I

The Concept of a World Economic Order

Institutional arrangements—including informal norms of behavior, laws and property rights for the use of land, and natural resources and the environment—represent a set of rules and procedures which humankind has introduced for the governance of society and the economy. These arrangements draw from historical experience, originating mostly from past mistakes, that is, learning the hard way from errors and false approaches. In a broader sense, institutions—not to be confused with organizations—both reflect and help establish the way things are done within a society.

In the domain of economics, institutional arrangements assign the benefits and opportunity costs of an economic decision to individuals or social subunits. Common examples of these subunits are individual households consuming goods, supplying labor, and generating savings; firms producing and investing; the private sector; and the government and its different layers (Siebert 1996a). By assigning benefits and opportunity costs, institutional arrangements define the incentives for the economic agents. These incentives in turn determine the performance of the economy, for instance its growth and employment; they also impose restraints that an economy and its members have to observe, representing a complex system of incentives and restraints. Rules take the place of ad hoc solutions and discretion (Kydland and Prescott 1977).

On a global scale, rules refer to the institutional arrangements among states. In specific areas and to a certain extent, sovereign states cede sovereignty. This leads to the establishment of a multilateral rule system, binding sovereign states and their citizens. In the economic sphere, the institutional setup affects all aspects of international interaction and interdependence, including the allocation of goods and resources, the flow of capital, the diffusion of technology, the mobility of labor and human capital, and global environmental scarcity. This system of rules refers not only to the international interaction and interdependence on the real side of the economy, but also to international relations on the monetary side. Using the word "order" in the tradition of the German Freiburg School (see Eucken 1940, p. 238), we can speak of a world economic order.

Like norms within a nation state, rules for a world order can be based on ethical grounds. A theologian or a philosopher may attempt to build a rule system in a constructionist “top-down” process—starting from one or more basic ethical axioms, originating in religious values, natural laws, or philosophical principles, such as the Kantian categorical imperative. From these principles specific and concrete implications may be derived for the behavior of economic agents. Such a constructionist approach, however, is not likely to succeed in deriving precise rules for economic decisions. In fact, even the same ethical principles allow a wide range of behavioral patterns within given situations.

Reduced Transaction Costs as a Measure of Welfare Gains

I will therefore adopt a different approach. This approach starts from the observation that the emergence of rules is the result of learning from experience rather than theoretical documentation. Most importantly, negative experiences that inflict severe hardship on people—historical disasters—become the underlying origin of a new rule. Rules arise from the attempt to prevent human tragedies in the future. Without rules, in the words of Thomas Hobbes (1651, chapter 13, p. 89) life would indeed be “solitary, poore, nasty, brutish and short.” Without rules, humankind would be mired in anarchy and engaged in a Hobbesian war of all against all.

Disastrous harm and hardship can be interpreted in terms of transaction costs. In a narrow sense, transaction costs are defined as resources used in human exchange, as understood in the interpretation of Coase (1937, 1960). Costs mean opportunity costs, i.e., the costs of an opportunity forgone: when a resource is used for one purpose, this implies relinquishing its use for another purpose. Opportunity costs represent the welfare lost when someone is no longer able to use a resource for a forgone alternative. A good example of high transaction costs comes from a barter economy where people repudiate the use of money, as happened during the transformation of the Soviet Union in the 1990s and in Germany after World War II. Because of the loss of confidence in money, resources had to be used to barter rather than to meet other basic needs, for instance within the production process. Consequently, transaction costs can go together with hardship and human tragedy. I adopt this broad interpretation when I speak of transaction costs. Examples are wars between nations, internal turmoil, for instance civil wars, border-crossing negative externalities, for instance acid rain, and also opportunistic behavior of one nation to the detriment of another in the international division of labor. The reduction of transaction costs can therefore explain many rules, especially within economic institutional arrangements. We thus speak of a transaction-costs approach or of an experience approach to rules.

There are many ways of reducing transaction costs: lowering transportation costs, reducing market segmentations, decreasing uncertainty due to all sorts of distortions and disruptions, for instance those arising from internal or cross-border political turmoil and from internalization of the negative effects of one nation’s actions on another, i.e., internalization of negative externalities. According to this approach, the rules for the world economy evolved following a bottom-up process of learning from experience, starting from subsidiary national rules. Whenever the severe international transaction costs of national arrangements became apparent—because new interdependencies arose or because the unexpected opportunity costs of existing sets of rules revealed themselves—new institutions evolved.

Ethical norms and values act as a de facto restraint on such rules: they limit the rule space that can be established nationally and globally. If ethical values differ markedly between nations, the reach of global rules is inevitably limited. For instance, if the values of a specific social group imply the destruction of other groups as their core aim, global rules cannot be established. This outcome becomes evident in the case of the Islamic terrorists' creed and the Nazi ideology. When values in different nations and cultures start to diverge significantly, an international rule system may fall apart. If ethical values are instead universal, there is more scope for an international institutional arrangement.

I will introduce ethical norms such as fairness or the Kantian categorical imperative at a later stage. We will then see how far the transaction-costs approach takes us in explaining the international order and what role ethical norms play in restraining the rule space.

