

I came to Chico in September 1971. I feel blessed that I was able to learn the craft of teaching during the high point of higher education in the U.S. -- albeit at the tail end of that period. Higher education was about to begin a torturous fall, which threatens to become even more destructive with each passing day.

My arrival also coincided with the beginning of the decline in the US economy. In 1972, a few months after my arrival, real hourly U.S. wages peaked. The political signs were also ominous. The month before I begin teaching, Lewis Powell, soon to become a member of the Supreme Court, penned a memo for the Chamber of Commerce, which served as both a manifesto and a blueprint for the movement that remade the US, and perhaps the world economy. A large portion of the memo dealt with the project of deregulating the economy, but Powell also emphasized the need for much tighter corporate influence on higher education by way of defunding.

Thirty five years later, in October 2007, just as the stock market was peaking, I published my book, The Confiscation of American Prosperity: From Right-Wing Extremism and Economic Ideology to the Next Great Depression, explaining how this transformation of American society I had witnessed set the stage for a Great Depression.

Many observers are confident that the worst of the storm has already passed. I don't share that confidence. Although the economy may recover, my sense is that the recovery is likely to be temporary. Repairing the economy requires serious changes, without which, more destructive crises await us.

How did I arrive at that opinion? To answer that question, I will cull out small pieces of my books to give you a flavor of my ongoing education.

When I first came to Chico, I was concerned about environmental problems, as well as world poverty. My first book in 1977, Farming for Profit in a Hungry World took six years to complete, even with the outstanding support of the office staff, librarians, computer technicians, and colleagues. The part of the book that won the most attention concerned agriculture's enormous direct and indirect consumption of energy. I regarded my warnings about the Green Revolution to be a more important contribution.

I then became interested in early economists' treatment of agriculture. This research led to the publication of Classical Political Economy, Primitive Accumulation, and the Social Division of Labor in 1984, in which I wrote about my discovery of these economists' contradictory positions. While most of them were enthusiastic promoters of laissez faire in their theoretical works, in their private letters and in less theoretical works, they were sympathetic to the often-violent measures used to force peasants from the land -- now called "Primitive Accumulation." -- thus, the book's title.

By the time I was working on that book, the economy was already showing deep strains. Following the Great Depression and the Second World War, the U.S. economy was stronger than ever. The Depression forced business to become efficient, while the War increased demand. Families accumulated significant savings during the War, when

rationing prevented them from acquiring many goods. The economies of potential rivals lay in ruins. The US economy worked better during the postwar period than ever before - so much so that economists refer to that as the Golden Age. By the end of the 1960s, the rate of profit was coming under pressure and the economy began to wobble. The times suggested that I turn to Karl Marx, who never lived to complete Capital. Two of the incomplete topics in his work fascinated me. The first was the role of durable capital goods in production. The second was the effects of financial assets, which have a tendency to lose their mooring in the real economy. Both topics were connected because the rapidly increasing importance of capital-intensive production helped to spur the financial industry. Neither is treated adequately in mainstream economic literature. This simultaneous increase of capital-intensive production and financialization created serious challenges for the emerging economy that Marx saw.

Although growing capital intensity and financialization reinforced each other, they became increasingly disconnected, in the sense that the price of financial assets moved independently of the underlying values of the physical capital that they represented. This disconnect played out disastrously in the recent economic crisis.

Research for this book drove me to look deeper into the role of durable capital in modern economic theory. During the Golden Age, the main economic theorist was John Maynard Keynes. My book, Keynes, Investment Theory and the Economic Slowdown: The Role of Replacement Investment and q-Ratios, was published in 1989. Keynes's theory was far deeper and more sophisticated than most Keynesians, especially American Keynesians, realized. Keynes, in fact, once he told a friend after having breakfast with a group of American Keynesians that he was the only non-Keynesian in the group.

Writing in the midst of the Great Depression, Keynes emphasized the urgency of immediately increasing economic activity. For that reason, Keynes identified total investment as a key factor for stimulating the economy. Given the pressing economic conditions, Keynes was correct, but economists who followed him never took account of the fact that investment consists of two very different components -- investment to expand capacity and investment to replace existing plant and equipment.

In practice, this distinction is important. Competitive pressures drive replacement investment, while increased demand is the greatest influence on capacity expansion. The ideal conditions of the Golden Age promoted considerable capacity expansion, but also reduced competitive pressures. Consequently, the capital stock in the US aged, in the absence of replacement investment. In the meantime, competing economies, which were building from scratch or recovering from wartime devastation, were putting brand-new capital in place. This situation put the US economy at a competitive disadvantage and laid the groundwork for what became known as deindustrialization.

Most economists seemed unconcerned with the prospect of deindustrialization. The idea was that the economy could do better by shifting away from physical production while turning to the development of an information-based economy. According to this logic,

people in this country would be so educated that they could maintain a dominant position in such activities.

This optimism about the future prospects on an information economy turned out to be excessive. Other countries seem to be doing quite well in developing their own foundations for an information economy. In the face of recent budgetary stringency in education, the likelihood that the US will be at the forefront of an information economy becomes increasingly less likely.

The idea of an information economy set me to work on Information, Social Relations, and the Economics of High Technology, published in 1991. This book explored how information develops most effectively in a cooperative environment, in which information sharing is encouraged, but sharing information undermines its marketability.

