# How to Keep Growing "New Economies"

by Jerry L. Jordan

In recent years, at least in North America, we have heard ever more frequent assertions concerning the emergence of a "new economy." The pundits contend that we need a new paradigm to understand how this new economy works. Not surprisingly, some old economic models have come under attack for not being able to reconcile the low inflation, high growth, and quite low unemployment rates we have witnessed over the past decade.

This is not a useful way for economists to talk. There is something new, but it isn't the economy. Certainly, computers and information technology have sped up the flow of acquiring or disseminating knowledge: knowledge about prices; knowledge about production techniques. But it doesn't necessarily follow that we need a new paradigm because of this technological progress. And the reason that the old models are not performing well is not because of bandwidth or megahertz, but probably, instead, because they never were very useful. Using statistical correlations, such as the relationship between inflation and unemployment, to determine policy can be dangerous.

This paper discusses some ideas concerning economic performance and progress that are old and yet still highly relevant to the world we are living in today. These ideas will not help anyone predict next year's real GDP growth or instruct the FOMC on what to do with the federal funds rate at its next meeting. But they should help our thinking about a more important question: How do we design monetary and fiscal institutions so that we maximize social welfare over time? The lesson these ideas point to is that the key to sustainable prosperity is the strength of the underlying economic infrastructure.

#### **Elements of Growth**

One thing that has not changed over the last millennium or two is that each and every day new businesses are born, and each and every day other businesses fail. Along with this turnover, the labor market churns, giving rise to new jobs and eliminating older, less productive ones. The same can be said of other productive resources, such as physical and entrepreneurial capital. Individuals and firms must respond to the various shocks hitting the economy. They must rethink not only the way they do business, but also the way labor and capital are put together to produce final consumption. Technological progress necessitates obsolescence. And this observation is just as valid today as it was in 1900, or 1800, or even much earlier.

Some shocks are large. Movable-type printing was every bit as revolutionary as the computer. Gutenberg's invention in the 1430s allowed information to be mass produced. Thirty years after the introduction of the printing press, there were print shops in every corner of the European continent. It is believed that more books were produced in the 50 years following Gutenberg's invention than in the 1,000 years before it.

The Industrial Revolution was obviously another large shock. The steam engine, for example, increased horse-power by several orders of magnitude. With the added power, not only could some products be made more quickly, but new products could also be produced that would have been much more costly with manual labor alone.

Today we may very well be in the midst of another large shock: The information technology revolution. Indeed, computers and the Internet allow us to obtain information instantaneously from Rather than debate whether technical advances have created a "new economy," economists should focus on the more interesting and useful question: How do we create the sort of environment in which innovation and the productive use of new technology thrive, thereby creating economic prosperity? This Economic Commentary discusses the features governments must incorporate into their institutions in order to build an economic infrastructure that promotes prosperity. It is an excerpt of a paper presented by Jerry Jordan, President and CEO of the Federal Reserve Bank of Cleveland, at the 75th **Annual Conference of the Western Eco**nomic Association International in Vancouver, B.C., Canada, on July 1, 2000. The full text of the paper will be available in Contemporary Economic Policy, vol. 19, no. 1 (January), 2001.

almost anywhere in the world, 24 hours a day, while sitting at our desks, and at very little cost.

But today's economy is not new. The fundamental determinants of healthy economies are the same as they ever were. So long as the right environment exists, markets will flourish, and in that environment individuals and markets will adapt to shocks. And as they adapt, the face of the economy changes.

In the right environment, the changes that do occur are the result of the people being allowed to respond optimally to the shocks that confront them, making everyone better off as a result. How does such an environment arise? It is the product of government laying the appropriate infrastructure.

In the United States, as well as in more and more countries throughout the world, an infrastructure exists that allows a large proportion of resources to be spent on research and development. The infrastructure ensures that we will reap the rewards from a successful outcome and, of course, pay the price for an unsuccessful one. Certainly, more people "online" means ideas can spread faster and new techniques and processes can spill over into other sectors of the economy. Nevertheless, there really isn't anything new here. The printing press, the telegraph, and the telephone each had the same effect. In fact, so much attention has been devoted to the so-called new economy that we have overlooked the importance of the infrastructure that has allowed a freer flow of information, products, capital, and labor—all of which have enabled us to fully exploit those new technologies.

### Another "New Economy"

To understand better how an infrastructure can foster the increase in output, and concomitantly wealth, in the economy, it is instructive to glance back at another "new economy"—the Industrial Revolution. What made the capital accumulation, innovation, and industrial enterprise of that economic transformation possible over a century and a half ago? The appropriate institutions and enforcement mechanisms were in place. In contrast, the technical preconditions for such a revolution almost certainly existed elsewhere in the world over time, yet none arose.