Ethical principles may be interpreted as being completely independent from economic institutional arrangements. However, any given institutional setup influences human interaction and is essential to create or prevent new economic options. Economic activities and interdependencies may in turn affect ethical values, for instance by showing the implications of behavior and the opportunity costs of norms. From this point of view, ethical principles are not completely autonomous of institutional arrangements. With the long-run impact of ethical norms being revealed by reality, the institutional arrangement reflects, at least to some extent, the experience drawn from the implementation of such norms.

There is another link between ethical norms and institutional arrangements: as societies and economies have become more complex, rules have taken the place of ethical norms. For instance, archaic societies and non-Western civilizations steer environmental allocation and the use of nature by internalized ethical norms—witness as an example American Indians—whereas the complex organization of industrialized countries devise legal approaches to environmental scarcity (Siebert 2008b).

The transaction-costs approach has the advantage that it does not motivate rules by means of a rosy concept of the welfare of the world. Such a concept might be imposed on the whim of a politburo, a dictator, or some other organization, yet it would not represent what people want within the context of free societies given the different preferences of their individuals. Nor can we rely on having a social planner design such an order in a technocratic sense, one who (supposedly) has all the necessary information to plan and enforce such a rule system from the top down.

This would be the case within a Trotskyist–Leninist approach, as political leaders or political parties hierarchically specify how people should behave. The transaction-costs approach does not start from the preferences of a subgroup of society either, for instance the ideas of some NGOs, which might be shared by their supporters but not accepted outside the group by other members of society. In contrast, under the transaction-costs approach, the benefit of rules is assessed according to the concept of reduced costs, and these costs can be defined in a decentralized way by individuals according to their preferences and by nation states according to their goals.

This approach differs from the anarchy described in Leviathan as the defining characteristic state of nature where life is "nasty, brutish and short" (Brennan and Buchanan 1985, p. ix). Given the Orwellian consequences which developed from Hobbes's ideas over time—last but not least in their Marxist realization—the centralization of decisions per se cannot become the guideline for viable solutions. The goal of avoiding market failures cannot come at the cost of worse policy failures. Besides, economists should not define market failures against the background of an abstract theoretical model detached from reality, as sometimes happens (Brennan and Buchanan 1985, p. 13).

When rules serve to reduce transaction costs, a crucial question is whether they are actually capable of achieving this goal. What rules should we then look for? One problem is to take into account the long-run impact of a rule system, i.e., to study which institutional arrangement performs better than others. Internationally, comparing the experience of different countries is therefore vital. Another important problem is that we do not have *ex ante* all the information necessary to forecast how a rule system will perform. This is the Hayekian issue of "pretense of knowledge" (Hayek 1975a), since the output of rule systems only evolves over time (Brennan and Buchanan 1985, p. 14). Another precondition is that all the opportunity costs of a rule system have to be taken into consideration. Finally, such systems should not serve to establish power, unless power is legitimate. As a corollary, individual liberty must represent a value that the system cannot relinquish.

We also need an understanding of the procedure according to which transaction costs are detected and assessed, since this is vital for the emergence of rules within a society. In the transaction-costs approach, the reduction of transaction costs comes to light either thanks to a market process revealing lower costs or through explicit political mechanisms aggregating the preferences of an entire society. This means that the transaction-costs approach assumes a competitive process, an open society, and democratic structures. Under these conditions, if a country accepts a rule, it is because the country itself finds it advantageous, unless it is coerced to obey the rule. By agreeing on rules voluntarily, the cost reductions are revealed implicitly. If, however, monopolies or the political power of specific groups locks in economic transactions, the scope for reducing transaction costs through new rules is limited or nonexistent. An example of this phenomenon comes from distortions between countries, for instance when there is no common agreement on free-market access and when regulations or subsidies protecting domestic producers prevent market access.

The transaction-costs concept is in line with a contractarian approach in the sense of constitutional political economy (Buchanan 1975; Brennan and Buchanan 1985, p. 21). It is also in line with the property-rights approach. The constitutional approach, with the distinction of outcomes generated within defined rules and by the rules themselves, may be interpreted as a positive science trying to determine which rule system fits the best given goals. In that interpretation, the constitutional approach is seen to be functional. Brennan and Buchanan interpret constitutionalism from a contractarian viewpoint in a normative sense, starting from the presupposition that the "individual is the unique unit of consciousness from which all evaluations begin" (Brennan and Buchanan 1985, p. 21), the individual being the only source of value. Starting from this presupposition, with all persons treated as morally equivalent, it is possible to derive a contractarian explanation of the social order (Buchanan and Tullock 1962; Buchanan 1975). Such an order prevents the "nasty, brutish and slavish" way of living, as depicted in Hobbes's Leviathan. From this point of view, the social order does not have to rely on romantic ideas as would be the case if some "natural harmony" among persons had to play a role in the elimination of all conflicts in the absence of rules.

