ABSTRACT: This paper discusses the implications of basic trade theory for our understanding of the economic performance of national institutional networks. A nation’s institutional configuration importantly shapes the incentives of its economic actors and thereby affects its productive capacities in various economic sectors. I.e., firms’ production functions, and thereby the shapes of national production possibility frontiers, depend, inter alia, on networks of national institutions. Basic trade theory then implies that, ceteris paribus, nations will produce relatively more of and export goods in which they are comparatively institutionally advantaged. Three substantive conclusions follow that previous empirical and theoretical work has generally missed. First, trade specialization in some sector evidences that a nation’s institutions are comparatively, not necessarily absolutely, better than other nations’ institutions in fostering that sector’s production. Indeed, even if a nation is a strong exporter of some goods, its national institutional networks could be pareto-dominated, i.e. weakly inferior in all goods, including those it exports. Second, increasing trade and financial integration alters the costs and benefits to different domestic interests of both inferior and superior national institutions and so may upset domestic political equilibria that maintain those institutions. Thus, globalization could lead to either international institutional convergence or divergence and provides no guarantee of institutional improvement. Third, additionally, expanding trade and financial exposure may reduce the short-run net incentives for institutional convergence by offsetting the costs of inferior institutional frameworks, thus reducing domestic pressures for institutional change.

I. Varieties of Capitalism, National Institutional Networks, and Comparative Advantage

Market capitalism, wherever it emerges, is predicated on preponderance of private ownership
of the means of production and reliance upon markets to organize economic interaction. However, recent scholarly discussions of the *varieties of capitalism* (*e.g.*, of Anglo-Saxon, Rhenish, or German capitalism, or of Japan Inc.)\(^2\) stress that, this common base notwithstanding, different market-capitalist societies may exhibit markedly distinct institutional and organizational features that condition their economic and political performance in myriad, importantly different, ways.

Recent social-scientific and journalistic literature addresses national institutional variety in at least three contexts. First, many emphasize that, because institutions affect economic outcomes and vary cross-nationally, varieties of capitalism produce differences in national aggregate economic performance. Second, some argue further that increasing globalization will increasingly force nations to converge on one set of institutional arrangements, and, in particular, that they will converge on (a single set of) Pareto-improving arrangements. Third, others stress instead that the institutional differences across varieties of capitalism can impact countries’ advantages in trade, and thereby alter the pattern of product specialization across nations.\(^3\) *E.g.*, the US tends to specialize in knowledge-intensive industries and services (*computers, biotechnology, financial services,* etc.) while Germany specializes in high-quality, high-diversity product markets: diversified, quality production, or DQP (*complex machine tools, upscale automobiles,* etc.). This product specialization appears to exceed that which differences in factor endowments and classical trade theory alone could explain. Some link this apparent US (German) advantage in knowledge-intensive (skill-intensive) goods at least in part to differences in national institutional structure.

Whether they emphasize performance, convergence, or specialization, analysts arguing varieties of capitalism agree that institutions shape economic activity within nations and, in particular, the set of national institutions interacts to produce certain economic advantages or disadvantages. The precise meaning of economic (dis)advantage, however, seems to vary across these analyses with the
simplest conceptualization being that a set of national institutions is better, in aggregate or for some industries, than another set of institutions if countries with the first set engage in more production of certain kinds than countries with other institutional arrangements do. However, anticipating later arguments, obviously no country can produce relatively more of all types of goods; rather, all countries will make relatively more of and export some goods and make relatively less of and import others, whatever the (dis)advantages conferred by their national-institutional frameworks.

We argue that this confusion stems from the implicit conflation in much of the literature of two variants of institutional advantage, comparative and absolute (competitive) institutional advantage, and we show how basic trade theory can sharpen our conception of how institutions affect economic performance. We develop this theoretical contrast between comparative and absolute advantage in the paper as follows. First, section II clarifies what we mean by national institutions and how we see them affecting economic performance. Then, section III presents a graphical two-good, two-country model of trade to clarify the distinction between absolute and comparative institutional advantage, demonstrating that previous empirical work addresses the latter though often claiming to address the former. Section IV then uses this model to provide further insights into the role of institutions and economic performance and, in particular, the impact of globalization on international institutional convergence and divergence. Section V concludes and suggests further analytic extensions.

