by Coase (1937). His seminal paper entitled "The Nature of the Firm" identifies the role of transaction costs at the firm level in the process of procuring inputs for production from the market. Capturing the costs that may arise when using the market in procuring inputs, transaction costs in this case refer to such costs as searching/accessing/collecting information, or the costs associated with developing contracts. When transaction costs are large relative to the benefits of using the market, the size of the organization (firm) would grow by internalizing the transactions. Hence, the magnitude of costs associated with relying on the market (using input suppliers) is an important determinant of the vertical boundary of the firm.

In summary, the notion of transaction costs is essential in institutional economics that involves the firm, the market, the state, and foreign states as the major players in modern economies. Transaction costs are present at all levels including individual organization, national, and global levels. Referring to the costs of using the market, transaction costs at the firm level differ from those by North at the national economy and political levels. In addition, Northian transaction costs are closely associated with the notion of social capital. Transaction costs by Coase and Williamson are at an individual organization level and concerned with the efficiency of the firm with the firm understood as the governance structure presiding over the choice among the hierarchy, the market, and the hybrid (contract). His later paper entitled "The Problems of Social Costs" recognizes transaction costs arising when dealing with externalities. Northian

informal institutions are equivalent to the concept of social capital that has gained traction in social sciences in the 1990s as a factor important in promoting economic development by reducing transaction costs (Putnam, 1996; Fukuyama, 2005)

The next question is how institutions emerge. At one extreme, institutions are said to arise "spontaneously" (as a spontaneous order) on the basis of the self-interest of individuals. In such cases, they may organize themselves without any agreement, without any legislative compulsion, even without any consideration of public interest. Hayek (1973, p 5) uses the term evolutionary rationalism to describe the situation. At another extreme, institutions may be the product of deliberate design. Some authority, acting with complete rationality, may be able to introduce a particular institutional structure that it deems appropriate. Hayek called it as the case of "made order" as a opposed to a "spontaneous" or "grown order". Williamson (1991, 3) speaks of the respective situations as "intentional" and "spontaneous" governance. Coleman (1991, 8) uses the terms "constructed" and spontaneous social organization. In general, political power would determine the types of institutions. In a totalitarian nation, the ruler will shape institutions that may be biased toward promoting the interests of the ruling class. The New Institutional Economics view is that institutions emerge in order to minimize such transaction costs, hence it is an extension of neoclassical economics, which assumes zero transaction costs. The next question is how institutions change.

3. Why do countries have different institutions?

The important question from the economics of development perspective is why countries have different institutions and why least developed and developing countries do not adopt better institutions. Acemoglu (2009) presents alternative explanations for the above question. They

present different equilibrium sets of economic institutions in a particular country and the comparative statics helps to explain why economic institutions differ across countries. The first explanation is the efficient institutions view (the Political Coase Theorem). According to this view, firms emerged as an efficient response to contractual problems that plague markets such as ex-post opportunism that can arise when individuals make relationship specific investments. Feudal economic institutions were an efficient contract between serfs and lords. The lords provided security/protection (a public good) in exchange for the labor of the serfs on their lands (North and Thomas, 1973). In this view, without a modern fiscal system this was an efficient way to organize this exchange. Political power is irrelevant for economic efficiency and matters for income distribution. Because of an inherent commitment problem, the political coase theorem is inapplicable. The second explanation is the ideology view. It views that economic institutions differ across countries because of ideological differences. According to this view, societies may choose different economic institutions, with very different implications because they disagree about what would be good for the society. In this explanation, there is sufficient uncertainty about the right economic institutions so that well-meaning political actors differ about what's good for their own people. The third explanation is the incidental institutions' view. The incidental view considers institutions as the by-product or unintended consequence of other social interactions or historical accidents. In other words, historical accidents at critical junctures determine institutions, and these institutions persist for a long time. The fourth explanation is the social conflict view. According to this view, economic (and political) institutions are not always chosen by the whole society (and not for the benefit of the whole society), but by the groups that control political power at the time (perhaps as a result of conflict with other groups). These groups will choose the economic institutions that maximize their own

rents, and the economic institutions that result may not coincide with those that maximize local surplus, wealth, or income. The first systematic development of this point of view in the economics literature is North (1981), who argued that agents who controlled the state should be modeled as self-interested. He then argued that the set of property rights that they would choose for society would be those that maximized their payoff and because of 'transaction costs', these would not necessarily be the set that maximized social welfare.

4. Institutional Political Economy of Firms, Markets, and States

The paper posits that the economy consists of institution environments (constitutions, laws, norms, customs, culture) and institutional arrangements/organizations (the state, the market, the firm). A particular institutional environment would give rise to a specific configuration about the roles of the firm, the market, the state, and foreign states. Hence, their relative roles would vary across different institutional environments. Whereas firms and states represent tangible/concrete entities making actual decisions concerning resource allocations to achieve their respective goals, the market is an abstract/invisible institution in which price movements would guide market participants' decisions.[1]

[1] There are three other types of units/organizations that are pertinent in discussing resource allocation decision-makings: households, civil society, and community. Households produce nonmarket goods and services (e.g., cooked meals, educating children) and their decisions of how to allocate household incomes (and time) among competing needs within the household is an important topic of study. Further, civil society (referring to the sphere representing social movements, NGOs, and watchdogs standing between the firm, the market, and the state) exerts increasingly significant influences on decision-making processes of the firm, the market, the state, and foreign states. While used in various different contexts, the institution named "community" as a decision-making unit for resource allocations takes a central place in Elinor Ostrom's study of economic governance for common property resources such as forests, fisheries, irrigation systems, or grazing lands. She recognizes the community as an institutional arrangement alternative to government regulation (the state) or privatization (the firm) for efficient use of common property resources. The three institutions constitutes important components of economics, political economy, politics, or broadly social sciences and deserve a close look.