The concept of opportunity cost varies with preference shifts over time. A case in point is that opportunity costs for future generations may become more relevant within the utility functions of individuals or within the goal functions of governments, as for instance with respect to environmental degradation in Europe since the 1970s. When it comes to such shifts, NGOs and new political parties such as the Greens in Europe could be a forerunner or prime mover of those values which will eventually make their way into society. This is especially relevant since preference shifts often occur together with generational changes, i.e., as new young cohorts enter the population. According to this interpretation, social subgroups can indeed play a role in determining the political preferences of society. Another example is that the utility function of individuals begins to include argument variables that extend to a wider space than the nation state, thus including phenomena in other countries. The tsunami that hit Thailand and other parts of Southeast Asia in December 2004, for instance, provoked widespread concern.

The gains for individual countries accepting a given rule need not be identical. Some countries may derive a larger gain from the rule system than others. Take the case of preventing a war through a rule system: in that case, it is difficult to determine whether the benefits of such a rule system are identical to all countries. It is, however, more important to have an effective rule preventing wars than to discuss who gains most. Yet, if the benefits of a rule system are visibly one-sided or if they diverge significantly, the stability of a rule system will most likely be thrown into question.

Admittedly, the approach described here is rather functional and rationalist, being founded as it is on historical experience, or as Voltaire put it "la raison la plus forte est toujours la meilleure." It corresponds to approaches discussed during the Enlightenment, for instance by Immanuel Kant. For many people and for many NGOs, the transaction-costs approach may not seem compassionate enough, neither showing sufficient empathy nor displaying "a heart and a soul." But this claim is questionable. It is more important to have a reliable rule system than to be at the mercy of the bloomy feelings and deeply felt intentions of many do-gooders. Good intentions alone are not enough to establish a viable international order.

Lowering Transaction Costs through International Institutional Rules

International rules, representing norms of behavior for governments, firms, and citizens, reduce transaction costs through several mechanisms. We offer the following taxonomy.

First, the practice of decentralizing economic decisions, made possible by a framework of rules, represents a method for lowering transaction costs. This practice can be interpreted as an informal agreement, corresponding to the subsidiarity principle, applied to the different layers of national governments in federal states; but it is also relevant for the institutional setup of regional integrations, such as the European Union, to say nothing of several other multilateral arrangements. Decentralization draws from past experience; the devolution of decision-making to peripheral actors has proved, in many areas, more efficient than its centralization, one reason being that at the lower levels of organizations information is more readily available and preferences can be expressed more easily. As a matter of fact, explaining rules through the lowering of transaction costs is implicitly based on the concept of decentralized decisions.

Second, relying on markets is a specific form and an essential way of decentralizing decisions and implementing the subsidiarity principle. Markets represent an institutional mechanism that aligns the production of private goods with the consumers' willingness to pay, determines consumption, saving, and investment from individual choices, and allocates scarce resources toward competing uses. The core function of markets is to signal the benefits and opportunity costs of economic decisions to individual agents. Markets express economic constraints and indicate scarcity in the form of prices to economic agents—a function increasingly important within a globalized world. Thus, global resource constraints are denoted by scarcity prices. Within this frame, new demand (from emerging countries) can drive out the "old" demand (from developed economies) in a peaceful way.[1]

[1] For instance, China's share of world imports is 46% for iron ore, 36% for cotton, 23% for copper ore, 21% for pulp and paper, 20% for rubber, and 6.2% for crude oil. For comparison, China's share of world output was 5% (data for 2005). In 1993 China did not need oil imports.

How efficient can markets be in allocating resources? An answer to this question could be observed after the transition of property rights from the large oil companies (the so-called Seven Sisters) to the resource countries, i.e., the oil-rich countries, before the first oil crisis in 1973. In this case, spot and futures markets replaced a hierarchical allocation system, which depended on the Seven Sisters and on their vertical integration encompassing both upstream and downstream activities. Before this change, the Seven Sisters controlled oil exploration and oil production (upstream activities) as well as refining, transportation, and distribution (downstream activities). Concession contracts, often valid for a period of 50–70 years, allowed oil companies to exploit their oil fields and provided access to the undiscovered oil deposits of the resource countries. When the extraction rights shifted to the resource countries, the vertical integration of these enterprises was broken up; spot markets (for example, in Rotterdam) and forward markets replaced vertical integration. Moreover, long-term resource contracts between governments—the result of political negotiations—became unattractive as soon as spot and futures markets for crude oil had developed. Note that a firm can be interpreted as a network of explicit and implicit contracts, combining different production factors. Following institutional economics, we can also describe a firm as an organizational unit with lower transaction costs than those of the market: a transaction takes place within a firm if the transaction costs within the firm are lower than in the market. If the market allows lower transaction costs, a transaction is done through it. Thus, the level of the transaction costs determines the dividing line between firms and the market.

The reduction of market segmentation is an important vehicle for reducing transaction costs. Over time, new options for reducing market segmentation arise: this is the case of technological progress in transportation, new property rights in network industries, and institutional harmonization, as it takes place through regional integration processes.

Third, property rights represent a crucial condition for decentralization and for reducing transaction costs. A property right can be defined as a set of rules specifying the use of scarce resources and goods (Furubotn and Pejovich 1972). The set of rules includes obligations and rights; laws may codify these rules, or they may be institutionalized by other mechanisms such as social norms together with a pattern of sanctions.