II. National Institutional Networks and Economic Performance

We define a country to be absolutely better at producing some good than other countries if it can produce more of that good than others can at the same factor-input cost (i.e., if it has a higher total-factor-cost productivity). One country could, therefore, be better at producing a good than is another country for many reasons. It could, e.g., be better at producing food (capital goods) if it is relatively more abundant in land (capital) because, by supply and demand, the same land-inputs would be
relatively inexpensive (assuming limited factor mobility). Thus, factor endowments are central to shaping a country’s production advantages. Technological differences, too, could make one country absolutely better in some productive activities than other countries. Indeed, neo-classical economics typically limits its focus to technology and factor endowments in comparing nations’ productivity. We will focus, instead, on how nations’ institutional configuration shapes their sectorial patterns of productivity, effectively assuming *ceteris paribus* on technological and factor-endowment fronts.

Among national institutions affecting economic performance, sociologists and political scientists have recently begun to emphasize those in the financial, education and training, industrial relations, and inter-company governance systems (see, e.g., Hall and Soskice 1999), though, of course, the tax, court, and property-rights systems, etc., remain equally central. Each of these institutional sub-systems creates economic advantages and disadvantages. E.g., financial-system arrangements might facilitate certain types of loans, promoting some kinds of investment, but also pay low interest rates, discouraging savings or otherwise hampering other kinds of loans and investment. The education system may produce a highly trained general workforce but produce very few advanced graduates or research scientists. Although these many national institutions and their varied effects deserve careful analysis of their own, we aggregate ruthlessly for present purposes. In this paper, “the set of national institutions” refers to all of a nation’s institutions that affect its economy, and “their effect on the economy” to the net effect of all those institutions.

National institutions’ economic effects occur along two broad causal pathways. First, institutions can shape governmental economic policymaking (Hall 1986) directly; i.e., they can alter a nation’s economic politics. E.g., concentrating trade-policy authority in politicians directly elected from and responsive to national constituencies might produce freer trade policy than would dividing authority among multiple representatives responsible many sub-national constituencies. Much economic
policy is similarly institutionally shaped, and these policies affect economic performance. Second, more directly, but at a more decentralized, micro-level, institutions can shape the incentives facing economic actors in their market activities; *i.e.*, they can alter nations’ economic production functions (Hall and Soskice 1999, XXXX). *E.g.*, British common-law derived legal systems seem to support production based on cooperative contractor-subcontractor relationships less well relative to those based on more competitive, adversarial contractor-subcontractor relationships than does, *e.g.*, the German legal system (Casper 1995). Admittedly, these two pathways are more analytically than practically distinct, and here we primarily analyze the latter type.

Along that second causal pathway, many specific mechanisms operate. New institutional economics, *e.g.*, emphasizes institutions’ reduction or increase of transaction costs as fostering or hindering economic performance. Others, *e.g.*, stress degrees to which firms and/or workers organize into collectivities capable of unified action, which can change what economic actions are optimal. Important to note is that all such institutional effects alter rates of production/accumulation of labor, physical and human capital, and technology; thus institutions affect economic performance, in part at least, *through* their effects on variables traditionally viewed as “purely economic.” *I.e.*, as North writes, “institutions affect the performance of the economy by their effect on the costs of exchange and production” (1990: 5). Institutions are thus a form of “soft technology,” not only affecting aggregate economic performance, but also altering how various inputs are most efficiently combined to produce different goods and thus differentially impacting various economic activities. *E.g.*, suppose legal-system safeguards for contracts and property rights were to weaken. Productive-but-risky exchange and, with it, aggregate efficiency would decline. Economic actors would also substitute other activities insofar as possible for risky exchanges as the optimal combination of subprocesses to produce final outputs will have changed. Note especially in this regard that, since some
productive activities rely more heavily upon risky exchanges than others do, the efficiency loss from weakening property rights would vary across the economic sectors.

In sum, institutions can affect economic performance by directly altering conditions of economic activity and/or, partly thereby, by altering economic policies and politics. Next, we ask how, then, and under what conditions, we can compare the impacts of institutions on economic performance, and specifically on production in and exchange among different countries.

