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Innovation Nation

Neo-classical economics is bunk. Keynes is dead. What comes next?

THE GRIDLOCK ECONOMY: HOW TOO MUCH OWNERSHIP WRECKS MARKETS, STOPS INNOVATION, AND COSTS LIVES BY MICHAEL HELLER
BASIC BOOKS • 2008 • 304 PAGES • $26

THE ORIGIN OF WEALTH: EVOLUTION, COMPLEXITY, AND THE RADICAL REMAKING OF ECONOMICS BY ERIC BEINHOCKER • HARVARD BUSINESS SCHOOL PRESS • 2007 • 544 PAGES • $16

In 1964, when Alan Greenspan was still worshiping at the altar of objectivist Ayn Rand, he wrote that "[regulation's] sole 'contribution' is to substitute force and fear for incentive as the 'protector' of the consumer... the basis of regulation is armed force... What collectivists refuse to recognize is that it is in the self-interest of every businessman to have a reputation for honest dealings and a quality product." Presumably Greenspan could not envision the flock of loan originators, packagers, and underwriters involved in the mortgage-financing fiasco, who didn't care if they had a quality product or reputation for honest dealings as long as they could pass off financial junk to the next buyer. Today, thanks to the Treasury's $700 billion bailout plan, that next buyer is the U.S. taxpayer.

How did we get into such a mess? While the causes are many, at the core there is one: Washington's belief in the primacy of unfettered markets. This belief is not

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just some random notion that happens to be in vogue. Rather, it lies at the heart of the prevailing doctrine of neo-classical economics, with its focus on stable markets driven by rational actors responding to price signals. Whether the question is how to respond to global warming, address the record trade deficit and declining U.S economic competitiveness, or put in place regulatory oversight to limit financial improprieties, the answer from the neo-classicists is largely the same: The market will take care of it, and if there is a role for government it should be strictly delimited, so as not to "distort" the workings of the "market."

Neo-classical economics pervades the thinking of both parties' establishments. On the right, supply-side economics is the anthem of the American Enterprise Institute, the Heritage Foundation, and the Cato Institute; on the left, "Rubinomics," referring to the policies of Clinton Treasury Secretary Robert Rubin, dominates the Brookings Institution, the Peterson Institute, and the Council on Foreign Relations. Staffers at all these places float in and out of top spots in the federal government, meaning that neo-classicists not only shape but also enforce the Washington consensus on economic policy.

It wasn't always this way. Before the late 1970s, U.S. economic policy was grounded in a different doctrine—Keynesianism economics—which prioritized high employment as the best way to grow the economy. Government's job was to stimulate spending for goods and services, particularly during slowdowns when consumers and businesses might be cutting back their spending, and regulate key sectors to prevent the kinds of excesses that led to the Great Depression. But Keynesianism lost its dominance in the late 1970s, when the emergence of high unemployment with high inflation (termed "stagflation"), coupled with a dramatic slowdown in productivity growth, led many to question it as an adequate guide.

Now the tables are turned, and the prevailing neo-classical economic doctrine is being called into question. When the private sector acting on its own can single-handedly be responsible for the losses of over $2 trillion dollars and require the federal government to save both it and the economy, the notion of leaving things to the wisdom of the market rings hollow at best. And yet a return to Keynesianism, with its inflexible emphasis on employment markets, is hardly the answer, either. We know we are on the wrong path, but how do we reach the right one?

Even with these tectonic changes in the markets, unless there is new thinking that not only calls into question the prevailing doctrine but lays out a compelling new doctrine, old doctrines have a way of hanging on. In the 1930s, the Depression put to rest old notions of laissez-faire, but without John Maynard Keynes's 1936 book *The General Theory of Employment, Interest, and Money*, the old doctrine might have managed to muddle through. In the 1970s, without

Jude Wanniski's 1978 supply-side bible *The Way the World Works* (coupled with a revival of neo-classical economics scholarship), Keynesianism might have had time to renew itself. Today, without a compelling new approach, we risk falling back on the neo-classical response once again, or even turning back even further to a revived Keynesianism.

Fortunately, new work is not only questioning key tenets of neo-classical economics, but also articulating a compelling alternative doctrine: "innovation economics." This theory, promulgated in two new books, holds that the major goal of economic policy should be to spur higher productivity and greater innovation, and that policy should rely not just on price signals alone to get there, but on smart public-private partnerships.

