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Political Economy, Economic Governance, and the Coordination of Economic Activities

Political Economy: Four Approaches

In der folgenden Studie wird ausgehend vom neo-institutionalen Ansatz der politischen Ökonomie ein Vergleich zu anderen Schulen unternommen. Hier wird die politische Ökonomie als eine Wissenschaft verstanden, die den Staat und die wirtschaftlich Handelnden in komplexen Organisationen untersucht, jeweils mit ihren internen Deliberations-, Koalitions- und Entscheidungsprozessen. Der Ansatz wird auf das Problem der Koordination von ökonomischen Aktivitäten angewandt. Es wird eine Typologie von Governance Mechanismen entwickelt, durch die zwischenorganisatorische Transaktionen und Beziehungen zwischen organisatorischen Akteuren im Produktionsprozeß koordiniert werden können. Als Beispiele für eine solche Koordination werden herangezogen der Markt, Corporate Hierarchies, State Hierarchy, Klans und Verbände. Schließlich werden Vorschläge für die weitere Forschung gemacht.

The rubric »political economy« has proved increasingly appealing to scholars of very different intellectual persuasions in recent years, signaling a revival of interest in the interactions of the polity and the economy. Marxists at one pole, orthodox economists at another, and students of political-economic cycles at a third, have all sought to intellectually appropriate the term.

In the classical Marxian tradition, political economy is the analysis of how the dynamics of economic accumulation determines the structure and functioning of the economy and the polity, and the patterns of their interaction. For orthodox economists, political economy is comprehended as the application of the core beliefs, individualistic language, and deductive methodology of economic theory to the analysis of the behavior of bureaucracies, politicians, and political groups, or the study of regulation or of public budgeting. How these »political« behaviors or processes »intrude« upon the presumed allocative efficiency of transactions among economic agents is of primary concern in this tradition. For that group of economists and political scientists that celebrate their invention of »the new empirical political economy«, the term denotes a concern with how macro-economic performance influences elections and/or how politicians' electoral strategies (in

anticipation of these influences) feed back upon economic conditions, thus creating a political business cycle.

A fourth pole or position with respect to political economy can also be discerned although there exists no authoritative statement of its tenets, and its practitioners are only beginning to become aware of each others' work. It can be dubbed as a »political-institutional« approach, and comprises the work of a number of political scientists, sociologists, organizational theorists, and »heterodox economists« (institutionalists, post-Marxians, etc.).¹ In this view, political economy is the study of discretionary state activity in the economy wherein *both* the state *and* economic agents (firms, banks, labor, technology providers, etc.) are conceptualized as complex organizations (or organizational systems), with internal processes of deliberation, coalition formation and decision. These agents are purposive actors and are considered to be »strategically rational« in the sense that they react to each others' strategies, and change and adapt their own strategies over time. These political-economic agents engage in social interactions of cooperation, competition, conflict, and domination in interlinked processes of state action (economic policy-making) and the production, allocation and distribution of economic goods and services. In so doing they make use of their resources (relative power) and models of reality (belief systems, ideologies). These interactions are structured and regulated by what we will call institutionalized rule systems or rule regimes and by cultural formations (i.e. types of social organization, inherited and historically specific legal and constitutional arrangements, property rights, corporate structures and organizational principles, formal and informal contractual relationships, industrial relation systems, etc.) which shape, constrain, or facilitate, the behavior of different agents in different ways (Burns *et al.*, 1985). Political-economic agents may also seek (with varying success) to change these structuring rule and cultural systems as they seek to adapt to changes or take advantage of opportunities implicit in technological, economic structure or political developments. It follows from these basic assumptions that any theory of state action or of the behavior of economic agents or of economic processes must be built up by means of empirical historical and cross-national comparative research.

In this political-institutional view of political economy, economic and political power and economic and political structures are closely intertwined and mutually determining in the behavior of state agencies *and* of economic agents. Neither economic nor political variables are *ipso facto* causal; the common distinction between exogenous variables is blurred. Furthermore, this viewpoint challenges the claims of orthodox micro- and macro-economic theories to provide an adequate understanding of how a modern capitalist economy works and to thus serve as a reference point either for under-

standing the effects of government policies or actions in the economy, or for prescribing desirable or undesirable economic roles for government.