III. Basic Trade Theory and Comparative versus Absolute Institutional Advantage

The first insight from basic economic trade theory is that, when two countries trade, one country will focus on producing some goods and the other country on other goods, the two will trade to satisfy their domestic demands, and both will benefit thereby. In short, trade induces specialization among and produces gains for all parties. The second basic insight is that, in trade, each country specializes into (out of) and exports (imports) the goods in which it is comparatively advantaged (disadvantaged). Critical here is that comparative as opposed to absolute advantage is doubly relative. Obviously, if England is absolutely better at making cloth and absolutely worse at making wine than Spain while Spain is absolutely better at wine and absolutely worse at cloth than England, then England could make cloth and Spain wine, they could trade, and both would benefit. That, however, is more than required. Even if England is absolutely more productive in both, e.g., trade produces specialization and gains. What determines the direction of trade, specialization, and gains is the productivity in activity 1 relative to productivity in activity 2 in country A relative to the same ratio in country B. Thus, e.g., if the ratio of England’s productivity in cloth to its productivity in wine exceeds the ratio of Spain’s productivity in cloth to its productivity in wine, then trade induces England (Spain) to specialize in and export cloth (wine), and they both gain by this transaction, all regardless of their respective absolute productivities.
Economics emphasizes factor endowments and technology as sources of comparative advantage, but if institutions affect national economic performance, as so many argue, then institutions will also drive countries’ advantages, both absolute and comparative. We now introduce a two-good (machine tools, computers), two-country (Germany, US) graphical model of production and trade to illustrate these comparative and absolute institutional advantages. The model assumes all factor-endowment, technological, and other conditions equal in the two countries to isolate institutional advantages.

We begin with production possibility frontiers (PPF’s). Figure 1 shows the combinations of machine tools and computers that the US can produce, using its factor endowment with its technologies and institutions. As production shifts from computers to machine tools, resources must reallocate. Since the first to reallocate will be those most effective in machine tools and least productive in computers, the curve is initially (rising from the x-axis) steep and flattens as more resources, increasingly well-suited (poorly-suited) to computers (machine tools), shift to machine tools (i.e., diminishing returns). US technologies and institutions determine the PPF’s curvature (i.e., the marginal cost of machine tools in terms of computers and vice versa) while US resources, technologies, and institutions all determine the curve’s distance from the origin (i.e., total productive capacity or, briefly, wealth).

Figure 1 also shows Germany’s production possibility frontier, which, given our assumptions, differs only because its institutions differ. In the example illustrated, Germany is assumed to have national institutions unfavorable to computer and favorable to machine-tool production. Thus, Germany must sacrifice many more machine tools than the US to make equal numbers of computers; i.e., the marginal cost of computers in terms of machine tools is higher in Germany. Note also that
the US can make more computers devoting than Germany can, each devoting all its resources to computers, while Germany can make more machine tools than the US can, each devoting all its resources to them. Since resources and technologies are equal, this precisely illustrates an absolute institutional advantage in machine tools for Germany and in computers for the US. Paralleling the simple England-Spain, wine-cloth example above, Germany is absolutely better (worse) in machine tools (computers) and the US absolutely better (worse) in computers (machine tools), so obviously trade induces Germany to specialize in tools and the US in computers, they trade, and both gain.

More interesting are cases where one country’s institutions are superior and the other’s inferior in both goods’ production. The example in Figure 2 shows the US absolutely more productive in computers, as above, but now also absolutely more productive in machine tools. Using the same resources and technologies as Germany, the US is better at making any combination of computers and machine tools than Germany. By our assumptions, this advantage stems only from institutional differences across the two, so the illustrated case shows strict Pareto dominance of US institutions.

Now suppose the US and Germany trade. When, as in Figure 1, the US had an absolute institutional advantage in producing computers and Germany had an absolute advantage in producing machine tools, the US produced more computers and fewer machine tools than domestically demanded while Germany produced more machine tools and fewer computers than domestically demanded. They traded with each other to cover the differences, and each benefited. In Figure 2, the US has an absolute institutional advantage in producing both computers and machine tools. However, the US (German) advantage (disadvantage) is larger in computers than in machine tools. Stated differently, US productivity in
computers relative to its productivity in machine tools exceeds the same ratio in Germany. Thus, the US (Germany) has a comparative advantage in computers (machine tools), so their specialization and pattern of imports and exports will be the same as in Figure 1, and both will still gain.

