

Chapter 1

Economic Fluidity: A Crucial Dimension of Economic Freedom

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A brief glance at the preceding seven years of thoughtful essays in the *Index of Economic Freedom* reveals a steady evolution of focus from macro-level to, more recently, micro-level issues. The former include the constitutional rule of law, global free trade, property rights, and terrorism. Indisputably, these are all important structural elements to consider in pursuing economic freedom and growth, and economists have performed important research into how they shape economic action.

In the past two years, however, essays on entrepreneurship and labor freedom have evinced a growing recognition that developments on the micro level are centrally important to economic freedom. Without entrepreneurship—what Joseph Schumpeter called the “fundamental impulse” of a free-market system—an economy will stagnate, and without the requisite labor mobility, a society’s workers will not feel secure enough to launch an entrepreneurial venture. Economist William Baumol has helped to bring the entrepreneur back into economic

analysis, and some economic historians have highlighted the role of entrepreneurs in continuously renewing economic growth and freedom.

The importance of these microeconomic elements points up a crucial dimension of economic freedom: fluidity. The degree of economic freedom (and, thus, of economic growth) in any society will reflect the amount of fluidity in the institutional, organizational, and individual elements of the economy. Every economy evolves based on the interactions within and between these elements, but the *rate* of evolution is determined by the level of fluidity and corresponding degree of interaction, which allows the mixing of ideas and generation of innovation. This might be viewed as the “meso” level of economic analysis.

HISTORICAL EXAMPLES

For example, the growth of cities in late medieval Europe raised the level of economic freedom and helped to drive increasing economic growth. On the Italian Peninsula—the

most urbanized part of Europe—most cities enjoyed similar levels of freedom and trade. It was Florence, however, ahead of the others, that achieved exponential growth, giving rise to early capitalism and the Italian Renaissance. Why did this occur exclusively in Florence? Why, if most Italian cities had comparable levels of economic freedom, did all the cities not experience such a leap?

We face a similar paradox when we look at Chicago's brilliant rise in the 19th century. Other cities, notably St. Louis and Cincinnati, enjoyed a head start over Chicago in terms of trade and transportation. Chicago also did not possess superior geographical advantage (and even faced a great disadvantage considering climate and seasonal variation). Most American cities in the 1830s and 1840s were economically free, and cities in the western part of the country battled among themselves to be the most attractive to business. Yet by 1900, Chicago stood as the grand mid-continental city, the true gateway to the Pacific. Why?

The answers to the riddles of Florence and Chicago are complex; it would be a historical disservice to boil an analysis down to one single element or mechanical formula. Yet the two cities do appear to share something relevant to our purposes: economic fluidity, which increased the rate of interaction inside the cities, raising the amount of entrepreneurial energy and speeding the cities' economic evolution.

INNOVATION AND ECONOMIC GROWTH

Before turning to the historical details of these two cities, we must first define what is meant by "fluidity." To do that, however, we must say a few words on the nature of economic growth. It is now well established in economics that innovation and entrepreneurship—distinct yet related concepts—are absolutely central to development, growth, and enhanced well-being.¹ From Henri Pirenne and

1 See, for example, William J. Baumol, Robert E. Litan, and Carl J. Schramm, *Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity* (New Haven, Conn.: Yale University Press, 2007).

Joseph Schumpeter to Paul Romer and William Baumol, economists and historians have seen disruption and renewal, and not simply incremental continuation, as key to increasing human welfare.

Schumpeter observed that the "fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates."² These are all forms of innovation. Professor Baumol, moreover, points to innovation as the source of the "enviable growth record" of capitalism: "the most critical attribute of the free-market economy" is "its ability to produce a stream of applied innovations and a rate of growth in living standards far beyond anything that any other type of economy has ever been able to achieve for any protracted period."³

2 Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper Perennial, 1975), p. 83.