From the perspective of a political-institutional approach to political economy, researchers in contending poles are committed to one-dimensional views of the state and state action that are symmetrical with their partial views of how the economy works. The empirical realities of the dynamic interactions of political-economic agents, of the production, reproduction and transformation of »institutionalized rule systems« regulating their interactions, and structuring and shaping the overall performance of the political economy, is thereby obscured. The implication is, of course, that we need much more realistic and complex models of the political economy, not because analytical parsimony should not be striven for but because without such models our understanding is dangerously overschematized and impoverished (Leontieff, 1985; Kornai, 1971).

The Coordination of Economic Activities

One of the strongest and most controversial assertions I have made on behalf of the political-institutional approach to political economy is my claim that the discipline of economics, and the dialogue among competing orthodox schools or between them and their heterodox critics, provides an inadequate basis for understanding how capitalist economies actually work. There is a vast literature *within* economics that supports this critical assessment on various grounds.¹ For political-institutional analysts such a position should follow logically from our conception of economic and political interaction processes, and the appropriate methodologies for their empirical study. It follows that the knowledge claims of conventional micro-economic theory, of Keynesians and Monetarists, supply-siders and new classical economists, and the host of heterodox schools that stand at the fringes of »neo-classical rhetorics,« must somehow be sorted out and integrated.

Together with a number of colleagues and students³ I am working on one possible analytical language and research strategy through which this task might be undertaken. We have focused on the problematics of »the coordination of economic activities,« which most economists would probably agree lies at the heart of macroeconomics and the ongoing controversies over its »micro economic foundations.« The central issue in its most general formulation is: to what extent, by what means or mechanisms, and within what limits of internal and external disturbances, can the economy be regarded as self-organizing or self-regulating? How do the diverse activities engaged in by the numerous agents in a capitalistic market economy (in *our* terms, firms and corporations, state agencies, unions, finance providers,

innovators and technology providers) »come to, are made to, or fail to ›mesh« (Leijonhufvud, 1976:88)? In the more technical language of neo-classical analysis, the question is »does the market system ... tend to move ›automatically‹ towards a state where all market excess demands and supplies are eliminated? How strong or weak are such tendencies?« (Leijonhufvud, 1973:29). In the language of organizational theory (e.g. Lawrence and Dyer, 1983), the problem becomes: how do economic agents adapt their internal structures and strategies to environmental conditions of ›information complexity(and ›resource scarcity(in making macroeconomically appropriate decisions about production, prices, allocation of resources, new investment, relations with labor, the securing of financing, product innovation, and the development and dissemination of new technologies.

Axel Leijonhufvud (1973:29) writes that »the coordination of economic activities remains the great and still inadequately explained problem of macro-economics.« This is especially the case »with reference to the real-world systems rather than particular classes of models.« Leijonhufvud adds: »our situation is one of emotionally charged ignorance with regard to a central issue of the science (U)nending controversies to which it is critical keep bobbing to the surface ... as conflicting declarations of faith.« Economics is »saddled with« opposed »cosmologies« or incompatible »visions of what real world markets are like« (1973:30-31).

A much more promising picture can be discerned, however, if we look beyond these theoretical-cum-theological debates to the empirical literature accumulated by students of the actual behavior of firms and economic sectors, the evolving structure of the corporation and its internal control processes, or the structure and functioning of financial systems or industrial relations systems, or the institutional dynamics of economic development, productive organization and the adoption of new technologies.⁴ These literatures suggest that the adjustment and adaptation of economic agents to the environment of other »transactors,« to uncertainty, instability, and changing market conditions - and the ways in which these actions and reactions get coordinated or regulated (or fail to!) - in different product markets and at different levels of the economic system, is a complex and somewhat inchoate intra-organization and interorganizational process of trial and error involving spontaneous homeostatic *market replacing mechanisms* (within and among organizations) as well as the operation of »selfequilibrating« market processes or discretionary government policies working through or against »the market.« This institutional adjustment process may work through the hierarchical control activities of the large horizontally or vertically integrated corporation, or through cooperative (collusive) strategies and counterstrategies of economic agents expressed in formal volun-

tary associations or informal networks based on a professional language or common culture. In each case - as with markets and discrete government interventions - these adjustment and coordination processes take place within a context structured by the relative power and ideological world views of different agents and the facilitating and legitimating actions of the state.