Figure 3 demonstrates that comparative, not absolute, advantages drive production specialization and trade direction and gains by adding national indifference curves (IC’s) and the global relative price of machine tools and computers ($p_w$) to Figure 2. Each IC connects all combinations of computers and machine tools the nations prefer equally well to consume. IC’s lying farther from the origin represent combinations of computers and machine tools that the nation prefers to more interior IC combinations. First, note that autarky (absence of trade) implies Germany and the US can only use their national PPF’s to reach their most distant IC’s possible (i.e., to maximize national welfare). Doing so, they do best to reach $IC_{Ga}$ and $IC_{Ua}$ respectively; the IC’s tangent to their PPF’s. Under autarky, then, Germany (the US) produces and consumes the bundle labeled $A_G$ ($A_U$). The tangents...
also determine the domestic, autarky relative prices of computers and machine tools: \( p_{Ga} \) and \( p_{Ua} \).

Note that machine tools are less costly in terms of computers in Germany, and \textit{vice versa} in the US, \( p_{Ga} > p_{Ua} \), reflecting the countries’ comparative advantage. Now, with fully free trade, the relative price of computers and machine tools obviously must equalize at one world price, \( p_w \), which will be between \( p_{Ga} \) and \( p_{Ua} \) since these are the only two countries. At \( p_w \), though, Germany (the US) could produce more machine tools (computers), sell them, and buy computers (machine tools) to consume on a higher IC. Trade thus enables Germany (the US) to produce \( T_{PG} \) (\( T_{PU} \)) but consume \( T_{CG} \) (\( T_{CU} \)), and therefore trade induces Germany (the US) to specialize in machine tools (computers), export them and import computers (machine tools), and both countries benefit.

Analytically, our point in Figure 3 is to illustrate that mere evidence of trade or production specialization does not suffice to determine absolute institutional advantage in production generally or in some goods. Specialization implies only comparative, not necessarily absolute, advantage, but scholars are rarely careful of the distinction. Examples of leaps from evidence of specialization to conclusions of absolute institutional advantages abound. Though the exact term \textit{absolute advantage} may not appear, the inference that some area’s specialization in some good’s production indicates that the area has special facility in such production is clear. This special facility is then linked to some local, regional or national institution (or cultural characteristic), often without attention to possible resources or technology advantages (comparative or absolute) that could also explain such specialization. Analyses of the \textit{Third Italy}, \textit{e.g.,} which specializes in fashion-goods and customized machine-tool production using \textit{flexible specialization} techniques, attribute this success to an institutionally determined absolute advantage. Piore and Sabel, \textit{e.g.,} write:

Four coincident factors were crucial to this innovative turn \textit{[i.e., successful expansion of flexible-specialization production]}: the Italian extended family; the view of artisan work as a distinct type of economic activity; the existence of merchant traditions connecting the Italian provinces to world markets; and the willingness of municipal and regional governments (often allied to the labor movement) to help create the infrastructure that the firms required but could not themselves provide.
The evidence cited—concentration in, and extensive production and high exports of fashion and other goods using flexible specialization techniques—does not prove that Italy is absolutely better than other countries at producing such goods. Such evidence proves only that Italy is, minimally, less bad at producing fashion goods and machine tools than it would be at producing other goods compared to other countries. Now, the flexible specialization enabled by Italian extended families, views of artisan work, merchant traditions, and municipal-government willingness to provide infrastructure may indeed make Italy absolutely better than other countries at producing fashion goods and machine tools, but evidence of specialization cannot establish that.

In this section, we graphically illustrated a simple two-good, two-country model from basic trade theory to clarify the distinction between absolute and comparative advantage, accomplishing three tasks *en route*. First, we demonstrated a procedure—graphing national PPF’s that isolate institutional differences by adjusting for resources and technology and applying basic trade theory—by which one can, in principle, compare the effects on production of different national institutional networks. Second, we identified the (exactly) two possible configurations of advantage. In one configuration, one country’s institutions provide absolute institutional advantage in both good’s production (i.e., that country’s institutions pareto-dominate the other’s institutions); in this case, either country can enjoy comparative advantage in either good. In the other case, one country’s institutions create an absolute advantage in one good, and the other’s institutions create an absolute advantage in the other goods; in this case, comparative and absolute advantage align. Thirdly, we established that trade induces countries to specialize production in goods in which they enjoy comparative, not absolute, advantage and, therefore, that production or export specialization (expansion) provides evidence only of (improving) comparative, and not necessarily of absolute, advantage in production.