The definition of property rights covers a wide range of specific uses. Dales (1968) distinguishes four types of property rights. A first category comprises exclusive property rights, covering the right of use—notably the right of sale and the right of disposal—and even the right to destroy the good or resource. However, exclusive ownership does not mean absolute ownership: a set of restraints protects other individuals or maintains economic assets. According to national regulations, for instance, a homeowner may not destroy his house. Zoning rules and criminal law are additional examples of restrictions on exclusive property rights. A second type of property right is status or functional ownership, referring to a set of rights accorded to some individuals but not to others. In this case the right to use an object or to receive a service is very often not transferable. Examples of this type of right include access to some services restricted to party officials within communist countries, licenses to notarize documents, and, during the Middle Ages, the right of admission into a guild. A third class includes the right to use a collective good such as a highway or to have access to a school or to a public good (such as health protection against contagion) for a specific purpose. A fourth class of property rights encompasses common-property resources such as the commons; they represent de facto a nonproperty because virtually no exclusion is defined.

Property rights constitute a mechanism aimed at reducing the occurrence and the scale of social conflicts. Accepting property rights means that people give up brute force, while, without such rights, people would resort to violence and dash out each other's brains. This holds for individuals within a society, but it also applies to nations engaged in international relations—the dimension which we will be looking at most closely.

In the past, common properties or free-access goods and resources have become private properties. An example of such an evolution comes from jurisdiction over the seas. The high sea was "*res nullius*" (i.e., nobody's property) when Hugo Grotius lived in the sixteenth century. Since then, however, we have established rules for how we use the seas: from the eighteenth century up to the mid-twentieth century, the territorial waters where a sovereign state had complete jurisdiction extended to three nautical miles. At the end of the twentieth century, this zone grew to twelve nautical miles (UN Convention on the Law of the Sea negotiated during 1973–82, entering into force in 1994). In a contiguous zone, up to 24 nautical miles beyond the 12-mile range of territorial waters, a coastal nation can prevent infringement of its customs, fiscal, immigration, or sanitary laws and regulations. In addition, countries enjoy the control of all economic resources—including fishing, mining, oil exploration, and control over pollution of these resources—over an exclusive economic zone that extends for 200 nautical miles. Thus, a coastal country has a differentiated control of its coastal waters.

The property-rights approach enables us to pose some very basic questions of economics: how should property rights be defined in order for the economic system to generate "optimal" results? Note that the meaning of "optimal" may be manifold and respond to quite a few criteria such as freedom of the individual and correct incentives to produce, invest, find new technologies, search for new resources, and supply the resources that an agent owns (for example, capital, labor, and raw materials). We should also ask ourselves whether property rights can be defined in such a way that externalities are internalized.

A crucial issue in property rights involves the right to use land: property rights assign the use of land to those having a title to it. The same happens, implicitly, with the land of an entire country. Historically, the principle of territoriality—mandating the respect of the territorial integrity of other countries—can be interpreted as a national property right, preventing war as a means to conquer space. Territoriality is therefore an international principle by which nation states agree on respecting each other's autonomy—in my interpretation, each other's property rights. This gives a state the legal authority to exercise jurisdiction within its borders, but not beyond them. Most importantly, territoriality protects a nation's right to decide on the use of its resources and the organization of its economy and its political system.[2] In that sense, a nation can be understood as a "resource machine," allocating resources and the power to decide on their use.

Territoriality has its limits in international public law, especially in the violation of its principles. Figures like Slobodan Milosevic and Adolf Hitler cannot be allowed to motivate their decisions by the principle of territoriality. Thus, the principle of territoriality does not (and cannot) cover the violation of "natural" law and human rights.

Territoriality is also overcome by international agreements, for instance by ceding sovereignty to a supraregional level in regional integrations (like the EU) or in international treaties (like the Kyoto Protocol). The principle of territoriality also loses importance if the utility functions of individuals include more and more argument variables depending on other countries. Courts such as the International Court of Justice at The Hague serve to implement these agreements and to solve disputes (see chapter IV).

Fourth, international rules reduce uncertainty in transactions. Many factors contribute to such uncertainty, for instance the opportunistic behavior of national governments. This also applies to market participants while fulfilling contracts, for example in the interpretation of contracts. Rules replace ad hoc negotiations between governments in the case of disputes. If rules do not exist, ad hoc negotiations are needed to solve disputes over the behavior of governments; likewise they are necessary when private market participants fulfill their contracts, for instance to prevent cheating, finagling, and double-dealing. Uncertainty is likely to arise when states of nature change, so that contingent contracts are imperfect. Thus, reliability and certainty of an international institutional framework represents a de facto public good, enhancing the welfare of nations.

Fifth, international rules set limits on the strategic behavior of national governments. This refers to governments enjoying political or market power which might use policy instruments to increase the national gains coming from the international division of labor, thus penalizing other countries. Within this context, international rules ease potential conflicts between different national interests. Countries that find their own advantage negatively affected by the strategic behavior of others are bound to object to such rules. Once again, international institutional arrangements end up playing the role of public goods.

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[2] See Langewiesche (2007), who explicitly mentions power resources, "the access to culture," and the distribution of "what has been commonly produced" (author's translation).

Table I.1. Welfare levels with cooperative and noncooperative behavior.