3 William J. Baumol, *The Free-Market Innovation Machine: Analyzing the Growth Miracle of Capitalism* (Princeton, N.J.: Princeton University Press, 2002), p. viii. Pirenne offered an earlier explanation of what Baumol describes as "recurring industrial revolutions." In a 1914 article, Pirenne theorized of economic history in general: "I believe that, for each period into which our economic history may be divided, there is a distinct and separate class of capitalists. In other words, the group of capitalists of a given epoch does not spring from the capitalist group of the preceding epoch. At every change in economic organization we find a breach of continuity. It is as if the capitalists who have up to that time been active, recognize that they are incapable of adapting themselves to conditions which are evoked by needs hitherto unknown and which call for methods hitherto unemployed. They withdraw from the struggle and become an aristocracy... In their place arise new men, courageous and enterprising, who boldly permit themselves to be driven by the wind actually blowing and who know how to trim their sails to take advantage of it, until the day comes when, its direction changing and disconcerting their manoeuvres, they in their turn pause and are distanced by new craft having fresh forces and new directions." Henri Pirenne, "The Stages in the Social History of Capitalism," *American Historical Review*, Vol. 19 (April 1914), pp. 494, 495. Romer, too, sees innovation as the key to

Innovation—the creation of new knowledge and the useful applications that flow from it—drives growth and improvement in standards of living, but what determines or produces innovation? This is a disputed question, and the partial answer offered here is that economic fluidity is a principal determinant of a society's level of innovation. Fluidity, then, is that condition of a loose yet stable alignment of institutions, organizations, and individuals that facilitates the exchange and networking of knowledge across boundaries. This fosters both innovation and its propagation through entrepreneurship.

This must not be confused with the often chimerical notion of equilibrium in economics. It bears more resemblance, instead, to the idea in complexity science of the “edge of chaos,” the estuary region where rigid order and random chaos meet and generate high levels of adaptation, complexity, and creativity.⁴ How adaptive is a society's economic structure, and how well does it absorb beneficial adaptations?

The notion of economic fluidity, however,

growth: “Economic growth occurs whenever people take resources and rearrange them in ways that are more valuable. A useful metaphor for production in an economy comes from the kitchen. To create valuable final products, we mix inexpensive ingredients together according to a recipe. The cooking one can do is limited by the supply of ingredients, and most cooking in the economy produces undesirable side effects. If economic growth could be achieved only by doing more and more of the same kind of cooking, we would eventually run out of raw materials and suffer from unacceptable levels of pollution and nuisance. Human history teaches us, however, that economic growth springs from better recipes, not just from more cooking. New recipes generally produce fewer unpleasant side effects and generate more economic value per unit of raw material.” Paul Romer, “Economic Growth,” in *The Concise Encyclopedia of Economics*, at www.econlib.org/library/enc/EconomicGrowth.html.

4 See, generally, Stuart Kauffman, *At Home in the Universe: The Search for the Laws of Self-Organization and Complexity* (New York: Oxford University Press, 1995); M. Mitchell Waldrop, *Complexity: The Emerging Science at the Edge of Order and Chaos* (New York: Simon & Schuster Touchstone, 1992); and John H. Holland, *Hidden Order: How Adaptation Builds Complexity* (New York: Perseus Books, 1995).

goes beyond merely the generation and diffusion of ideas and technology within the existing economic structure. Substantial research indicates that it is those ideas on the margins, challenging the status quo, that lift the trajectory of an economy's performance.⁵ Psychologist Howard Gardner, for example, highlights the role of “asynchrony...a lack of fit, an unusual pattern, or an irregularity,” in generating creative ideas and innovation.⁶

Such innovations are often referred to as “disruptive,” but this is accurate only to the extent that the innovations are absorbed and propagated. Marginal and potentially disruptive innovations likely exist in every society at every point in history. They become productive, however, only when the alignment—the dialogue—among institutions, organizations, and individuals is fluid enough that the innovations become part of that co-evolution and shift the trajectory of economic performance to a higher level. Such absorption and propagation are determined by the level of economic fluidity.

LEVELS OF FLUIDITY

At an institutional level, fluidity signals a society's capacity to adapt to changing circumstances, its ability to absorb adaptations productively, and its openness to new ideas. Institutions are here taken to mean “durable systems of established and embedded social rules that structure social interactions.”⁷

5 “This historic and irreversible change in the way of doing things we call ‘innovation’ and we define: innovations are changes in production functions which cannot be decomposed into infinitesimal steps. Add as many mail-coaches as you please, you will never get a railroad by so doing.” Joseph A. Schumpeter, “The Analysis of Economic Change,” *Review of Economic Statistics*, May 1935, pp. 2, 4.