The first step in the development of the holistic institutional political economy framework in this study is to conceive that the firm, the market, the state, and foreign states can be analyzed by diverse methodologies including those of management, economics, political science, and international relations. For example, study of firms can be approached not only from management but also from economics, political science, and International Relations (IR); study of markets can be approached not only from economics but also from management, political science, and International Relations; the state can be studied not only from political science but also from management, economics, and International Relations; inter-state relations can be studied not only from International Relations but also by using the methods of management, economics, and political science. The conception views the relationship between management and economics not simply as the interaction between the firm and the market but more appropriately as the firm susceptible to analysis by economic methods and the market susceptible to analysis by management methods (if any). Further, the relationship between economics and politics (political economy) is viewed not simply as a field studying interactions between economic and political affairs, but also poses politics as susceptible to analysis by economic methods and the market (economics) as susceptible to analysis by political theories/methods (Caporaso and Levine, 1992); the relationship between economics and International Relations is viewed not simply as the interaction between the market and foreign states but more exactly as the market susceptible to analysis by IR theories/methods and international relations susceptible to analysis by economics methods. Among these various relationships between distinctive disciplines, the applications of economics to the firm, the state, and foreign states have been most visible and fertile in academics as have been shown in the rise public choice school, positive political economy, economics of firms, and economic liberalism.

Yet, the applications of methods of management, politics, and International Relations may be pertinent depending on the nature of economic/political situations.

Table 1 compares the main characteristics of the three institutions in four dimensions including (i) the nature/goals, (ii) organizational properties, (iii) forces, and (iv) territoriality. The nature of the firm, from its inception, is structurally predestined to create, increase, and sustain profit, and enhance its performance in the stock market (for publicly traded corporations). To achieve them, the firm pursues innovations in technology and organization, endeavors to adapt to changing political and economic environments and consumer preferences. The market is an institution structurally predisposed to achieve productive/technical (low costs: minimum efforts and maximum outputs) and allocative efficiencies (maximizing societal welfare), thereby being conducive to maximizing societal wealth given the resource and technological constraints in an economy. In general, unfettered competition between firms, between firms and consumers, and between consumers would ensure that technically inferior firms would be driven out of business and achieve allocative efficiency. While the liberals and the Marxists share the above story about the market, they sharply diverge when it comes to the long-run outcomes of such market processes.

With regard to foreign states, the state would pursue shared economic prosperity and peace (the liberals); pursue national interests (mercantilism, nationalism, statism, and realism); place a dominant emphasis on the notion of an egalitarian world (cosmopolitanism). The neoliberal institutionalists highlight the role of international institutions (the UN, the WTO, the World Bank, the IMF) in inducing countries to resolve conflicts of interests and collaborate for mutual gains. They posit that such international institutions reduce transaction costs associated with transnational collaborations. Marxists believe that international institutions serve the

interests of more powerful countries at the costs of weak countries. The neo-Marxists (imperialism; dependency theory; world-systems approach) believe that the rich countries in the West constitute the core of the world economic system, while the South constituting of the peripheral countries. The core states exploit the peripheral states, causing the latter to undergo a permanent cycle of development of underdevelopment.

Whereas the above goals and inherent nature of the firm and the market are accepted by most social science programs, it is not straightforward to define what the nature/goal of the state is. The goal of the state differs across different schools of thought in economics, political science, and political economy. According to neoclassical economics, the state is an institution correcting market failures (caused by externalities, free-riders associated with public goods, and imperfect competition) and providing institutional/legal frameworks for protecting private property rights and setting basic rules and regulations for the market and firms. In general, the liberal theory assumes that the state serves common/public interest in public affairs as an unprejudiced organization harmonizing interests across different constituent groups. The libertarian theory (public choice school in economics) posits that the state consists of politicians and bureaucrats who have agenda for their own interests rather than the interests of voters or national interests. The Marxists assumes that the state serves the interests of the capitalists. Some development scholars posit that the state in some developing countries is an authoritarian developmental state dedicated to accelerating industrialization and modernization to catch up with advanced economies of the West. Positive political economy (non-ideological) poses the state as an entity that would be resulting from the processes of conflicts among various constituent groups (interest groups) within the country, without necessarily presuming about the resulting outcomes of such processes. According to this view, the state does not have its own

agenda or autonomy, but a passive entity subject to various forces within its national economic system.