From the perspective of the analytical language or our political-institutional approach we think it is useful to conceptualize the coordination of economic activities in terms of a typology of *economic governance mechanisms*. We define each of these governance mechanisms as distinctive but complementary interaction and control systems, i. e. as institutionalized rules and rule regimes and belief systems that structure the ways in which strategically and purposively rational agents (which are also complex organizations with internal decision processes) come to deal with each other in response to situations of resource scarcity (uncertainty with respect to availability of capital, raw materials, human resources) and information complexity (uncertainty about competitors, suppliers, products, markets, technology and government regulations).

Each mechanism rests on different coordination properties in terms of which we can measure a capacity to induce potentially competitive or conflictual agents to link their behavior. Thus inter-organizational coordination of economic activities involves information exchange, collective action, and some normative-ethical principle underlying and sustaining interactions and exchanges over time. Governance mechanisms are thus inter-organizational rule systems or rule regimes coordinating the transactions and interactions of the diverse agents engaged in economic production, allocation, exchange, and distribution (Burns *et al.*, 1985).

Conceptually, as indicated in *Figure 1*, they constitute meso-level behavioral regularities. These capture some strategic consequences of micro-level response functions or decision-algorithms, and set the stage for analysis of aggregate or macro-level effects or consequences.

Micro-Level	Meso-Level	Macro-Level
<p>Economic Agents</p> <ol style="list-style-type: none"> agents are organizations or institutions (not single decision-makers) agents have to be modelled as having internal processes and structures (i.e. coalitions and »politics«). <ul style="list-style-type: none"> - are »procedurally rational« - behavior involves »appropriate deliberation,« decision, d-processes, selective heuristics, search routines agents are »strategically rational« - model strategy and counter-strategy internal processes, structures, and strategies of agents shaped by power relations, ideology, institutional inheritance (i.e. politically and culturally contingent). 	<p>Mechanisms of Econ. Governance</p> <p>interaction systems (i.e. institutions, control systems, rule systems) that structure inter-organizational relations in the coordination of economic activities within sectors/industries</p> <ol style="list-style-type: none"> markets corporate hierarchies state hierarchies clans associations <p>each with distinctive »coordination properties«: information, collective action, ethical norms</p>	<p>Aggregate Effects</p> <ol style="list-style-type: none"> <i>interactive effects</i> of sectoral performance (infra-structure goods, finance, marginal growth sectors, pattern-setting sectors) <i>Aggregate regulation or management</i> <ul style="list-style-type: none"> - effective demand failures - growth and structural change design/architecture of governance redistribution of power, side-payments

Figure 1: Actor-Structure Model of the Political Economy

Governance Mechanisms

The various literatures upon which we have drawn (orthodox economics, organizational theory, institutional economics, the political science theory of neo-corporatism) suggest that five distinctive mechanisms of economic governance can be identified: markets, corporate hierarchies, state hierarchies, clans or networks, and associations. Some of the characteristics of each is given in *Figure 2*.

Figure 2: Governance Mechanisms

	Definitions, Examples
markets	<p>price incentives effectively control the behavior of transactors</p> <p>prices are free to move in response to excess demands/ supplies</p> <p>production, consumption, and trading activities of individual agents coordinated by a »central coordinator« or »social contract« or a »central supermarket«</p>
corporate hierarchy	<p>modern corporation coordinates supply and demand in individual industries/sectors; stabilizes production thru horizontal and vertical integration permitting monitoring of activities, allocation of capital, technology and personnel. Refiners of products merge backwards into exploration. Manufacturers move forward into marketing and distribution.</p> <p>relations to work force regulated by contracts, job description, work rules, seniority</p> <p>managerial elite has considerable autonomy: own finance, tech. and marketing research, advertising, lobbying</p>
state hierarchy	<p>government agencies (more or less coordinated with each other) respond to fluctuations in economic conditions, clientelle pressures and own objectives: positive incentives (subsidies) to support firms and sectors, patents, procurement, finance research and development, provide infrastructure goods</p> <p>information coordinator</p> <p>enforces markets - encourages/discourages »private governance«</p> <p>regulates »market failures«: air, water pollution, health and safety, work conditions, »natural monopolies«</p>
clans	<p>a loose form of organization among relatively limited number of agents - sharing a common culture, communitarian ethos, professional language, ethnicity, territory, extended families</p> <p>informal networks: nuclei of small firms, university research labs, local government agencies.</p> <p>some sub-contractor relations (e.g. share design, development costs)</p> <p>»industrial districts«</p>
associations	<p>formal organizations of economic agents (in industry, sector, sub-sector, nationally) form stable and institutionalized compromises in pursuit their interests</p> <p>associations and systems of associations may become highly developed vertically and horizontally.</p> <p>Permanent association staffs develop autonomy in pursuit long-term strategies for stabilization of relations with the state and other interlocutors</p> <p>self-regulation and self-governance (private government in <i>re</i> a product, industry, sector)</p> <p>»corporatist intermediation«</p>