Institutions—those that existed and the way they were structured—have been cited as the proximate cause of the Industrial Revolution. Because of its institutions. Great Britain could combine innovation and resources to create greater wealth and set the revolution in motion. While leaders of countries across the globe may have had similar attitudes toward their citizenry at that time, the European fiefdoms were small and open, allowing individuals to move across jurisdictions easily if the conditions in one were not conducive to their skills, or if the particular area was governed in an arbitrary manner. Individuals with the foresight to realize that gains in the standard of living could be made by enforcing property rights, establishing individual autonomy to make contracts, and so on, were able to capture such gains to the benefit of the citizenry.

Still, trading *between* jurisdictions was problematic, because laws or rules between them were often idiosyncratic. The merchants took it upon themselves to impose and enforce their own rules, known as medieval *lex mercatoria* (custom of merchants). These rules basically established property rights and enforcement mechanisms for breaches of those rights, enabling a freer flow of both goods and ideas, leading to higher levels of prosperity.

It is easy to point to many cases where institutions can be singled out as the force that encouraged or discouraged growth. For instance, we can compare the "Asian Tigers" over the past couple of decades to China or North Korea. Or we can compare countries divided by some arbitrary border, as East and West Germany were, or as North and South Korea are. It seems doubtful that explanations other than the underlying infrastructure can adequately explain the disparate patterns of growth between such politically divided regions.

# The Importance of Institutions

If we ask a simple question such as, "Why are some economies rich and others poor?" we get a simple answer: Rich economies have greater resources per capita—more capital, both human and nonhuman, and better technology connecting the two. But this answer only begs another question: "Why do some economies have high levels of capital and technology, while others do not?"

It is a nation's choice of institutions—the totality of which we call the economic infrastructure—that determines wealth and development. What separates economic "haves" from "have-nots" is whether the role of an economy's institutions—particularly its public institutions—is to facilitate production, or to confiscate it.

We can describe an economy's infrastructure as the climate created by institutions that serve as conduits of commerce. Some of these institutions are private; others are public. In either case, an institution's role can be that of conversion—helping to transform resources into output—or diversion—transferring resources to nonproducers. Most private institutions are sustained by the value they add—either they produce, or they fail. But the same cannot be said of public institutions that are sustained by the power of the state.

### Effective Public Institutions

At the most basic level, there can be only two rationalizations for the state's participation in an economy. The first is as a social equalizer, redistributing the fruits of a nation's production under the presumption that a particular social need takes precedence over private desires. The second is the assertion that markets fail to produce an efficient outcome.

Where equity issues are concerned, the role of the state is unambiguous. Society chooses to accept a lower average level of wealth in exchange for some presumably higher social objective.

It is the state's role as a promoter of market efficiency that raises the most complex questions. Even if the objective is to overcome a particular market failure, once the state has involved itself in the economy, its influence will have wide-ranging and unanticipated consequences. And state institutions, which are not bound to obey market forces, exert influence long after their usefulness has passed.

Market failures are likely not as common as activist policymakers presume, but it is clear that they do occur. The most frequently cited example is "public goods," where providing a good for anyone makes it possible to provide it for everyone with no additional costs. But, precisely because it is difficult to exclude individuals from receiving the benefits of such goods, the private sector would produce too little of them. A legal system and national defense are such public goods. Another, though not often mentioned in economics textbooks, is that of a stable currency.

But once the state is introduced into the economic infrastructure, it cannot help but tax the system's productive capacity. Sometimes, these taxes are direct and sustain the government activity. But direct taxes are probably only a small part of the overall cost to the economy. Also important are the costs borne by private agents who invest resources to minimize their tax burdens, either through tax-avoidance schemes or through attempts to influence the taxing authorities.

What are the elements, then, that the state must put in place to allow an economy to be able to take full advantage of possible gains from trade? A market economy requires a foundation of enforceable property rights, generally

accepted accounting principles, sound financial institutions, and a stable currency.

Where public contracts are not honored and private contracts not enforced, markets are impaired. Where title to property is not certain, normal banking is not possible. Where financial statements are not reliable, investment opportunities are obscured. Where the purchasing power of money is not stable, resources are wasted in costly information gathering or in producing or consuming the wrong things.

Additionally, the rules governing individual interactions are inherently not any different than those we would want governing interactions between individuals and institutions. It is essential that we trust that those we interact with will act in predictable ways, will fulfill promises, and so on. If this were not the case, transactions' costs might exclude possible gains from trade. It seems remarkable, when you think about it, that we often take substantial amounts of money to our bank and hand it over to people we have never met before. Or, that securities traders can send millions of dollars to people they don't know in countries they have never been in. Yet this occurs all the time. We trust that the infrastructure is set in place that allows us not to worry that the person at the bank who takes our money doesn't just pocket it. Or that when we use our credit cards to buy a new CD or tennis racquet over the Internet, from a business that is located in some other state or country, we are confident we will get our merchandise, and they are confident they will get paid.