The three decision-making units differ substantially in their organizational properties. For example, the market is based on voluntary exchanges between buyers and sellers, whereas the firm and the state uses authority and power (formal and informal) associated with the hierarchy of the firm organization in the process of making resource-allocating decisions internally. The forces upholding the three institutions differ markedly, too. Resource allocation by the market is guided by the invisible hand referring to price movements and subsequent adjustments in sellers and buyers' behaviors. This process is highly impersonal: i.e., changes in incomes among laborers, capitalists, and landowners resulting from the market adjustments due to price changes are not the major concerns of market economists, but the resulting aggregate quantities (decreases or increases) and new prices are the utmost interests. The firm relies on leadership and the fiats of leaders within its organization, while the state is subject to bureaucratic practices and political value-dependent (e.g., democratic; autocratic; socialistic; monarchic) rules in determining the allocation of resources. Concerning the role of territoriality, the firm and the market may or may not be bound by national borders in their resource-allocation decision, although the globalization trend in the late 20th century reduced the barriers among national borders to a certain extent. In other words, the firm and the market do not need to make resource allocation decisions necessarily within its national boundaries. In contrast, the state's decisions have a lot to do with territoriality.

Table 3 shows various interdisciplinary theories resulting from the applications of the methodologies of management, economics, politics, and IR to studying the firm, the market, the state and foreign states, giving rise to sixteen cells representing disciplinary and interdisciplinary

theories. The horizontal row represents the four different decision-making units, while the vertical column depicting distinctive methods of inquiry associated with management, economics, politics, and International Relations. Therefore, the three cells in the first row represent interdisciplinary academic fields using the methods of management; the next three cells in the second row referring to academic fields using the methods of economics; and the third row referring to academic fields using the methods of politics; and the last row showing academic fields using the methods of International Relations. Cell 1 represents conventional business management/school, although one can question whether there is a set of distinctive methods of inquiry in business management given that it embraces theories and methods from other disciplines such as economics, sociology, or psychology. Cell 2 represents the field of inquiry applying management theories or methods to economics. Michael Porter's competitive strategies, although rooted in industrial organization economics (structure-conduct-performance paradigm), can be considered as a case of using the methods of management (private profit-seeking) to provide new theories/explanations about firm behaviors/market structure/profitability (a major component of economic theories) in terms of managing competition from rivals, new entrants, input suppliers, and substitutes. In general, the field of strategic management has made substantial contributions to motivating economics/economists to go beyond their traditional explanations of the firm, thereby prompting them to rewrite the firm theory and to better reflect the real world firms. Cell 3 represents the application of management methods to the state. The methods of management, for example, in terms of measuring organizational efficiency or performances constitute part of the principles of public administration. Cell 4 shows the application of management methods to foreign states/firms (international affairs), giving rise to international business/marketing.

Cell 5 represents the application of economics methods to business management (firm behavior). While neoclassical economics provided the initial conceptualization of the business firm as a production unit converting inputs to outputs, the two fields of economics and management have developed their own approaches quite independently from each other until the 1980s. The neoclassical approach treats the firm as a black box in the process of using inputs (labor, capital, and land) to produce outputs and assuming competitive markets for both outputs and inputs. It was not interested in knowing the details of what occurs inside the firm for two reasons including (i) competitive markets in output and inputs makes it straightforward to predict the firm behavior and (ii) its emphasis on market performances of the firms as an industry aggregate in terms of societal welfare (based on individual preferences) and efficiency. The approach was appropriate for small firms operating under competitive market structures (large number of firms). However, as the size of the firms grows in the 20th century, they got to control more and more resources under their hierarchical command, suggesting that their resource allocation decisions are not inconsequential any more but are likely to have significant ramifications for the entire industry or the economy. Such a change prompted economists to pay increasing attention to what happens inside the firm, giving birth to new fields called Economics of the Firm, Managerial Economics, or Economics of Strategy. As noted earlier, Michael Porter played an important role in laying the foundation for greater interaction between economics and management by using economic theories (industrial organization) to design business strategies.

Cell 6 denotes traditional economics. Cell 7 depicts the application of economics methods to the state politics. As a branch of the field of political economy, the public choice theory belongs to this category. It presumes that politics is inherently economic and all participants in the state politics behave to serve their own interests. The optimization concepts

(e.g., self-interest seeking, utility maximization, profit maximization, cost minimization) in neoclassical economics are readily applicable to politicians' and bureaucrats' behaviors. Cell 8 shows the application of economic methods to international economic and political relations. It would encompass international economics (comparative advantage theory; infant industry protection; strategic trade theory) and International Political Economy theories such as Mercantilism, Protectionism, Nationalism. Cell 9 shows the application of politics methods to business management. The role of power and authority distribution in hierarchical business organizations is studies. Cell 10 denotes the application of politics methods to the market. As a branch of the field of political economy, it emphasizes the role of political/market power in determining market outcomes. It presumes that the market is a political construct, and therefore economics is political. Cell 11 shows the traditional political science. Cell 12 represents part of International Relations (IR) focused on foreign policies.

Cell 13 shows the application of IR to business management as may be reflected in the study of transnational corporations (TNCs) and issues associated with globalization. Cell 14 shows the application of IR to the market, giving rise to IPE theories such as statism, realism, NeoMarxism, Imperialism, World-Systems Approach, and Dependency theory. Cell 15 shows International Relations focusing on the analysis of the influences of foreign states on domestic politics/policies. Cell 16 represents traditional international relations.