6 Howard Gardner, *Creating Minds: An Anatomy of Creativity Seen Through the Lives of Freud, Einstein, Picasso, Stravinsky, Eliot, Graham, and Gandhi* (New York: Basic Books, 1993), pp. 40–41.

7 Geoffrey M. Hodgson, *The Evolution of Institutional Economics: Agency, Structure and Darwinism in American Institutionalism* (London and New York: Routledge, 2004), p. 14: “According to this definition, systems of language, money, law,

According to Nobel laureate Douglass North, these include both formal (rules, laws, constitutions) and informal (norms of behavior, conventions, self-imposed codes of conduct) constraints, as well as “their enforcement characteristics.”⁸ If the laws and conventions of a society—and the regulations and habits of economic activity—fail to account for a changing reality, the society will become frozen.

Obversely, if the institutions do not maintain a measure of stability and permanence, a society will neither absorb adaptations nor be able to adapt in the first place. As Heraclitus observed, “On those stepping into rivers staying the same other and other waters flow.” For example, American universities have continuously adapted themselves as the needs and demands of society have changed, yet they have also maintained a level of institutional permanence. Adaptation and absorption require openness to those marginal ideas that often form the foundation of economic progress.

Organizationally, fluidity means minimal bureaucracy. Though necessary and perhaps inevitable to some degree, bureaucracy is, in its essence, “a means of communication whose purpose is to reduce risk. Within organizations, the risk-averting dialogue is articulated in rules that bound the behaviors of people and control processes.”⁹

In terms of economic growth, bureaucracy often hinders progress because it seeks predictable, low-risk outcomes— notions that are antithetical to dynamic, entrepreneurship-driven growth. Rules and structure, however, are inevitable and even desirable because they can help to propagate new ideas and innovations. Within a business firm, a facilitative bureau-

weights and measures, traffic conventions, table manners, firms (and all other organizations) are all institutions.”

8 Douglass C. North, “Economic Performance Through Time,” Nobel Prize Lecture, December 9, 1993, at www.nobelprize.org.

9 Carl J. Schramm, “Entrepreneurial Capitalism and the End of Bureaucracy: Reforming the Mutual Dialog of Risk Aversion,” paper presented at annual meeting of the American Economics Association, January 6, 2006, at www.aeaweb.org/annual_mtg_papers/2006/0107_1015_0304.pdf.

cratic structure can increase the “technology adoption investment” that is key to growth.¹⁰ Problems and barriers arise when bureaucracy—in a firm, in government, in a university—sees its goal as perpetuation of the status quo rather than adaptation. The fluidity of a society’s organizations—their ability to minimize bureaucracy and adapt their structure—is often a prime determinant of economic growth.¹¹

The third level of economic fluidity is that of the individual: the ability of individual economic actors to freely decide their line of work, move between jobs, and, crucially, start new businesses. In last year’s *Index of Economic Freedom*, Johnny Munkhammar highlighted restrictive labor laws that continue to hamper economic growth even in Europe.¹² Similarly, the most recent Nobel laureate in economics, Edmund Phelps, has done extensive research into how the “corporatist” economic structure of Western Europe limits individual mobility: “high corporatism is strongly correlated with stifled entrepreneurship and obstructive job protection.”¹³ Here, a nation’s bankruptcy laws, ease of business formation, tax treatment

10 Stephen L. Parente and Edward C. Prescott, “Barriers to Technology Adoption and Development,” *Journal of Political Economy*, Vol. 102 (April 1994), pp. 298, 318.

11 Others view organizational fluidity more expansively, in terms of the institutional context: “Organizations are central to all aspects of social order... [B]ecause cooperation and coordination directly affect productivity, the ability to support complex, sophisticated organizations is central to economic growth.... Open access societies support open access to organizations.... Creative destruction depends critically on open entry and support for organizational forms.” Douglass C. North, John Joseph Wallis, and Barry R. Weingast, “A Conceptual Framework for Interpreting Recorded Human History,” National Bureau of Economic Research Working Paper No. 12795, December 2006.