		Foreign country			
			Cooperative strategy		Noncooperative strategy
Domestic country	Cooperative strategy	I	(27, 27*)	III	(10, 30*)
	Noncooperative strategy policy	II	(30, 10*)	IV	(12, 12*)

Sixth, an international rule system represents a form of self-commitment: states within such a system limit the future choices of their national governments. Behind any rule system we can therefore detect a “negative catalogue,” i.e., a series of restraints imposed on the behavior of national governments. These constraints protect the international division of labor against the conflicting interests of national governments. The self-commitment of states also works as a shelter against the power of protectionist groups in national economies. It helps against political cycles, such as a government’s protectionist leaning before a national election, in the hope that protectionism will attract votes. It also shields against the shift of political preferences in a country, for instance when a government comes into power with completely different inclinations.

Seventh, a rule system can lead to cooperative behavior among states, which in turn makes it possible to increase the total benefits coming to all countries from the international division of labor (while the distribution of the additional benefits is another story). Without cooperative behavior, countries find themselves caught in a prisoner’s dilemma, unable as they are to reduce their protectionist measures or to capitalize on potential gains. The structure of a single game is illustrated in table I.1, where we assume that benefits can be measured in utility units, or utils. If countries cooperate, they can enjoy benefits of 27 utils each (case I). If they dominate the solution, individually they can improve their results (cases II and III). In the case of noncooperation, they both have lower benefits (case IV). For a fuller explanation see figure III.2 and table III.1. Only some sort of agreement, convention, or rule system can exclude an undesirable payoff to the players (Brennan and Buchanan 1985, chapter 2; Barrett 2005). Cooperative behavior is more likely to occur in repeated games, in which economic agents have to deal with each other over time. Rules are then embedded into a relational contract (MacNeil 1978). As a result, transaction costs would be higher with noncooperative behavior.

Eighth, rules can internalize negative externalities between states (negative spillovers) and thus reduce transaction costs. Negative externalities represent forms of interdependency between economic activities that escape market mechanisms rather than following nonmarket systems such as natural or “technological” systems. For instance, national economic activities are interdependent due to border-crossing groundwaters or river systems, atmospheric systems, or the biochain. Contagion in a currency crisis facilitated by our communication, social, or "psychological" systems is another example of economic interdependency. In a broader interpretation, a war started by one country can be considered as an extreme form of negative externality. It is hoped that rules may be able to prevent this "superexternality." As with negative externalities, positive externalities such as the supply of biodiversity by a country can be internalized.

Ninth, global public goods require specific rules in order to reduce transaction costs. Public goods are those goods that are consumed in equal amounts by all (Samuelson 1954). There is no rivalry in consumption and, technically, users cannot be excluded. A public good should not be confounded with a meritorious good, i.e., with a good that is judged to be worthy to be supplied by a group, a political party, or a country. In our context, public goods have a global dimension; Earth's atmosphere in the case of global warming or the depletion of the ozone layer, for instance, represent public goods. Other examples are smallpox eradication or asteroid deflection. Such goods can be interpreted as a special case of negative externalities, but public goods are an important case in their own right in the taxonomy of interdependencies. Decentralized market decisions cannot determine the quantity of a public good we want to have; this process would indeed lead to an under-provision of the public good, while transaction costs would be too high. Instead, the optimal provision of a public good must be determined by the aggregation of the countries' preferences in a bargaining solution between states. Institutional arrangements are needed in order to establish the desired quantity of the public good, i.e., to aggregate national preferences. Put differently, an international agreement is needed on how much deterioration in the quality of the public good is acceptable, for instance how much global warming can be tolerated. Agreement is also needed on how the costs of the desired quality of the public good are allocated to individual countries and how free-rider behavior can be prevented.

Note that global institutional arrangements such as the trade order are sometimes considered to have the property of a public good, although they must not be used in equal amounts by all and consequently do not satisfy the definition of public goods. Also note that global public goods in the strict sense represent only one of the nine aspects in the taxonomy of international rules. It would be too narrow an approach if the lowering of transaction costs was only discussed under this heading.

The last two cases are in line with the concept that transactions should be done in organizational units where they have the lowest transaction costs. The firm gets the first shot if transaction costs there are lower than in the market (see above). Allocations that can be accomplished through markets at lower transaction costs than in firms should be done there. What cannot be allocated through markets—externalities and public goods—must be dealt with by the political process, usually in the national political process. Finally, when transaction costs can be reduced by shifting transactions beyond the nation state, then multilateral arrangements come into play.

This taxonomy encompasses nine categories within each of which which it is possible to reduce transaction costs. One may interpret these cases as failures of national markets, leading to too high transaction costs. The international rule system can then be viewed as a correction of subsidiary national rules and of national market failures. Similarly, multilateral rules appear as an expression of the subsidiarity principle: only when national rules lead to undesirable results with high transaction costs are multilateral rules auspicious. However, the definition of market failures cannot come from theoretical models which do not fully reflect economic reality. Nor can such a definition come from flawed models. For instance, the hypothesis of a downward-sloping Philipps curve relating the inflation rate and the unemployment rate may lead to the policy conclusion to expand aggregate demand: the opposing hypothesis—that the Philipps curve varies together with institutional conditions and that it is not downward sloping if agents have rational expectations—does not suggest a policy failure in this sense. It is also well-known that the correction of market failure by bargaining and cooperation is not free from policy failure. Only if the costs of policy failure are lower than the benefits of correcting market failure will transaction costs be reduced.