Table 2 extends the above structure of social sciences by incorporating the society as a unit within an economy and sociology as the discipline primarily interested in studying the society. The society is obviously not a decision-making unit responsible for resource allocations, but it represents an entity that is inherently influenced in a variety of ways by the resource allocation decisions made by the firm, the market, the state, and foreign states. Sociology is an

academic discipline studying the behavior of various social organizations (groups of individuals) in a state. When sociology is applied to the firm, it gives rise to organizational theory of the firm. When sociology is applied to the market, it gave rise to economic sociology, representing a field of study addressing economic questions from the perspective of sociology. The field is particularly interested in examining the social consequences and ramifications of market/economic processes and outcomes. Karl Polanyi's book titled "The Great Transformation: Political and Economic Origins of Our Time" is considered the origin of economic sociology. Polanyi paved the way for sociologists to study the relationship between the economy/market and society by providing novel concepts such as "the double movement", "market society", and "embeddedness." Polanyi depicted economic liberals as trying to construct markets in ways that they would have a self-regulating mechanism, rendering it unnecessary for the government to intervene in the market. In such a market-dominated society, traditional institutions (family, kinship) and other social relations are destroyed, hence, the society resist the expansion of the market and attempts to protect it from the market forces. He called the process of market expansion and societal resistance to it as "the double movement." He suggested the embedded market economy as a compromised notion of an ideal society in which market forces are only one part of a larger society. That is, the embedded market economy represents an acceptable balance between the market and society. When economics is applied to the society, it resulted in Gary Becker's various models predicting family-related issues (e.g., marriage, number of children), addictive (drug, alcohol) behavior, or number of schooling based on utility maximization models. It uses economic methodology to analyze human beings' social behavior. When sociology is applied to the state, it gives rise to political sociology.

5. Case Study: Application to Explaining Agricultural Trade

Agricultural trade has been one of the most contentious issues in international economic affairs since World War II. While the postwar leadership (Bretton Woods System) was in pursuit of establishing a liberal economic order, agriculture was allowed to be an exception, giving rise to an unchecked growth of agricultural protection in developed countries. The Uruguay Round brought a limited success in placing agricultural trade under a common set of trade rules for all WTO member countries as contained in the Agreements on Agriculture (AoA). The Doha Round is in a stalemate after more than 15 years since its launching in 2001, failing to advance the AoA and leaving agricultural protectionism/exceptionalism virtually intact. Today, agriculture accounts for less than 3 percent of the value of global outputs and agricultural trade represents about 6 percent of total merchandise trade compared to around 10 – 12 percent in the 1990s and about 18 percent in the 1970s (figures 1 and 2).[2] The decline in the share of agricultural trade can be attributed to (1) increases in the share of global consumers' expenditure on goods and services from the manufacturing and service sectors, and (2) the persistence of agricultural exceptionalism/protectionism as represented by high tariffs and nontariff barriers in the agricultural sector compared to the considerable reductions in trade barriers for the manufacturing sector. The increase in the share of global consumers' expenditure on manufacturing goods and services is an inevitable feature that arises as economies undergo transformations from agriculture-driven economies to manufacturing and service-dominated economies, while the high barriers to trade in agriculture represents an artificial feature

[2] Within the agricultural sector, the share of the trade of bulk commodities has diminished from over 60 percent in the 1960s to about 35 percent in the 2000s, whereas the share of the trade of processed food products has increased proportionally over the same period of time (figures 3 and 4).

associated with agricultural protectionism in the 20th century and the failure of the WTO Doha Round in reducing it.

This section presents an analysis of the role the state plays in determining the pattern and international competitiveness of agricultural trade. The analysis is intended to analytically show that the state should receive substantial attention and market-only- based models (theory of comparative advantage) are not appropriate for explaining agricultural trade. The analysis is conducted based on a comparison with the manufacturing sector. Before probing the role of the state in agricultural trade in depth, two issues of analytic importance are in order. The first issue concerns the question of what is the unit of analysis when researching agricultural trade. Economic theory of trade is based on the fiction that states trade with each other (i.e., national governments make international transactions with each other), indicating that the unit of analysis of international trade is the state. In practice, international trade, however, involves economic transactions between private firms (importers and exporters) in different countries, although state trading represents one form of international trade in the agricultural sector at the present time. The second issue is about what commodities/products are included in agricultural trade. While agricultural trade in general encompasses both raw food and nonfood commodities and processed/manufactured food products, the analysis in this paper identifies agricultural trade in a narrower scope that includes only international trade in raw unprocessed agricultural commodities such as grains/oilseeds (rice, wheat, corn, soybean, barley, oats, rye, feed grains, coarse grains such as millet and sorghum). Processed/manufactured food products would then belong to the manufacturing sector.

With the two caveats in mind, we examine below how the agricultural and manufacturing sectors differ regarding two questions of importance in analyzing the effects of international

trade and trade liberalization: (i) who makes decisions about the international transactions and (ii) what determines international competitiveness of the products traded.[3] In the case of the trading of manufactured goods, it is the private business firms that would identify markets; decide whether or not to enter international markets depending on the international competitiveness of their products; and perform all transactions needed for exporting their products. Firm level strategies (e.g., investment, R&D) are therefore important in determining the trade patterns of the manufacturing sector in addition to natural comparative advantages inherent at the state level.