IV. Pareto-Dominated Institutions, Globalization, Politics, and Convergence or Divergence
We now use this model to explore the role of institutions in shaping the impact of increasing globalization and, in particular, to consider whether and how globalization might foster or retard international institutional convergence or divergence. In this exploration, we invoke only the more interesting case in which one country’s institutions pareto-dominate the other’s; extension to the other case is straightforward. We also follow Frieden and Rogowski (1996) in defining globalization as an “exogenous easing of international exchange,” which, for expositional simplicity, we model by starkly comparing the situation of two countries that do not trade to that of the same two trading freely. Finally, we consider directly only globalization of trade in goods, and not in capital or labor; that extension may be less straightforward and awaits future consideration.

Many have argued that trade globalization, by increasing exposure of national economies to competition, will eventually produce international convergence of national institutional networks. Inferior institutional arrangements retard economic performance, creating ever-mounting political pressure to alter the offending arrangements. How, then, might societies have persistently different sets of institutions even if some of these sets of institutions are absolutely inferior to others?

One possibility is that countries with different relative land, labor, human and physical capital endowments might require different technologies, including the soft technology of institutions, to combine these production inputs most efficiently. Divergent institutions might then reflect optimal or sub-optimal responses to varying resource and technology endowments. Our first point is that, if different national institutional networks are optimal responses to relative endowments, then basic trade theory and the standard globalization logic do not imply institutional convergence at all; rather institutional divergence would persistent or even increase as countries further specialize to exploit comparative advantages. We explore the harder case of inferior institutions below, partly because we suspect that much existing institutional variation is sub-optimal, exceeding or not matching any
differences that optimal responses to relative endowments could explain.

Path dependency provides another possible explanation of institutional variety; *i.e.*, transition costs involved in adjusting national institutional networks to pareto-superior configurations might hinder or prohibit such adjustments.\(^{15}\) However, path dependence is usually limited, and the standard globalization argument claims only *eventual* convergence. Because the loss from any inefficiency in national institutional networks would compound over time as current output is reinvested to grow into future output, disparity between inferior and superior configurations would become increasingly apparent over time. Transition costs, therefore, must be extremely large relative to institutional inefficiencies for retaining inefficient institutions to be permanently economically optimal. Thus, while we attribute some importance to such *economic* path dependency in maintaining institutional diversity, we stress a third, more political, source of institutional persistence.

Institutions, especially formal institutions, rest on the social and political coalitions that support them (Hall 1986). Thus, cross-country variation in the distribution of political power among various interest groups, however that may be determined, implies different equilibrium national institutional networks, and the correlation between sets of institutions that are economically most efficient and those that can be maintained politically can be quite imperfect. Thus, to the degree that current winning-coalitions cannot be reliably compensated for accepting replacement of the institutions favoring them, inferior national institutional networks can persist indefinitely. Finding sufficient compensatory schemes may become easier as losses from inefficiency mount, but they need not as, *e.g.*, potential gainers from institutional adjustment often find effective collective action more difficult than those currently benefiting from existing networks (Olson 1965, 1982). This, too, is a kind of path dependency, though a more political one.

Either sort of path dependency allows institutional divergence, including economically inferior
institutions, to persist because either transition costs or replacing of current winning-coalitions are/is prohibitive. Henceforth, we stress the role of politics in institutional persistence and change.

The standard argument that globalization fosters convergence is inspired by a basic-trade-theory result that, with free trade and certain other conditions, factor (land, labor, capital) prices equalize and by proven free-market doctrine that competition tends to excise inefficiency. We obviously challenge neither doctrine—such pathways for globalization to increase pressures for institutional convergence exist—but institutions are both factors of production and part of the technology that determines the shape of production functions. In the latter capacity, as noted above, equally well-proven doctrine implies that, by inducing specialization, trade will increase economically efficient institutional divergence. We now demonstrate that, adding political considerations, globalization could foster economically inefficient institutional divergence, persistence, or convergence.