Note that the taxonomy presented here is quite different from the theory of fiscal federalism. The latter applies when communality is relevant as a common interest, for instance in the form of some national identity in culture and language and where usually at least a weak institutional arrangement exists. The conditions for fiscal federalism, as presented by Ahearne and Eichengreen (2007)—namely similarity of tastes and economies of scale—appear to me somewhat narrow and misleading. In any case, they do not give sufficient reasons for multilateral arrangements. Note that the similarity of tastes should not be confused with the utility function including phenomena in other nation states. It would seem that the concept of economies of scale is too narrow to apply to existing organizational units.

A Hierarchy of Rules

The rule system is a complex network. Most rules have a spatial dimension: some are local, others are regional, while a good number of them are national; some apply to regional integrations or pertain to border-crossing interdependencies; finally, various rules relate to global phenomena. In our interpretation, rules follow the subsidiarity principle: they are relevant for the organizational layer, for instance households, firms, and organizational strata of governments, where they can best fulfill their function. Thus, local rules make sure that information on problems is easily available at the local level and that the preferences of local people can be straightforwardly expressed. Therefore, it is possible to decentralize quite a few rules. When spillovers occur, the dimension of rules needs a larger scope. Rule systems therefore have a vertical structure: with globalization and increasing interdependencies, institutional arrangements become more global.

In contrast to this vertical structure according to the subsidiarity principle, some rules are universal. This characteristic applies to ethical norms, religious values, and principles of natural law. Such universal rules cut through the network of hierarchical rules. Thus, the rule system becomes a complex matrix containing many dimensions: it is defined over space; together with its spatial connotation comes its vertical structure; it applies to different walks of life, which also have their own spatial dimension; and it contains universal rules.

The Process of Ceding Sovereignty

Historically, a long process in ceding sovereignty from nation states to multilateral arrangements has taken place, with many accomplishments but also many setbacks. The progressive devolution of national decisions has been accompanied by poor historical experiences as well as by the occurrence and appearance of unprecedented interdependencies. An example is the increased awareness of environmental degradation in recent decades, affecting not only national environmental systems but also global systems such as the atmosphere. Another example is the disintegration of the world economy experienced during the 1930s and World War II, which in turn led to the establishment of GATT, the IMF, and the World Bank.

The transaction-costs approach to rule setting relies on rules set by voluntary decisions since these are expected to bring advantages. Historically, rule systems have been strongly influenced by a hegemon as was the case with the Bretton Woods institutions after World War II, strongly affected by the United States. At other times, the rule system was imposed by the dominant power as in the case of *Pax Britannica* or *Pax Romana*. Often, such rule systems collapsed together with the dominant power. Then, new rule systems had to be invented. This is the moment when the transaction-costs approach once again in demand. Consequently, in a long-run historical analysis, the transaction-costs approach holds.

There is a rich practice of ceding rules within the European Union, where the process of giving up sovereignty has been going on for nearly sixty years, having started with the European Coal and Steel Community in 1951. The original group of six members has now grown to twenty-seven, through four consecutive steps: enlargement to the north, south, to the neutral states, and to the east. The ceding of sovereignty also included the devolution of policy instruments, as was the case with the establishment of the single market and monetary union as well as with giving up the control of national borders. The process of ceding sovereignty embraces many other mechanisms. For instance, constitutional court judges from all EU countries gather informally to discuss inconsistencies between national constitutions and the European treaties.

As it concerns the extent to which the establishment and implementation of rules are ceded, we can distinguish between unconditional delegation to a supranational agent, supervised delegation, and coordination (Coeuré and Pisani-Ferry 2007, p. 29). Unconditional delegation is unusual. The monetary policy in the euro area and EU competition policy are examples of unconditional delegation, where the agents have full authority to take decisions (although the EU member states remain masters of the EU treaty). The term "unconditional delegation" better fits processes taking place within nation states. Supervised delegation is equally unusual on the international stage. Again in the EU, trade policy may be used as an illustration, as a committee of trade officials nominated by the member states monitors the negotiation process (Coeuré and Pisani-Ferry 2007, p. 30). Coordination means instead that states cooperate in taking into account existing conditions and the instruments chosen elsewhere as well as the interests of other countries. Note that international rules may be either formal or informal. When they are formal, they imply obligations, even though they are not enforceable in a hierarchical legal system (Hoekman and Kostecki 2001, p. 25). Such obligations may in turn result from a mediating convention between signing parties, or they may crystallize into an international organization whose members are themselves states, as in the case of the World Trade Organization (WTO).

As for the ceded rules, they apply to different areas (see the following chapter). At the same time, the process of relinquishing rules can take place with different degrees of intensities. For instance, Stiglitz and Charlton (2005, p. 133) distinguish a descending order of transparency-enhancing obligations on firms and countries, cooperation between jurisdictions, and the establishment of enforceable international rules.