The extent to which and the reasons why particular mechanisms prevail in any given interaction situation, economic process, industry or sector, or their relative incidence in any given national economy has begun to be investigated empirically. It seems to vary with such dimensions as: type of product, capital requirements, industrial structure, and technology. The question of which mechanisms are »optimal« or most efficient seems quite complex. In most cases, more than one mechanism will be involved in any particular sector or situation, i. e. these governance mechanisms should be seen not as mutually exclusive, but as potentially (if not necessarily) complementary control systems.

Because political, cultural, and institutional conditions vary from country to country (but also from sector to sector within any country), the purposes, strategies, internal structures, relative power, and institutional contexts of economic agents differ and so too do their »preferences« for one or another governance mechanism or mix of governance mechanisms. Thus market coordination seems to be probably more widespread and more legitimate in the U. S. than it is in W. Europe or Japan. So too (paradoxically?) is coordination through the large horizontally and vertically integrated corporation. On the other hand, associations of all kinds are more important in W Europe, particularly in the centralized organization of labor and business interests for both regulation of their own members' strategies and for »concertation« of labor, business and the state in micro and macro policy-making. Clan-like networks seem especially well-developed in Japan and reinforce highly developed associational mechanisms that organize business interests and produce coordination with the state bureaucracy. State intervention is a more coherent and legitimated factor in economic governance in Japan and continental Europe than it is in North America or the U.K.

We can anticipate that further empirical comparisons across sectors and across countries will serve as the »quasi-experiments« needed to solidly determine which mix of governance mechanisms seems most adaptive for given sectors or industries, market conditions, or degrees of technological volatility. Such research would also put us in the position to ask whether there may be serious »mismatches« between the mix of governance mechanisms that seems most appropriate to a given case and the one that is »available« given the constraints of power, culture and institutions.

Mainstream economists' concerns have been with *ideal-type* competitive markets, stylized market failures, and abstract analyses of how these failures can be corrected by equally idealized ranges of government action. Economists have generally dismissed, or treated with suspicion as collusion, the forms of behavior that are suggested by our concepts of corporate hierarchy, clans, and associations. Empirical research on the actual coordination functions served by corporate hierarchies, state agencies, business associations

and labor unions, or by informal networks, has been contributed by political scientists, organizational sociologists, economic historians, and economists working outside of the mainstream.

Figures 3 and 4 offer very schematic summaries of what can be gleaned about the coordination of economic activities from the diverse literatures inside and outside of the economics mainstream, as »integrated« or synthesized by our proposed analytical language of governance mechanisms seen as meso-level rule regimes lying conceptually between the conventional micro and macro levels of analysis. *Figure 3 - The Coordination Properties of Governance Mechanisms* - reinforces one of our basic axioms or assumptions, namely that a capitalist »mixed« political economy is an interconnected network of complex organizations with *complementary* control systems or rule regimes. Since these constituent units are complex organizations whose behavior emerges from internal compromises, their behavior must be understood in terms of a variety of motivations. Since their behavior is also determined by transactions with their environment - conceptualized here in terms of inter-organizational relationships - it is crucial to understand the full range of mutually reinforcing ways in which inter-organizational coordination can be achieved.

The argument of *Figure 3* is that coordination of economic activities among (and within) complex organizations involves a medium of information exchange, a rational or self-interested basis for inducing >collective action,< and an ethical or normative underpinning or justification for action.