Consider first a nation with inferior institutions that does not trade. The inferior institutions will involve extra-normal rents and deadweight losses, assume that the rents and losses are distributed such that the political forces supporting the present institutions exceed those opposing them (i.e., the nation and its institutions are in political equilibrium initially). Now, opening to trade increases competition but also increases (decreases) returns to factors in which the nation is comparatively (dis-)advantaged (Stolper XXXX, Samuelsson XXXX, and Rogowski XXXX). Whether this will weaken support for inferior institutions depends on how it alters the amount or allocation of rents and losses. Increasing exposure could increase deadweight costs on those previously benefiting from the inferior institutions, weakening them or changing some into opponents, or it could increase costs on current opponents, perhaps thereby enabling more effective collective action against the previous winning coalition. One or both of these possibilities must implicitly underlie standard arguments that globalization leads to institutional convergence, but note that the mechanism by which increasing
exposure induces convergence is political, shifting the allocation of rents and costs from institutions.

However, the political shifts induced by globalization could also strengthen coalitions behind inferior institutions. In Figure 3, e.g., Germany’s inferior institutions (recall: its only difference from the US) certainly reduced its aggregate wealth (Germany’s PPF lies entirely within the US’), but they also created its comparative advantage in machine tools. Given this comparative advantage, trade exposure would increase returns to agents deriving their income from, and factors used intensively in, that industry.\(^{16}\) This would likely strengthen any coalition based on machine tools (\emph{i.e.}, on its specific or intensely used factors) relative to any opponents based on computers, and the former are far more likely than the latter to support the existing national institutional network given its relative favoring of machine tools. Adding political considerations, then, globalization once again seems at least as likely to reinforce institutional divergence as to induce institutional convergence.

To clarify, if a country with inferior institutions were to replace them with superior institutions; its society in aggregate would benefit absolutely. However, trade exposure \emph{per se} need strengthen neither the economic nor the political incentives for replacing inferior institutions. The sources of pressure for institutional improvement are the \emph{potential} gains such improvements might bring certain domestic political actors and the political actions these might motivate them to take. Against this are arrayed the \emph{potential} losses of those currently gaining rents of various origin from the existing inferior institutions and the actions these might motivate them to take.\(^{17}\) Increasing exposure alters both in multiple ways, but the net impact is ambiguous and at least as likely to reduce as to increase pressures toward improvement. Ultimately, pressures toward institutional improvement arise because domestic actors perceive a gap between their own and some alternative, more efficient institutional arrangements, existing or hypothetical.\(^{18}\) In this regard, trade exposure \emph{per se} actually reduces pressures toward institutional improvement precisely because it increases the net wealth of societies.
To illustrate, consider Figure 3 one last time. Germany’s inferior institutions allow it to produce combinations of computers and machine tools along PPF\(_G\). Given that PPF, and absent trade, it can achieve its maximal national welfare by producing and consuming \(A_G\), reaching IC\(_{G_0}\). If German actors recognize alternative institutional arrangements, such as those allowing the US to reach PPF\(_U\), they might well press for the necessary changes, though even this is not assured given the political considerations discussed above. However, opening to trade with would allow Germany to increase machine-tool production and reduce computer production to \(T_{PG}\), and trade with the US to consume at \(T_{CG}\) thus achieving higher aggregate welfare along IC\(_{G_t}\) and lowering the costs of its inferior institutions. Thus, increasing trade exposure *per se* reduces pressure for institutional improvement. The US benefits also, so, likewise, if its institutions are inferior, trade *per se* reduces their aggregate costs and thereby lowers pressures for reform. Phrased differently, within some range, institutional reform and trade liberalization are more substitutes than complements.

Notice, finally, that if Germany improved its national institutions fully to match the US and the two had identical preferences, then trade and, with it, gains from trade would disappear. In Germany, increased aggregate efficiency would compensate, but the US would actually suffer. This example exaggerates because all sources of gains from trade but the institutional differences were assumed away, but it also illustrates clearly nations’ mixed incentives regarding international convergence on institutional *improvements* when institutional differences provide gains from trade.

Thus trade exposure has two effects on the persistence and reform of inferior institutions. (1) It redistributes the costs of inferior institutions, which might produce a new winning-coalition behind reform or, at least as likely, might reinforce existing political equilibria. (2) It partially offsets the aggregate costs of inferior institutions by allowing nations to garner gains from trade, some of which stem from institutional differences. For these reasons, and because (3) some of the international
diversity in institutions is optimal given differing factor and technological endowments, and because (4) economic transition-costs induce path dependence for existing national institutional networks, increasing trade exposure *per se* is unlikely to produce international institutional convergence.