A Political Order as a Precondition

A necessary frame of reference for the transaction-costs approach is some measure of international political stability, i.e., a political order in which rules are respected. At the same time, the rule system may in turn contribute to political stability, thereby initiating a virtuous circle in the long run. Such a rule system can come from a hegemon, provided that the hegemon is not selfish. It can also stem from a group of nations or from *all* nations, a pluralistic approach fitting a multipolar world. This will be our frame of reference.

The political order, however, does not always represent a stable equilibrium. Imperial or ideological dominance, political supremacy, and strategic behavior have the potential to harm existing international rules.

As a warning, the experience of Communist regimes and of National Socialism in Germany remind us that rules, even when agreed upon within a country and between countries, may be fragile. Dictators may rise to power, governments or political systems may become authoritarian, populists may seduce people, and institutions may fall into the hands of lunatics while political preferences may vary over time. Historical experience tells us that the transaction-costs approach is not immune from ideological and religious groups, which may want to destroy other ethnic groups or peoples sharing different religious beliefs. Nor is such an approach hedged from terrorism. We, and especially those generations that have not seen a war in Europe in the last sixty years, cannot be sure whether rules will not be reneged upon, forgotten, or thrown into the dustbin of history. Unfortunately, humankind has a short memory. Sometimes, it seems as if we are only one generation away from the Stone Age. A partial consolation comes from knowing that the more integrated all countries in the world order become, the smaller the possibility of overthrowing the rule system. Consequently, the international community has a strong interest in preventing a country from deviating from such a system.

Historically, shifts in the balance of power have coincided with periods of disruption of the international rules. A case in point is the rise of Germany after its unification in 1871 and the two world wars that ensued, to a large extent as a consequence of the shift in the balance of power between European nations. A case for the future will be the shift of power in the coming decades from the United States to China. In order to defuse the disruptive potential of such shifts, it is essential to have a rule system that is able to accommodate the rising powers and include effective forms of mediation that can be used.

International Rules: A Brief History of Ideas

Philosophers have been studying international rules for a long time. The Enlightenment especially saw many proposals looking into the issue of how rules can be found. Common features are the principle of rationality and the analysis of how such a rule system may function.

In his *Leviathan*, Hobbes (1651) developed the idea of "war of all against all" ("*bellum omium contra omnes*") with the often quoted words "*homo homoni lupus*" ("man is a wolf to man"). Man in his natural state cannot help but defend himself in any way possible when threatened with death. Self-defense against violent death is Hobbes's highest human priority. Since men have a self-interested and materialistic desire to end war, Hobbes argued in favor of a social contract: "the passions that incline men to peace are fear of death, desire of such things as are necessary to commodious living, and a hope by their industry to obtain them" (xiii, 14). Much of the book constitutes a demonstration of the necessity of a strong central authority—an absolute sovereign or a Leviathan—to avoid the evil of discord and civil war. Any abuse of power perpetrated by this authority has to be accepted as the price of peace, since an absolute sovereign ensures the enforcement of the contracts.

In his *Theory of Moral Sentiments*, Adam Smith (1759), one of the founders of economics, explained rules by a combination of sentiment and experience. As stated in the opening sentence of his book, moral sentiments, called sympathy by Smith, are feelings or emotions of approval, disapproval, gratitude, or resentment:

> How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it.
>
> Smith 1759, p. 1

Sympathy means “having feelings in common with another person”, or putting oneself in someone else’s shoes. By observing the behavior of others and by feeling or expressing approval or disapproval, rules are revealed.

> Our continual observations upon the conduct of others, insensibly lead us to form for ourselves certain general rules concerning what is fit and proper either to be done or to be avoided. Some of their actions shock all our natural sentiments. . . . We thus naturally lay down to ourselves a general rule, that all such actions are to be avoided, as tending to render us odious, contemptible, or punishable, the objects of all those sentiments for which we have the greatest dread and aversion.
>
> Ibid., p. 265

Thus, it is the experience of which actions are approved or disapproved that leads to a general rule. These general rules are universally acknowledged and appealed to as standards of judgment. They determine the laws and institutions, Smith’s term for rules (also see his *Wealth of Nations* (Smith 1776, Book I, chapter 8)). Unlike Hobbes, Smith assigns positive effects to human interactions, allowing gains from the division of labor.

In contrast to Smith, Immanuel Kant provides a rationalistic foundation of international rules. Reason becomes the basis for any rule, for instance of an institutional arrangement to prevent war:

> Nonetheless, from the throne of its moral legislative power, reason absolutely condemns war as a means of determining the right and makes seeking the state of peace a matter of unmitigated duty. But without a contract among nations, peace can be neither inaugurated nor guaranteed. A league of a special sort must therefore be established, one that we can call a league of peace (*foedus pacificum*), which will be distinguished from a treaty of peace (*pactum pacis*) because the latter seeks merely to stop one war, while the former seeks to end all wars forever.
>
> Kant 1795, p. 117

Karl Marx (1867) proposed a system of rules for organizing a society based on the public ownership of the means of production. Meanwhile, especially in Europe, we have gained experience with Marxist societies and economies. Communist economies were centrally planned, and nearly all sectors of the economy were nationalized. Private ownership was minimized. Individuals were deprived of economic and political freedom, access to information was limited, and freedom of expression prohibited. One political party controlled all political processes and all educational and cultural activities. The organization of society followed the principles of constructive rationalism with the communist ideology as the underlying approach. Self-correcting mechanisms were lacking, the consequences of which were detailed in Aleksandr Solzhenitsyn's *Gulag Archipelago*, cost many millions of lives. Residents found themselves walled in. Although the system clearly failed and citizens ran away from it when the iron curtain fell, the disaster of its historical performance is fading in the perceptions of the young and Marxist principles are receiving attention again within the intellectual circles of Europe and elsewhere.