We must require from our government institutions the same features we require from our private ones—predictable behavior, trustworthiness, and commitment. People would like to expect that if taxes are taken from them to provide for their retirement, the government will honor its obligation and return the funds with interest when they are old.

### A Reputable Monetary Authority

These rules should apply at all levels and to all institutions, including the monetary authority. We should expect that the currency issued by the government is subject to the same level of trust, and that its value will not be eroded by arbitrary policies. Economic exchange involves information and

transaction costs that require real resources. These costs, which influence the extent of trade, the degree of specialization of labor, and the economic benefit derived from goods, stem primarily from the difficulty of acquiring information about the quality of the goods—their true worth, as opposed to their money worth. The lower the information and transactions costs, the greater the opportunities for individuals to undertake exchanges that maximize mutual welfare. When we find ways to conserve productive resources that had been devoted to gathering information and conducting exchange, we liberate them and make them available for creating consumable output. In this way, sound money promotes prosperity.

Of course, a nation must be concerned not only about the integrity of its money, but also about the stability and reliability of its financial system. The condition of a nation's financial intermediaries and financial (asset) markets may influence a monetary authority's policy actions, but need not compromise its objectives. Unsound financial institutions and inefficient financial markets may impede, but do not preclude, the achievement and maintenance of a stable currency. Nevertheless, if ex ante concerns about, or ex post responses to, the condition of financial intermediaries or markets divert monetary authorities from a disciplined, sound policy stance, then overall financial instability can result. While the adverse effects of shocks to the financial sector can never be eliminated, their disruptive influence can be minimized if monetary authorities continue to provide a stable monetary unit.

While central banks around the world have begun to understand the longterm efficiencies that stable money can provide, they are also part of a fiscal regime that includes strong incentives to violate the public's trust by generating unanticipated inflation. Through unanticipated expansions of fiat money, central banks can levy an unlegislated tax, reduce the real value of the government's outstanding debts, or attempt to exploit a short-term trade-off between growth and inflation. Governments, especially those that heavily discount the future, will always be tempted to instruct or pressure their central banks to issue excessive amounts of money.

The beneficial effects of such shortsighted government policies are transitory at best. As people alter their behavior in the face of inflation, the cost of conducting exchanges increases. The additional resources expended on gathering information and protecting the real value of wealth would otherwise have been available for growth-enhancing activities.

# Institutions that Achieve Monetary Stability

Governments lacking the willpower to maintain price stability may attempt to ensure the quality of their monetary unit by adopting institutional arrangements that restrict their own monetary discretion. Certain types of rules can enhance a central bank's reputation by signaling that the government intends to maintain the quality of its currency. Examples include explicit price-level targets or other legal imperatives that place monetary stability above other objectives. Such arrangements may be particularly important because a reputation for monetary integrity is built only very slowly.

One example of the role of institutions in providing an infrastructure conducive to fostering long-run growth is the degree to which the Federal Reserve makes public the way it makes monetary policy decisions. It is imperative that the Fed maintain the purchasing power of the dollar. Not minute by minute, not necessarily at the frequency at which the FOMC meets, but over some longer time horizon, maybe three to five years. The rules for institutions mentioned earlier apply equally well here. Predictability is an important component; if the rules are transparent enough, people know with some amount of certainty how the monetary authorities will respond. If they know that policymakers have a three- to five-year horizon, then seeing an uptick in price statistics in one quarter will not cause people to alter their behavior.

It ought to become clearer that the Federal Reserve is focused on one goal: the long-run stability of the purchasing power of the dollar. There should be no perception that the central bank is "antigrowth," as has often been portrayed in the media, or that it is pursuing some sort of "countercyclical stabilization policy." If an economy's monetary unit is known to be a stable standard of value, then

changes in money prices will accurately reflect changes in the relative values of goods and assets. This is the best that can be done. While monetary authorities are focused on this one intermediate goal, there is no sacrifice of output or employment. The notion of a social/political trade-off between prosperity and price stability is a mischievous myth.

When monetary stability is certain, substantial resources are preserved since people do not have to solve a complicated signal extraction problem, trying to decide if the price changes they observe are relative or more general. Resources will not be wasted searching for and using near-money.

The monetary authority of any country has an important role in the ideal economic infrastructure. Therefore, it is imperative that we understand, in a structural sense, how money fits into a dynamic, equilibrium economy.

Economic infrastructure plays a major role in determining economic prosperity. That infrastructure depends crucially on the culture of the institutions that are supported by the state. While we are fortunate to be in the midst of what appears to be a new technological revolution, we should keep in sharp focus the environment that encourages such great leaps forward. And, it would be false hope for countries or regions without such an environment to think that adopting new technologies will allow them to achieve the tremendous gains experienced by those with a more conducive infrastructure in place.

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