In *The Origin of Wealth*, McKinsey Global Institute Fellow Eric Beinhocker challenges the notion of *homo economicus*, the idealized rational actor that underlies neo-classical economics. Research in an array of fields, including the new disciplines of behavioral economics and complexity theory, has called into question this faith by showing how people often fail to act rationally when making economic decisions. Relying on advanced computer modeling and simulations, researchers have found that many economic systems act less like well-structured systems in equilibrium (as neo-classical economics holds) and more like chaotic, complex systems whose outcomes are unstable and can vary widely based on seemingly minor changes. These models bring us closer to the way things actually work: In the traditional neo-classical view, stock market bubbles don't exist because markets are rational and always reflect full costs and benefits. But in a chaotic, complex-system model, bubbles and their bursting are not out of the ordinary.

In real life, people make "irrational" decisions all the time. Beinhocker explains that people's decisions are affected by a host of "problems," including framing biases (people often choose differently depending on how a problem is presented to them), difficulties judging risk, superstitious reasoning, and other "human" biases for which neo-classical theory simply can't account. As Beinhocker notes, "A substantial body of empirical and experimental evidence shows that real-world investors look nothing like their theoretical, perfectly rational counterparts. Investors do not discount in the way traditional theory assumes, they have various biases regarding risk, are subject to framing errors in processing information, and use heuristics to make decisions." The current financial meltdown demonstrates this truth in spades.

One straightforward example comes from the growing field of behavioral economics, in which real human test subjects, not abstract models, are used to

examine economic activities. Behavioral economists and psychologists like to conduct a simple experiment, called "the sharing game." Imagine you are offered $15. You would likely take the money, behaving as neo-classical economists would predict. Now suppose your colleague has $100 and chooses to give you $15 but keeps the remaining $85—the only catch being that if you refuse the $15, neither of you gets anything. In experiments around the world, most people reject any offer below 20 percent, because offers below that level violate their sense of fairness. In other words, most people will give up $15 in order to "punish" what they see as selfish behavior, even if they lose out in the process. Perhaps it's this dynamic that is partly behind the public's skepticism about the federal bailout of the financial industry, which many saw as helping those who already have a lot of money. For a neo-classical economist used to modeling "rational" behavior, this kind of behavior is anything but.

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These "distortions" and violations of neo-classical economic "laws" are not confined to experimental games. As Michael Heller writes in *The Gridlock Economy*, much of our economy is embedded with this kind of irrationality that limits economic growth. Heller, a law professor at Columbia University, has written an accessible and important book that calls into question a key tenet of neo-classical economics, namely that property rights are the answer to most problems. According to the neo-classical doctrine, the most important thing is to make sure that goods and services are properly allocated according to prices set by the market. The best way to achieve that state is for goods and services to be owned, so that owners can bargain for the right prices with no owner able to exert undue market power.

We are familiar with the problems of too little ownership, creating what economists call the "tragedy of the commons." When no one owns the meadow, sheep herders put all their sheep on it, leading to overgrazing. But Heller argues that the opposite can also be true: "When too many people own too many pieces of one thing, cooperation breaks down, wealth disappears, and everybody loses." Heller calls this gridlock, or the tragedy of the "anti-commons," a situation in which too many people can block each other from creating or using a scarce resource. "Privatization," Heller notes, "can overshoot. Sometimes we create too many owners of a single resource." You don't have to look far to see what Heller is talking about. He notes that the current financial meltdown stems in part from too many owners of mortgages: "There were so many partial owners of pooled mortgages that no one cared to act like an old-fashioned mortgage banker with

careful underwriting and loan servicing…Scattered owners of pooled mortgages could not easily reach agreement to restructure troubled loans."

Heller identifies numerous other areas where dispersed ownership creates gridlock. Cell phone licenses have often been issued based on too many discrete territories, making it difficult to assemble a national network. Similarly, about 1,700 local TV stations possess the rights to valuable wireless spectrum in a crazy-quilt patchwork, where the same frequency is used in some places but not in others, resulting in a vast waste of valuable resources that could instead be used to provide wireless broadband services to tens of millions of Americans. In the pharmaceutical industry, too many patents on compounds and other items limit drug developers from assembling all the intellectual property they need to create new breakthrough drugs. Because land is often owned in small lots, it has become near impossible to assemble real estate in cities for public developments, like additional runways at our nation's airports.