Two other immoral orientations that had a devastating impact on the world and on the international institutional arrangement were National Socialism in Germany and Fascism in Italy. Again, power was centralized, political freedom and democracy abolished, and one party gathered all the power. Decisions were taken by the führer and by his immediate entourage appealing to nationalistic emotions. The laws of the state and social behavior were brought in line—all ending in a terrible world war.

The experience of Communism and National Socialism in Germany gave birth to a new generation of social philosophers, whose intention was to understand whether such aberrations were the inherently necessary consequence of poor institutional arrangements. They also tried to identify conditions that would prevent the recurrence of such anomalies and tried to look for principles on which superior rules could be based.

Germany's Freiburg School, most prominently Walter Eucken, developed the concept of competitive order and its constituting principles: open markets—nowadays the most important ingredient of the concept of contestable markets—are a prerequisite for competition. Private ownership is both a guarantee of individual liberty and an incentive to minimize costs and reveal true economic information. Freedom of contract is conducive to competition. Liability ensures that social costs are internalized. The constancy of economic policy helps prevent a misallocation of resources over time, and price-level stability is a sine qua non for the price mechanism to operate. All this feeds into the competitive order which for Eucken represented the fundamental principle for organizing an economy. The ordoliberals took the view that the competitive order is instrumental in allowing individual liberties. Decentralization permits individual choice and provides options. How the institutional setup affects the behavior of the individuals and firms was a central issue for the ordoliberal thinkers of the Freiburg School—to think in terms of an order, i.e., in terms of incentives, was a central demand of the ordoliberals. Their thinking became the foundation of Germany's concept of social market economy.

Karl Popper (1945) developed his concept of the open society, countering a closed society in which inheritance, tradition, party membership, and status decide on an individual's options while measures and hierarchies cement social structures, limit entry, and restrain vertical income and social mobility. According to Popper (2003), society should be open "in which individuals are confronted with personal decisions" (p. 186), "in which institutions leave . . . room for personal responsibility" (p. 185), and "which sets free the critical powers of man" (p. xvii). This concept of a free society implies "competition for status among its members" (p. 186).

Hayek (1944, 1971, 1973) conceived the concept of a "spontaneous order" evolving from the interaction of a multitude of decentralized agents. Many rules and institutions have evolved in a historical process and have been refined by selection. The institutional arrangements for the different spheres of human life—economic, political, educational, cultural, and religious—are partially separate. They are so complex that it is impossible for any individual to know all the facts which are relevant to the functioning of such rules. The rules are not "designed" nor can they be "designed" by a social planner. Rather, they "emerge" spontaneously from a seemingly complex network of interactions among agents with limited knowledge. Instead of constructive rationalism "from above," rules and institutional arrangements are the outcome of evolutionary rationalism. The subsidiarity principle is part of the institutional arrangement. Self-correcting mechanisms for amending errors and improving malfunctioning are essential, while market prices are important information signals to bring about adjustment to changed conditions. Governments must create a legal framework—including laws of property, contract, and tort—which allow the market order to function.

Balance of Power and Some Concepts in Political Science

My approach explaining the emergence of rules through learning from experience and the reduction of transaction costs differs from some that have been used in political science, where institutional arrangements are explained by the balance of power in the sense of the classical realists or the concept of realpolitik. This approach is in line with such ideas as a state-and-sovereignty-based order as we know it from the Westphalian peace (Hurrell 2007), but also from the analysis of wars or understanding the situation of the post-Cold-War system and hegemonic stability. Such approaches have also been labeled state-centric realism (Gilpin 1987, 2001). Collective security can be considered to be an issue under such conditions that has to be resolved in the self-interest of states. Without a hegemon, state-based pluralism can be viewed as playing a fundamental role in international institutional arrangements.

Yet another view is to look at major changes in the world economic system and to trace their impact on the international rule system (Gilpin 1987), i.e., how an economically integrated world economy has affected the international rule system (Frieden 2006). Another approach is to analyze changes in value and in ethical views and their effect on the rule system. I take up this issue in chapter X, where I discuss the restraints of the international rule system that arise from human rights, demands for fairness, and the issue of legitimacy. Within the context of changing values, political scientists study the changes that take place in international society and the challenges that derive from globalization (Hurrell 2007). State solidarity may be an outcome of this thinking.

Last but not least, one may return to the balance-of-power approach and look at the impact of impending geoeconomic and geopolitical shifts such as the rise of emerging markets on the world's institutional arrangement. I take up this theme in the final chapter.