In the case of the agricultural sector, agricultural commodities (e.g., grains, oilseeds, feed grains) are produced by farmers, assembled by grain handlers or cooperatives, and exported internationally by trading firms, which are large multinational corporations controlling procuring, selling, financing, and delivering to importing firms or state trading agencies around the world. That is to say, farmers are neither the ones who make decisions whether or not to enter international markets nor are the ones who invest in R&D and attempt to develop new technologies for the purpose of enhancing their international competitiveness. Agricultural production efficiency/technology is determined primarily by public investments in agricultural technology, extension services, and rural/farming infrastructure in addition to natural comparative advantage.[4] Farm producers simply decide whether or not to adopt new

[3] The term international competitiveness is used differently from comparative advantage. While comparative advantage is a concept defined at the country level, international competitiveness is defined at the firm level, indicating that, depending on the effectiveness of long-term strategies, individual firms may be able to overcome comparative disadvantages and export their products to foreign countries.

[4] In addition, input supply business firms (seed; machine; fertilizers; herbicides; pesticides) are in a position to influence agricultural production technology. In theory, if the input supply firms operate globally, farm producers around the world should have equal access to new technologies provided by the input supply firms.

technologies. Strategies and public policies at the state level are therefore pertinent in determining the pattern of agricultural trade along with natural comparative advantage.

In short, international competitiveness of firms is determined basically at the firm level for the manufacturing sector (assuming that institutional and technological environments at the state level remain constant) and at the state level for the agricultural sector. Reducing barriers to trade in the manufacturing sector are likely to open up exporting opportunities for a greater number of firms around the world, thereby promoting competition in international markets and compelling them to become more lean and better organized; reduce costs; improve the quality of their products; adopt new technologies; or invest in R&D to develop new technologies so as to outcompete rivals, secure greater market shares, and earn higher profits. The added competition among firms in international markets would benefit consumers around the world with potentially lower prices, higher quality of products, and/or greater varieties of products. The role of the state is merely to ensure that the firms follow environmental and labor regulations that would meet international standards, thereby preventing negative externalities.

For the agricultural sector, the state plays a significant role in determining the effects of trade liberalization. Reducing barriers to trade in the agricultural sector will first send signals to trading corporations, grain handlers, and governments. Then, the signals will be transmitted to farmers through market and nonmarket (e.g., public extension services) channels. Based on the indirect (transmitted) signals, farmers may or may not alter their decisions regarding what to produce (crop mix), how much (acreage), and how (technology adoption). In countries with comparative advantage in agricultural production (natural resource endowments favorable to agriculture), farmers are likely to receive signals to expand their production; and farmers in countries with comparative disadvantage in agricultural production would receive signals to

reduce their production. The adjustments in production between countries based on natural comparative advantages would foster a specialized system of agricultural production at the global scale. Yet, states' long-term strategic investment in agriculture (compatible with international trade rules) may promote technological innovations, reduce costs or improve productivity, potentially enhancing international competitiveness of their agricultural commodities, or reducing the need for imports or producing surpluses and exporting them. Hence, the entities attempting to develop newer technologies are not farm producers but national governments (and input supply business corporations if they determine that doing so fits their business strategies).

The point is that whereas individual firms are in a position to determine their competitiveness in international trade in the manufacturing sector, it is the state that plays the remaining role in determining the competitiveness of agricultural raw commodities once the endowments of natural resources and initial labor productivity shapes natural comparative advantage and trade patterns.

6. Implications

The paper attempts to develop an institutional political economy framework integrating the firm, the market, the state, and foreign states. The framework transcends disciplinary and interdisciplinary approaches and considers all the institutional arrangements listed above as potentially active players in determining economic outcomes. The paper then analyzes the case of agricultural trade and demonstrates that the state, the market, and the firm are all important entities that deserve attention when researchers choose analytical model (s) for their study of agricultural trade.

Specifically, the paper shows that it is the state that would determine international competitiveness of agricultural commodities (unprocessed) and the pattern of agricultural trade once natural resources and factor endowments shape comparative advantage. That is in contrast to the manufacturing sector in which firm level strategies would be the major factor determining international competitiveness of manufactured products. This difference implies that free trade in the manufacturing sector would bring about economic gains by promoting competition and creative destruction processes (entrepreneurial innovations) among firms. But there may be no such gains in the agricultural sector, because farmers do neither face greater competition nor undergo creative destruction processes among themselves once international competitiveness of agricultural commodities are determined by comparative advantages at the national level. In other words, freer trade offers little additional incentive for individual farm producers to reduce costs or adopt new technologies (or farmers have no leverages available to them to improve their international competitiveness) for the purpose of enhancing export opportunities. Yet, when a state has the desire to become an exporter in some agricultural commodities or strengthen domestic production capacity, it can craft long-term strategies; make investments in strengthening agricultural infrastructure or in developing new technologies (in cooperation with private sectors); reduce costs; and produce commodities of higher quality, thereby potentially improving international competitiveness. Hence, what goals states have in relation to their agriculture would determine the international competitiveness of agricultural commodities and the pattern of agricultural trade in the long-term.