This point of the potential complementarity and mutual interdependence of governance mechanisms in concrete, real-world economies is further elaborated in *Figure 4: »When Mechanisms Prevail - or Fail.«* In this Figure I have summarized what comparative research and theoretical work tells us about the kinds of economic, technological, and political circumstances and situations to which particular mechanisms seem adaptively well suited or poorly suited. The message of *Figure 4* is that the various governance mechanisms seem to emerge naturally or spontaneously, within the opportunities and constraints provided by relative power, world views, and response functions of the state and economic agents. They emerge in response to particular market structures (i. e. size of firms, ease of entry, stability of demand, type of product, degrees of competitiveness), to technological complexity and volatility, to stages in the product cycle and the »natural history« of firm internal routines and structures, to the need of particular kinds of relationships with labor, subcontractors, financiers, innovators or technology providers, or to the dependency of a product or industry on state - provided infrastructures or regulatory regimes - or alternatively on regulatory or self-governance regimes operated by associations, usually under state sponsorship.

Figure 3: Coordination Properties of Governance Mechanisms

	Medium of information and information exchange	»Rational« basis of collective action among agents	Ethical or normative principles
markets	prices	dispersed competition »hidden hand«	short-term reinforcement rewards to self-interested behavior
hierarchies	surveillance and evaluation rules, plans regulations, subsidies	bureaucratic control, coercion »visible hand« leadership	medium-term rewards »social contract« legitimate authority
clans	professional cultures, languages shared norms	serial equity (sequential Prisoner's Dilemma games) collective memory	community trust
associations	coordination as property of associational systems autonomy of assoc. and staff	concertation through »selective goods« and »intermediation«	conditional solidarity sociability reciprocity

Figure 4: When Mechanisms Prevail - or Fail

	Works best, prevails, advantages	Works poorly, unimportant, disadvantages
markets	<p>firms have high ratio variable to fixed costs, relatively low potential for scale economies in production and marketing</p> <p>relatively small firms, few technical or financial barriers to entry</p> <p>low structural change and volatility of technology</p> <p>relatively homogeneous products</p> <p>relatively simple information structure</p>	<p>information complexity and technological volatility</p> <p>high uncertainty</p> <p>externalities</p> <p>unstable demand that leads to insufficient investment in technology or capacity</p> <p>highly differentiated goods</p>
corporate hierarchy	<p>demand sensitive to marketing; capital and energy intensive technologies allow econs of scale in processing and assembling large volumes raw materials and semi-finished goods into standardized producer or consumer goods</p> <p>high fixed costs, product complexity, large barriers to entry</p> <p>mature product cycle</p>	<p>motivation to innovate may suffer from bureaucratic rigidity</p> <p>rapid changes technology or demand</p> <p>develops rigid managerial structures and shopfloor practices, labor utilization</p> <p>autonomy of managerial elite insulates other controls</p> <p>inappropriate early stages of product cycle</p> <p>effective demand failures</p>
state hierarchy	<p>very large technological, economic or financial barriers to entry</p> <p>early stages product development (screening and spreading new technology)</p> <p>complex infrastructures needed - suppliers, servicers, regulators</p> <p>stabilize demand via macro policy or procurement</p> <p>regulate some externalities</p> <p>public goods</p>	<p>product life is short or unstable</p> <p>decentralized incentives needed for worker/manager incentives</p> <p>unstable and volatile technology</p> <p>vulnerable to pressures for non-adjustment-oriented protectionism</p>
clans	<p>high levels technological complexity and volatility</p> <p>organizing »flexible specialization« along craft lines</p> <p>information about innovations quickly communicated</p> <p>long-term relationships are important</p> <p>production processes require highly-skilled and integrated work force</p>	<p>mature technologies, later stages of product cycle</p> <p>large infrastructures and stable capital flows required</p> <p>standardized goods</p>

	Works best, prevails, advantages	Works poorly, unimportant, disadvantages
associations	<i>where developed</i> may stabilize market relations, enforce norms of fair competition, provide manpower training and apprenticeship, product and safety standards. Helps secure compliance with state regulations. Facilitates information exchange. Corporatist concertation and macro-policy conditions: state strong, labor organized	less appropriate/important at early stages of product cycle, or in small, high-technology firms less developed in <i>re</i> investment decisions, development of new technology propensity towards protectionism (where state and labor weak) poorly developed where hierarchical industries predominate, state is weak, labor weak