12 See Johnny Munkhammar, “The Urgent Need for Labor Freedom in Europe—and the World,” Chapter 2 in *2007 Index of Economic Freedom* (Washington, D.C.: The Heritage Foundation and Dow Jones & Company, Inc., 2007), pp. 27–36.

13 Edmund Phelps, “The Dynamism of Nations,” Project Syndicate, December 2003, at www.project-syndicate.org/commentary/phelps4.

of capital gains, and, informally, receptivity to new ideas are all important.

FLUIDITY IN OPERATION

None of these three levels of fluidity is independent; they interact with and determine each other's degree of fluidity. Moreover, there is likely no "optimal" state of fluidity toward which an economy's institutions, organizations, or individuals should gravitate. The desirable level for innovation and its propagation will vary because of the ceaseless march of economic change.

The ubiquity of uncertainty and change in human systems makes fluidity itself necessary. As North observed, "conditions of uncertainty...have characterized the political and economic choices that shaped (and continue to shape) historical change."¹⁴ Rigidity at any level—institutional, organizational, or individual—hinders adaptation and, thus, the ability to improve living standards. This does not mean, of course, that a society should throw itself open to any and all adaptations; the result would be chaos. The corollary of fluidity is the ability to make salutary changes "stick," to institutionalize them. Returning to the examples of Florence and Chicago, we see these two sides of fluidity at work.

- In Florence, economic growth created scores of "new men," made rich from trade and banking, who challenged the old landholding aristocracy. What set Florence apart from other Italian cities was the level of mixing and interaction between the two groups, which prevented aristocratic ossification. (Much of this mixing involved political calculation on both sides, but that doesn't change the fact that it occurred.) At the same time, the artisan and craftsmen guilds in Florence remained more open than in other cities—accepting, for example, silk weavers driven from nearby Lucca. This openness also reflected the movement of the Florentine economy up the value chain. Artisans were continually able to upgrade their skills, and there was much

interaction between the artisans and the upper classes, which increasingly displaced the Church as artistic patrons. This intermingling helped to drive the rebirth of artistic creativity that subsequently spread across Europe.

- We find a similar story in Chicago, where successive waves of settlers, investors, and entrepreneurs constantly remained open to change and new developments. Though Chicago enjoyed water access, the city quickly capitalized on the innovation of the railroad. Meanwhile, its rival St. Louis resisted this advancement, and its commercial institutions failed to adapt quickly to changes wrought by railroads. The growing institutions of Chicago, by contrast, resisted ossification and continuously evolved. One measure of this fluidity is that Chicago simultaneously experienced the fastest rate of wealth creation in the country and the highest turnover of citizens. The level of entrepreneurial energy, facilitated by near-liquid fluidity, pushed the city at an incredible clip.

This notion of fluidity parallels the work done by other economists and economic historians in recent years. Phelps has examined the importance of "economic dynamism" in explaining the difference in economic performance across countries. According to Phelps:

[Dynamism reflects] how fertile the country is in coming up with innovative ideas having prospects of profitability, how adept it is at identifying and nourishing the ideas with the best prospects, and how prepared it is in evaluating and trying out the new products and methods that are launched onto the market.¹⁵

Phelps is absolutely correct that economic dynamism is "a crucial determinant of [a] country's economic performance."¹⁶ Yet even the level of dynamism is determined by other factors, as Phelps recognizes:

¹⁴ North, "Economic Performance Through Time."

¹⁵ Edmund S. Phelps, "Entrepreneurial Culture," *The Wall Street Journal*, February 12, 2007, p. A15.

¹⁶ *Ibid.*

A country's economic model determines its economic dynamism.... There are two dimensions to a country's economic model. One part consists of its economic institutions.... The other part of the economic model consists of various elements of the country's economic culture.¹⁷

The contention of this essay is that unless there is *a priori* fluidity in that "economic model," the character of the institutions and culture will matter less. There must be fluidity for the development of a co-evolutionary process among institutions, organizations, and individuals. "Economic dynamism" emerges from that process and the fluidity that facilitates it.