Heller's analysis also provides needed insights into antitrust policy. With their emphasis on allocative efficiency, neo-classicists worry that undue market power will lead to inefficient prices and harms to the consumer. As a result, they are ever watchful of corporate cooperation or market power. But as Heller notes, in those markets dominated by complements (e.g., a railroad where three owners each own a segment on a line), social welfare can be maximized if markets are more, rather than less, concentrated. In this case, where rail lines should all merge into one firm, Heller adds that "monopoly trumps competition." While the neo-classical focus is on the "anti" part of anti-trust, Heller argues that in many cases "pro-trust" may be the appropriate position. Indeed, even if a particular merger might lead to an increase in market power and a concomitant reduction in allocative efficiency and/or hurt other companies in the marketplace, such a merger might expand economic welfare if it leads to even greater efficiencies—particularly in industries such as software, semiconductors, and others with rapidly declining marginal costs, where added scale can drive significant cost savings and reinvestment in research and development.

Heller's insights are particularly appropriate for today's innovation-driven economy, in which "the leading edge of wealth creation requires assembly." In other words, most innovation, and hence the creation of future prosperity, depends on collaboration, or what Harvard business theorist Joe Pine calls "coopetition" (markets or industries involving both competition and cooperation). When this is the case, Heller rightly argues that excessive ownership can limit growth, not accelerate it, as neo-classicists believe.

Defenders of neo-classical doctrine will respond that Heller is simply pointing out problems related to transaction costs, and that the market and individuals

pursuing their self interest will resolve them. But as Heller shows, in many cases the market does not in fact solve them. Heller finds that in experiments, individuals respond quite differently to commons and anti-commons dilemmas, acting more irrationally when dealing with the latter, often resulting in bargaining failure. In some instances, as in the case with trying to assemble a variety of copyrighted works, the costs of negotiating with all the owners may be too high. In other cases, individual owners may hold out, limiting essential property from being used, making it difficult for companies to develop the innovations that would require using a large set of patents.

Such intellectual anomalies are beginning to shake the neo-classical foundations. But without a compelling alternative, policy makers will be left with no place to turn for guidance. Fortunately, as David Warsh illustrates in *Knowledge and the Wealth of Nations,* within the last 15 years a new theory and narrative of economic growth based on an explicit effort to understand and model how technological advance occurs has emerged, at least in academic circles. This new doctrine of "innovation economics" reformulates the traditional model of economic growth so that knowledge, technology, entrepreneurship, and innovation are positioned at the center of the model, rather than seen as independent forces that are largely unaffected by policy.

Innovation economics is based on two fundamental tenets. First, innovation economists believe that what drives growth is not capital accumulation, as neoclassicists claim, but innovation. They argue that the major changes in the U.S. economy of the last 15 years have occurred not because the economy accumulated more capital to invest in even bigger steel mills or car factories, but because of innovation: the creation and adoption of new products, services, and business models. The economy developed and deployed a wide array of new technologies, particularly information technologies. Although capital was needed for these technologies, capital was not the driver. And it's clear from the current financial crises, in which capital was chasing bad deals, that capital was not a commodity in short supply. Thus, the primary goal of economic policy should be to spur higher productivity and greater innovation.

Second, markets relying on price signals alone will always be less effective than smart public-private partnerships in spurring higher productivity and greater innovation. That's because innovation and productivity growth take place in the context of institutions. In turn it is the "social technologies" of institutions, culture, norms, laws, and networks that are so central to growth. Innovation economists view innovation as an evolutionary process, where organizations act on imperfect information and where what economists call "market failures"

are in fact actually the norm. But these are precisely the sorts of social systems that are so difficult for conventional economics to model or study.

As a result, innovation economics holds that the critical issue of the proper role of the state and market should not be understood, as it is currently by policymakers and others in Washington, as the state versus the market. Rather, as Beinhocker suggests, the issue should be seen as "how to combine states and markets to create an effective evolutionary system." And this is largely an empirical and practical problem—to which neo-classical economics, with its focus on prices and mathematical models, is particularly unsuited.

Over 70 years ago, as policymakers struggled to escape the grasp of outmoded economic doctrines that hindered them from effectively responding to the Great Depression, John Maynard Keynes famously stated, "Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist." Today, the challenge is for Washington's practical men (and women) to stop being slaves of defunct economists—including Keynes—and start being followers of the kind of innovation economics that Beinhocker, Heller, and others so compellingly articulate. D