An Agenda for Future Research

Two strong implications would seem to follow from *Figure 4*. First, that any modern economy will be made up of many different sectors and industries confronting rather different conditions of market structure, technological complexity, product cycle, relations with labor and finance, etc. Hence, we must expect different governance mechanisms or more likely, combinations of governance mechanisms to prevail in different sectors or industries. Second, industries, sectors, entire economies will experience changes in these same dimensions. New competitors or technologies, changes in the structure or relative power of agents will alter the contexts of action and interaction. Rule regimes structuring and regulating these transactions will come under pressure as agents' relative gains and rewards from the extant patterns change. The extant mix of governance mechanisms may thus lose capabilities for dealing with particular coordination tasks or problems. This will set in motion a process of rule system and rule regime reformulation or transformation as agents with different effective resources (and access to the state) seek a restructuring that best suits their interests. This process may proceed as one coalition of agents succeeds (with the tacit or active support of the state) in imposing its »rule innovations« on the others. Or the process may proceed by inter-group and inter-organizational bargaining (typically under the aegis of a more or less autonomous state), or alternatively, adjustment and »learning« may be blocked or stalemated.

In fact, we have far too little systematic research into these matters. If we are to construct more realistic models of the coordination of economic acti-

vities - how the real economy really works - we will need to answer the following kinds of questions.

1. Through what mechanisms, transaction systems, rule regimes are a whole set of coordination of economic activities problems resolved in given industries and sectors? What is the political and inter-organizational history of the emergence of these governance mixes? How do factors of ideology, relative power, and intra-organizational structure exercise their influence?

2. How and why do industries and sectors vary in their prevailing governance structure? How and why are the same industries or sectors governed differently in different countries?

3. Does the established governance structure in a sector/industry facilitate or constrain the efforts of agents to respond to technological change, to develop productivity-enhancing relationships with labor, to assure stable sources of financing, or to establish a stable and legitimate framework for public regulation?

4. Under what conditions do you get changes in governance arrangements? How do the internal structure and coalition dynamics of economic agents influence their preferences for an inter-organizational governance structure? What agents or coalitions among agents dominate the process of change? What are the dynamic implications for economic performance? Why have some industries (e. g. computers vs. steel in the U. S.) been so much more adaptive than others? Why do these processes vary from one sector to another or across countries?

5. What are the policy implications of the kind of political-institutional research proposed here? One premise of this agenda is that the governance structure of a sector or industry not only helps shape its economic performance, but also defines both the need for and the constraints on government policies designed to improve industrial performance. It follows that debates about industrial policy or how to improve government - business - labor relations will remain diffuse and ideologically polarized until they are informed by an understanding of how different parts of the economy are in fact governed and how these arrangements are performing under current conditions. Such research would also have important implications for macro- or aggregate-demand policies. Because the impact of such policies can be expected to vary substantially from sector to sector, their presumed effects on relative prices, levels of production, the availability of capital, and productivity performance may be seriously called into question.

6. The proposed agenda conforms to the call of Leontieff, Kornai and many other >heterodox(economists for detailed, sector-specific models of the economy and economic processes. A whole set of challenging macro-level modelling issues are raised by this approach. What are the macro-analytical implications of viewing the economy as a complex set of rule regimes each

of which might be modelled as a kind of dynamic inter-organizational »game«? Can we generalize about the »rules of transformation« that seem to govern »sequential games« in different industries or sectors? What are the macro-performance implications and the interactive effects among different sectors characterized by different rule regimes and dynamic games? Does the dynamic contribution to the economy of certain sectors - e. g. finance or infrastructure goods like telecommunications or transportation, or high-tech-high-value-added products - dictate special public concern for the governance of such sectors?

Footnotes

- 1 For discussions of these various literatures see Lindberg (1982, 1985)
- 2 For a sampling see Eichner (1983), Nelson and Winter (1982), and Kornai (1971), Ward (1972), Thurow (1983), Meehan (1982)
- 3 For example see: Hollingsworth and Lindberg (1985) and Young, Lindberg, and Hollingsworth (1985), and Burns *et al.* (1985)
- 4 See literatures cited in Lindberg (1985)

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