Put differently, it is not the existence of a specific set of institutions *per se*, but how fluid they are. Many European countries have a start-up rate just as high as that of the United States; ideas and potential innovations, however, cannot break into the prevailing economic model. The proper institutions and organizations appear to exist, but they are not fluid. Recent research suggests that a high rate of entrepreneurship may be necessary but not sufficient to stimulate dynamism and high performance.¹⁸

17 *Ibid.* "A transformation of the economy to one of dynamism, thus the teamwork to implement it and to adapt well to it, can be obtained only if the economic culture and possibly other 'background conditions' are conducive, not just the institutional machinery." Edmund S. Phelps, "Economic Culture and Economic Performance: What Light is Shed on the Continent's Problem?" paper presented at conference, "Perspectives on the Performance of the Continent's Economies," Venice Summer Institute, July 21–22, 2006.

18 See Robert Fairlie, "Entrepreneurship in Silicon Valley During the Boom and Bust," Report for Small Business Administration, Office of Advocacy, March 2007. See also William J. Baumol, *The Free-Market Innovation Machine: Analyzing the Growth Miracle of Capitalism* (Princeton, N.J.: Princeton University Press, 2002), p. viii, emphasizing the importance of "the way in which the market mechanism—together with institutional arrangements—influences, not the creation, but the *allocation* of entrepreneurship between productive and unproductive (rent-seeking) pursuits.... Rather, [entrepreneurs] can be and are reallocated by economic conditions and circumstances

Others have looked at the incentive structure of an economy and how it allocates economic activity. Baumol has analyzed entrepreneurial activity in terms of the "reward structure in the economy" at any given time:

[I]t is the set of rules and not the supply of entrepreneurs or the nature of their objectives that undergoes significant changes from one period to another and helps to dictate the ultimate effect on the economy via the *allocation* of entrepreneurial resources.¹⁹

Similarly, Robert Hall and Charles Jones posit that economic performance is almost exclusively determined by the "infrastructure," the context of economic activity:

Our hypothesis is that an important part of the explanation lies in the economic environment in which individuals produce, transact, invent, and accumulate skills.... A successful infrastructure encourages production. A perverse infrastructure discourages production in ways that are detrimental to economic performance.²⁰

The scholar whose work is perhaps most reflected in this essay is North. By refocusing economic research on the importance of institutions, he has added rich insight into how we view our economies and societies: "It is the interaction between institutions and organizations that shapes the institutional evolution of an economy. If institutions are the rules of the game, organizations and their entrepreneurs are the players."²¹ Moreover, for North, "the

into (or out of) activities that appear not to be entrepreneurial because the preconception that enterprising activity is necessarily productive."

19 William J. Baumol, "Entrepreneurship: Productive, Unproductive, and Destructive," *Journal of Political Economy*, Vol. 98 (October 1990), pp. 893, 894. Emphasis in original.

20 Robert E. Hall and Charles I. Jones, "Levels of Economic Activity Across Countries," *American Economic Review*, Vol. 87 (May 1997), pp. 173, 174–175.

21 North, "Economic Performance Through Time."

most fundamental long run source of change is learning by individuals and entrepreneurs of organizations.”²²

CONTEXT AND ECONOMIC GROWTH

Much of the research referenced here appears to point toward a common idea: Context matters greatly for economic growth. This, too, is one premise of the *Index of Economic Freedom*. The contention of this essay is merely that context is important for growth to the degree that it is fluid enough to promote that growth—fluidity determines the rate of learning.²³

This ostensible tautology can be resolved by pointing out that the proper context of economic success is not a Goldilocks point of equilibrium at which conditions are “just right.” The notion of a stable equilibrium to which all countries must converge is often a mirage,²⁴ and there is nothing inevitable or automatic once a country achieves a threshold level of economic freedom. A society can maintain economic freedom—freedom to start a business, to choose one’s occupation, to own property—yet still slide toward ossification due to a lack of fluidity. As North writes: “In fact most societies throughout history got ‘stuck’ in an institutional matrix that did not evolve.”²⁵

22 *Ibid.*

23 Furthermore, a high level of fluidity can itself serve as a stimulus for innovation and entrepreneurship because it helps maintain the requisite “vibrancy and sense of excitement” and “energy and optimism” that can spark entrepreneurship and growth. Baumol, Litan, and Schramm, *Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity*, p. 33.