V. Conclusion

In this paper, we expounded on comparative institutional advantage to demonstrate three points. First, given trade, production and/or export specialization evidences only comparative advantage and therefore cannot establish that one set of institutions are absolutely better than another set, in general or for those areas of specialization. Second, increasing trade exposure likely alters the amount and allocation of (extra-normal) gains and (deadweight) losses from (pareto-inferior) institutions among domestic groups. This may upset the existing political equilibria maintaining that set of institutions, which could, but does not necessarily or perhaps even likely, increase pressures toward either domestic institutional *improvement* or international institutional convergence. Third, increasing trade exposure *per se* actually reduces the aggregate economic incentives toward domestic institutional improvement by offsetting the costs of inferior institutions with gains from trade.

Several important issues received insufficient attention above; we mention them here partly to suggest directions for our own and others’ future work. First, we suspect that there is no single, best set of national institutions for all countries, which would imply that convergence is undesirable as well as unlikely. Second, the distinct roles of national, regional, and sectorial level institutions in governing the economy, and inducing specialization, warrant exploration; again we suspect regional and sectorial variation in institutional networks is desirable. Third, we also suspect that increasing trade, capital, and labor flows can have quite different effects on economic efficiency and thus on politics, despite their similar effect on factor-price convergence (Tiebout 1956, Rogowski 1989), though we explicitly evaded discussion of any such differences above. To establish these suspicions,
however, and to evaluate many of our and others’ arguments about institutional advantages, we must, fourth and most pressing presently, develop and advance empirical methods capable of distinguishing comparative and absolute advantage as we have done theoretically above.

References


**Notes**

1 Financial support from and helpful discussion with the convenors and fellows of the GAAC German and American Young Scholars' Summer Institute, “Institutions and Economic Performance in Advanced Economies since 1945”.


4 The last refers to how inter-firm relationships are structured and function, and emphasizes the degree to which market or network relationships dominate. See also Soskice (1997).

5 Need cite here.

6 North and Thomas (1973), North (1981, 1990), and Williamson (XXXX) are archetypal.

7 Olson (1965, 1982) are archetypal.

8 This point can radically change our understanding of institutions and economic performance. E.g., students of the *East Asian Miracle* have disputed whether (a) the *East Asian Institutional Model* improved productivity or (b) greater inputs of labor, capital and human capital explain the *Miracle* (Krugman 1994), which many take to imply that institutions played little role. However, if East Asian institutions impacted the increases in labor and physical and human-capital inputs, then they clearly mattered even if they appear insignificant controlling for factor-growth.

9 For illustrative clarity, we assume two goods, two countries, and different production possibility frontiers throughout. Allowing equality or more countries or goods complicates without adding insight.

10 Although we illustrate several of our arguments with the labels Germany, the US, computers, and machine tools, the situations presented are hypothetical: mere thought experiments. We do not intend to imply and the reader should not infer any stance on the actual relative or absolute effectiveness for either industry of either country’s actual institutions.

11 We argued above that institutions influence factor and technological accumulation. In this simple, static model, we assume the countries begin with equal factor endowments; in a dynamic model,
which awaits development, institutions would have additional, future impacts as the current impacts alter factor-endowment and technological conditions.

12 Net of transport and related costs; if prices differed, arbitrage gains would be infinite.

13 To see that these are and exhaust the possibilities, call country 1 (2) productivity in good A (B): $a_1, b_1, a_2, b_2$. Absolute advantage in A and B for 1 implies $a_1 > a_2$ and $b_1 > b_2$, which implies nothing about comparative advantage: $a_1/b_1 \leq a_2/b_2$. Absolute advantage in A (B) for 1 (2), however, implies $a_1 > a_2$ and $b_1 < b_2$, which implies $a_1/b_1 > a_2/b_2$.

14 [Insert references here: XXXX]

15 North, 1990, Chpt. 11; and [need other cites XXXX get Brian Arthur in Anderson et al. The Economy as an Evolving Complex System. ]

16 This implication is common to Ricardo-Viner specific-factors and Stolper-Samuelson mobile-factors trade models.

17 Becker (1983) argues similarly but focuses on policies rather than institutions and only indirectly considers the impact of these domestic political forces on economic performance.

18 Thus, globalization of information and ideas, rather than of trade and capital flows, is the transmission mechanism for institutional convergence.