The implication of this study for low income countries is that the state should play a proactive role in using agricultural trade as a strategy of advancing agricultural/economic development particularly in consideration of the strong evidence that agricultural growth is

indispensable for overall economic growth (Gollin, Pabente, and Rogerson, 2002; Tiffin and Irz, 2006; Self and Grabowski, 2007). The state should make major investments in the initial stages of economic development for building agricultural production capacity (through public investments in R&D and extension services) and constructing/fostering the markets for agricultural inputs (credits, risks, information, transportation, managerial). The directions suggested by policy paradigms such as laissez-faire, free trade, market fundamentalism, neoliberalism, or the Washington Consensus are not very well suited for agricultural development/markets. Even agricultural production and markets in developed countries would not be able to maintain farm/rural economic stability or vitality without public actions (state interventions) in areas like dealing with uncertainty, risks, safety nets, infrastructure, technical assistance, information provision, and other extension services. Advancing agricultural development in low income countries should be a steady and sustained process of building public institutions for provisioning physical infrastructure and assisting markets to rise and function efficiently, which is exactly what developed countries have done to develop their agriculture (Chang, 2009). Markets are not self-rising, self-sustaining, or self-correcting especially for agricultural commodities. Market failures (imperfect markets or missing markets) arising in the process of agricultural development should not be left unaddressed because of the fear of government failures. Developing countries may experience government failures, but they would experience institutional learning, too. The successful experiences of the developmental state model in East Asia should prove to be a good example showing that such learning do indeed take place in practice.

References

Acemoglu, Daron, and Jaume Ventura. 2002. "The World Income Distribution." *Quarterly Journal of Economics 117*: 659-694.

Acemoglu, D. S. Johnson, and J. Robinson. 2005. The Rise of Europe: Atlantic Trade, Institutional Change, and Economic Growth. *American Economic Review* 95 (3): 546-579.

Aghion, Philippe, Christopher Harris, Peter Howitt, and John Vickers. 2001. "Competition, Imitation and Growth with Step-by-step Innovation." *Review of Economic Studies 68*: 467-492.

Athukorala, Prema-chandra. 2011. "Production Networks and Trade Patterns in East Asia: Regionalization or Globalization?" *Asian Economic Papers 10*: 65-95.

Baffes, J. and H. de Gorter. Experience with Decoupling Agricultural Support. In *Global Agricultural Trade and Developing Countries*. Ed by M. Ataman Aksoy and J. C. Begin. The World Bank. Washington D.C. 2005.

Bernhofen, Daniel M., and John C. Brown. 2005. "An Empirical Assessment of the Comparative Advantage Gains from Trade: Evidence from Japan." *American Economic Review 95*: 208-225.

Birdsall, Nancy, Augusto de la Torre, and Felipe Valencia Caicedo. 2010. "The Washington Consensus: Assessing a Damaged Brand." Working Paper 211. Washington DC: Center for Global Development.

Caporaso, J. A., and D. P. Levine. 1992. Theories of Political Economy. Cambridge University Press. New York, USA.

Chang, H. J. 2002. Breaking the mould: an institutionalist political economy alternative to the neo-liberal theory of the market and the state. *Cambridge Journal of Economics* 26: 539-559.

Chang, H. J. 2009. Rethinking public policy in agriculture: lessons from history, distant, and recent. *Journal of Peasant Studies* 36 (3):

Chang, Ha-joon. 2002. *Kicking Away the Ladder*. London, UK: Anthem Press.

Chang, Ha-joon. 2009. Rethinking Public Policy in Agriculture: Lessons from History, Distant, and Recent. *Journal of Peasant Studies*. 36 (3): 477-515.

Diao, Xinshen, A. Somwaru, and T. Roe. A Global Analysis of Agricultural Trade Reform in WTO Member Countries. Bulletin Number 01-1, Economic Development Center, Department of Applied Economics, Minneapolis. January 2001, University of Minnesota.

Easterly, William, and Ross Levine. 2001. "It's Not Factor Accumulation: Stylized Facts and Growth Model." *World Bank Economic Review 15*: 177–219.

Ferreira, Pedro C., and Jose L. Rossi. 2003. "New Evidence from Brazil on Trade Liberalization and Productivity Growth." *International Economic Review 44*: 1383-1405.

Gollin, Douglas, Stephen Parente and Richard. Rogerson. 2002. "The Role of Agriculture in Development." *American Economic Review 92*: 160-164.

Gonzalez, Carmen G. , Institutionalizing Inequality: The WTO Agreement on Agriculture, Food Security, and Developing Countries. *Columbia Journal of Environmental Law*, Vol. 27, p. 433, 2002. Available at SSRN: http://ssrn.com/abstract=987945

Gonzalez, C. G. Deconstructing the Mythology of Free Trade: Critical Reflections on Comparative Advantage. *Berkeley La Raza Law Journal* 65, Spring 2006.

Gore, Charles. 2000. "The Rise and Fall of the Washington Consensus as a Paradigm for Developing Countries." *World Development* 28: 780-804.