24 “What redeems their system in Continental eyes is its stability and job security. But recent history suggests vulnerability, not stability.... Europe is learning that when economic shocks hit, policies that rigidify wage rates and protect existing jobs can only slow—not lessen—the fall of total employment.... By delaying restructuring, such policies may aggravate the fall in profitability, share prices, and the currency, worsening unemployment.” Edmund Phelps, “European Myths, European Realities,” Project Syndicate, November 2002, at www.project-syndicate.org/commentary/phelps4.

25 North, “Economic Performance Through

For example, in the 1970s and early 1980s, the U.S. economy faltered; the economic structure that the author calls “bureaucratic capitalism” stultified American economic performance.²⁶ Yet this economic structure, the context, was not “wrong.” The United States still possessed the ostensibly proper infrastructure and institutions for growth. It simply became too rigid. It lacked fluidity. It did not lack for adaptations: Many would have adapted the American economy toward central planning, and, indeed, several changes in this era did eventually come together to produce entrepreneurial capitalism.²⁷ But bureaucratic capitalism lacked the capacity to generate, absorb, or propagate beneficial adaptations such as innovation. It was not fluid enough.

As noted above, Edmund Phelps has analyzed the economic woes of Western Europe in analogous terms. These two examples demonstrate that threats to fluidity are omnipresent. Even the “proper” institutional context cannot guarantee against stagnation.²⁸ Even today, in the advanced economy of the U.S., we confront developments that could easily have a deleterious impact on fluidity.²⁹

Time.” See also Lewis Mumford, *The City in History: Its Origins, Its Transformations, and Its Prospects* (New York: Harcourt, Brace and World, 1961), pp. 5, 110–111: Any organism can become “sessile...overadapted to a fixed position and lose the power of movement.... Groups of organisms may occupy a common environment and make use of each other’s activities without any one organism reaching its fullest growth, or achieving its maximum potentialities for development. As a matter of fact, they may live together for a long time while undergoing a steady deterioration.... Survival by itself indicates nothing about the development or rank of the organism that survives.”

26 See, for example, Carl J. Schramm, *The Entrepreneurial Imperative* (New York: HarperCollins, 2006).

27 *Ibid.*

28 See also Terence Kealey, *The Economic Laws of Scientific Research* (New York: Palgrave Macmillan, 1996).

29 See, for example, Schramm, *The Entrepreneurial Imperative*, pointing to creeping regulatory strictures as well as the institutional rigidity of American universities.

By the same token, however, fluidity does not mean change for the sake of change, which can be just as detrimental to economic performance: "There is no guarantee that the beliefs and institutions that evolve through time will produce economic growth."³⁰ It means instead that degree of looseness and stability that permits successful adaptation through the rapid generation, absorption, and propagation of innovation.

A key point to keep in mind is that a society's economic structure or "economic model" likely cannot be created *de novo* through government action. Government policy certainly is important, but it is only one factor in determining economic performance and, indeed, can often work to hinder growth. The level of economic fluidity at any given moment will reflect a co-evolutionary process of individuals, organizations, and institutions over time. Evolution and change do not cease, but neither do they guarantee progress and improved human welfare:

As social scientists we often associate change with movement and progress.... But a great deal of change in history is simply change. In every society the balance among political,

economic, religious, military, and educational organizations is in continual flux.³¹

The level of economic fluidity determines how much a society can absorb beneficial adaptations and incorporate them into a self-reinforcing process of increasing economic performance.

Economic freedom continues to be a goal of surpassing importance, but we must recognize that it contains several dimensions, one of which is economic fluidity. To reach and maintain economic freedom in any society, whether advanced or developing, we must ensure that institutions, organizations, and individuals remain fluid enough to facilitate growth.

This essay argues that whether the economic infrastructure is "successful" or "perverse" and whether the "reward structure" is conducive to innovation and entrepreneurship rests on the degree of economic fluidity. Without constant mixing across boundaries, without the creation and testing of ideas, and without learning and adaptation, the specific character of the institutional structure matters little. Fluidity determines whether or not the structure will be successful in facilitating growth.

30 North, "Economic Performance Through Time."

31 North, Wallis, and Weingast, "A Conceptual Framework for Interpreting Recorded Human History."