Grossman, Gene, and Anne O. Krueger. 1993. "Environmental Impacts of the North American Free Trade Agreement." In *The U.S.-Mexico Free Trade Agreement*, by P Garber, 13-56. Cambridge, MA: MIT Press.

Grossman, Gene, and Elhanan Helpman. 1991. *Innovation and Growth in the Global Economy*. Cambridge, MA: MIT Press.

Josling, T. E., F. H. Sanderson, and T. K. Warley. The Future of International Agricultural Relations: Issues in the GATT Negotiations. In *Agricultural Protectionism in the Industrialized World*. Ed by F. H. Sanderson. Resources for the Future, Washington D.C. 1990.

Keller, Wolfgang. 2000. "Do Trade Patterns and Technology Flows Affect Productivity Growth?" *World Bank Economic Review 14*: 17-47.

Keller, Wolfgang. 2004. "International Technology Diffusion." *Journal of Economic Literature XLII*: 752-782.

Krugman, Paul R. 1979. "Increasing returns, monopolistic competition, and international trade." *Journal of International Economics 9*: 469-479.

—. 1980. "Scale Economies, Product Differentiation, and the Pattern of Trade." *American Economic Review 70*: 950-959.

List, F. 1841. *The National System of Political Economy (English Edition, 1904).* London, UK: Longman

Markusen, James R. 1984. "Multinationals, Multiplant Economies, and the Gains from Trade." *Journal of International Economics 16*: 205-226.

—. 1981. "Trade and the Gains from Trade with Imperfect Competition." *Journal of International Economics 11*: 531-551.

McCalla, A. F. Protectionism in International Agricultural Trade. *Agricultural History* 43 (1969): 327-344.

North, Douglass C. 1994. "Economic Performance through Time." *American Economic Review 84*: 359-368.

North, D. C. 1989. Institutions and Economic Growth: A Historical Introduction. *World Development* 17 (9): 1319-1332.

North, D. C. 1979. A Framework for Analyzing the State in Economic History. *Explorations in Economic History*. 16: 249-259.

North, D. C. 1990. A Transaction Cost Theory of Politics. *Journal of Political Politics* 2 (4): 355-367.

OECD. Agricultural Support: How is It Measured and What Does it Mean? OECD, 2009.

OECD. Agricultural Policies in OECD Countries: At a Glance. OECD, 2010.

Pingali, P. Agriculture Renaissance: Making Agriculture for Development Work in the 21st Century. *Handbook of Agricultural Economics* Volume 4. 2010.

Rodrik, Dani. 2006. "Goodbye Washington Consensus, Hello Washington Confusion?" *Journal of Economic Literature 44*: 973-987.

Stiglitz, Joseph E. 1998a. "More Instruments and Broader Goals: Moving Toward the Post-Washington Consensus." *The WIDER Annual Lectures*. Helsinki, Finland: World Institute for Development Economics Research.

—. 1998b. "Towards a New paradigm for Development: Strategies, Policies, and Processes." *The Raul Prebisch Lectures.* Geneva, Switzerland: UNCTAD.

Stringer, R. Food Security in Developing Countries. Center for International Economic Studies (CIES), University of Adelaide. CIES Working Paper No. 11, 2000.

Williamson, John. 1990. "What Washington Means by Policy Reform." In John Williamson, ed., *Latin American Adjustment: How Much Has Happened?*, eds. John Williamson. Washington, DC. Institute for International Economics.

Table 1. Characteristics of the Firm, the Market, and the State as Resource Allocation Decision-Making Organizations

	The firm	The market	The state
Goals	Profit; innovation; adaptability; productive and organizational efficiency	Productive and allocative efficiency	National interest: public interest; ruling class's interest; harmonizing conflicting interests
Organizational Property	Hierarchy	Voluntary Exchange/Private Property Rights	Formal and informal Power; Authority
Forces Upholding Organizations	Visible hand; Leadership; fiat; Corporate culture	Price signals; Invisible hand; Impersonal	Constitution; Statute/Common Laws; Democratic Rules; Check/Balance (Executive/Legislative/Judiciary); Bureaucratic professionalism
National Border	No boundary	No boundary	Territoriality

Table 2. Interactions among the firm, the market, and the state.

		Resource Allocation Decision-Making Units		
		The Firm	The Market	The State
Disciplinary Methods	Management	**Business School** Management; Finance; Marketing; Accounting; Human Resources	Competitive Strategies: Strategic Management	Public Administration
	Economics	Economics analysis of the firm; Economics of the firm: New Institutional Economics; Schumpeterian economics.	**Economics:** Neoclassical Economics	Economic analysis of the state: positive political economy; public choice theory: Olson's collective action theory; Politics is economic; Classical Political Economy; Keynesian Economics; Neoliberalism
	Politics	Power and authority in business organizations	Power in the economy: Economics/market is political; States-centered political economy; Justice-centered political economy	**Political Science**

Table 3. Interactions among the firm, the market, the state, and foreign states

		Resource Allocation Decision-Making Units			
		The Firm	The Market	The State	Foreign states
Disciplinary Methods	Management	**Business School** Management; Finance; Marketing; Accounting; Human Resources	Competitive Strategies: Strategic Management	Public Administration Competitive Advantage of Nations	International Business; International Marketing; International Finance
	Economics	Economic analysis of the firm; Economics of the firm: New Institutional Economics; Schumpeterian economics; Evolutionary economics	**Economics:** Neoclassical Economics	Economic analysis of the state: Positive political economy; Public choice theory: Olson's collective action theory; Down's theory of voting; Politics is economic; Classical Political Economy; Keynesian Economics; Neoliberalism; New Institutional Economics	International Economics and IPE: international politics is economic; Liberal Comparative Advantage Theory; Mercantilism; Protectionism; Infant Industry Protection; Strategic Trade Theory; Open Economy Politics (OEP)
	Politics	Power and authority in business organizations	Power in the economy: Economics/market is political; States-centered political economy; Justice-centered political economy	**Political Science**	**International Relations**: the State's Foreign Policies
	International Relations	The rise of TNCs and globalization	International Economics and IPE; International economy is political; Statism; Realism	**International Relations**: Influences of foreign states on domestic politics/policies	**International Relations;** Liberalism; Statism; Realism; Neorealism; Constructivism

Table 4. Interactions among the firm, the market, the state, and foreign states: addition of the society

Disciplinary Methods	Resource Allocation Decision-Making Units				
	The Firm	The Market	The Society	The State	Foreign states
Management	**Business School** Management; Finance; Marketing; Accounting; Human Resources	Competitive Strategies: Strategic Management	Nonprofit Organization and NGOs Management	Public Administration Competitive Advantage of Nations	International Business; International Marketing; International Finance
Economics	Economics of Strategy; Economics of the firm: New Institutional Economics; Schumpeterian economics; Evolutionary economics	**Economics:** Neoclassical Economics	Economics of Social Issues; Gary Becker's Optimization Models	Economic analysis of the state: Positive political economy; Public choice theory: Olson's collective action theory; Down's theory of voting; Politics is economic; Classical Political Economy; Keynesian Economics; Neoliberalism; New Institutional Economics	International Economics and IPE: international politics is economic; Comparative Advantage Theory; Mercantilism; Protectionism; Infant Industry Protection; Strategic Trade Theory; Open Economy Politics (OEP)
Sociology	Organizational Theory	Economic Sociology: Economy is embedded in the society; Karl Polanyi's market society; Variegated capitalism approach	**Traditional Sociology**	Political Sociology	Sociology of Globalization;
Politics	Power and authority in business organizations	Power in the economy: Economics/market is political; States-centered political economy; Justice-centered political economy	Politics of social problems	**Political Science**	**International Relations**: the State's Foreign Policies
International Relations	Globalization; TNCs	International Economics and IPE; International economy is political; Statism; Realism	International Social Movements	**International Relations**: Influences of foreign states on domestic politics/policies	**International Relations;** Liberalism; Statism; Realism; Neorealism; Constructivism

Table 5. Interactions among the firm, the market, the state, and foreign states: addition of the society and the consumer

		Resource Allocation Decision-Making Units					
		Individuals; Consumers; Taxpayers; Voters	The Firm	The Market	The Society	The State	Foreign states
Disciplinary Methods	Psychology	**Traditional Psychology**	Management; Marketing: Herbert Simon's Behavioral Approach to Management	Behavioral Economics; Herbert Simon's Bounded Rationality	Social Psychology	Political Psychology	The role of psychology in formulating foreign policies
	Management	Consumer behavior; Human resources management	**Business School** Management; Finance; Marketing; Accounting; Human Resources	Competitive Strategies: Strategic Management	Nonprofit Organization and NGOs Management	Public Administration Competitive Advantage of Nations	International Business; International Marketing; International Finance
	Economics	Demand theory; liberal utilitarianism	Economics analysis of the firm; Economics of the firm: New Institutional Economics; Schumpeterian economics; Evolutionary economics	**Economics:** Classical Economics; Neoclassical Economics; Keynesian Economics; Neoliberalism	Sociological Economics; Gary Becker's Models	Economic analysis of the state: Positive political economy; Public choice theory: Olson's collective action theory; Down's theory of voting; Politics is economic; Classical Economy; Keynesian; Neoliberalism; New Institutional Economics	International Economics and IPE: international politics is economic; Liberal Comparative Advantage Theory; Mercantilism; Protectionism ; Infant Industry Protection; Strategic Trade Theory
	Sociology	Social psychology	Organizational Theory	Economic Sociology: Economy is embedded in the society; Karl Polanyi's market society	**Traditional Sociology**	Political Sociology	Globalization; Global village; global community; economic development at the global level
	Politics	Rational choice models	Power and authority in business organizations	Power in the economy: Economics/market is political; States-centered political economy; Justice-centered political economy	Political Sociology	**Political Science**	**International Relations**: the State's Foreign Policies
	International Relations	Liberalism; Individuals living together harmoniously across nation-states:	Globalization; TNCs	International Economics and IPE; International economy is political; Statism; Realism	International Social Movements	**International Relations**: Influences of foreign states on domestic politics/policies	**International Relations;** Liberalism; Statism; Realism; Neorealism; Constructivis