The book explores why competitive markets are ill-suited to handle information as a commodity. The problem is that information differs from the traditional commodities. Unlike industrial goods, which wear out and become obsolete, information can become more valuable over time as more as people can find more applications for and implications of the information.

In addition, markets are supposed to ration scarce goods that people produce, but information, once produced, is not scarce at all. Once known, people can reproduce information for almost no cost whatsoever. As a result, competition would mean bankruptcy for whoever invested in the production of information.

A competitive, market-oriented information economy cannot work efficiently for another reason. Although information works best when it is shared, sharing becomes impractical in a market economy. Secrecy becomes a strategic weapon to win intellectual property rights. Even the sale of information requires secrecy. If I offer to sell you some information, you would first want to know what it is that I am offering. If I disclose enough about my information so that you realize its utility, you may already possess it without the need to make a purchase.

Allocating the monopoly rewards for those who produce information is impossible, because individuals rarely produce any information on their own. In general, the creation of information builds upon earlier work.

Given these characteristics of information, an information economy requires a government to create scarcity by granting monopolies. Such monopolies, of course, violate market principles. Even more at odds with a market economy, the maintenance of these monopolies requires means a far more intrusive and coercive government to create and enforce intellectual property rights.

Next, I tried to bring together what I had learned about the US economy in The Pathology of the U.S. Economy: The Costs of a Low Wage System, which appeared in 1991. The

book analyzed the disintegration of the Golden Age, with particular attention to the role of wages.

Here I added another twist to the economics of replacement investment; namely that an economy can stimulate replacement investment without necessarily experiencing depressions or steep recessions. Instead, economies can create competitive pressures by increasing wages or the price of raw materials. Squeezed by increasing costs, business will need to become more efficient.

Like anything else in the economy, a Goldilocks Principle is operative -- too much or too little is a bad thing. Of course, by the time this book appeared, real hourly wages had continued to stagnate and the capital structure in the US economy had continued to age.

To get a deeper appreciation of what these findings meant for the US economy, I began to work on The End of Economics, which appeared in 1996. I used the economic history of the United States as evidence of the principles that I had been developing in my earlier work. I found that the economic history of this country swung between periods of regulation and periods of deregulation. Each of the deregulatory phases ended in a deep economic crisis.

The economy would eventually recover, but these downturns could be long lasting unless something else intervened, such as World War II. The competitive pressures brought on by the economic decline eventually helped to make the economy stronger. As this economic strength accumulated, business became increasingly confident, pushing the economy into a renewed phase of deregulation, along with the increasing inequality that usually accompanied this phase.

In researching the late 19th century economy, when industry was first learning to effectively harness fossil fuels, I gained a more nuanced understanding replacement investment. At the time, new technology was coming on line so quickly that industry was often unable to recoup its initial investment costs before competition made it necessary to replace them. While competitive pressures and the consequent replacement investment are important for developing productivity, when that force becomes excessive, as it did at the time, it can become destructive. Beginning in 1873, a depression began and lasted almost 20 years.

What happened? The problem was that in a modern economy with high fixed costs, competition can drive prices down to the cost of producing one more unit. In the case of capital-intensive industries, this cost can be very small -- something similar to what occurs in information industry. Railroads, the major industry in the United States, went bankrupt with regularity because the cost of carrying a unit of freight was trivial relative to the money required to repay bonds. Industry after industry was bleeding money, even though productivity was soaring.

This period also showed how the prospect of premature obsolescence can become so strong that investment can freeze up.

These competitive pressures continued until J.P. Morgan began consolidating industries to eliminate competition. A massive merger wave consolidated industry after industry in a process that became known as Morganization. This merger wave put an end to excessive competition, but it also reduced the pressure for modernization, sapping the vitality of the economy.

This insight became crucial in my next book, Class Warfare in the Information Age, which appeared in 1998. As the title indicates, I was returning to the subject of information economy, just as the dot.com boom was emerging.

The potential of the Information Age was obvious, but it appeared that its application was unbalanced. The new technology was largely directed toward reducing wage costs, partially by increasing labor efficiency and partially by rapid off-shoring.

As a result, the effect of this technology was showing up in the economy as lower wages, higher profits, and great speculative returns. At the time, relatively few investors understood what I had learned by looking at the 19th century railroad and manufacturing industries -- that industries with high fixed costs and a small cost of producing an extra unit of output cannot easily survive in a competitive economy. Many of the innovators in the dot.com era seemed to have enormous profit-making potential -- at least until others duplicated their business model.

Ideally, the benefits of technological improvements should lead to investment, which can make the economy stronger. In a few sectors, massive investment occurred, much of it directed toward fanciful visions of the direction of the future economy. The most outlandish example of misplaced investment was the wild scramble to lay fiber-optic cable, which was occurring so fast that the Department of Commerce estimated that, at one point, the total capacity was doubling every 100 days. Even today, only a small share of the millions of miles of fiber-optic cable is in use. At the same time, much of the economics discipline was explaining how markets could direct investment into their most productive use.

Much of the other investment in information technology went to software and hardware, which would soon become obsolete. Here was another complexity of replacement investment. Because the life expectancy of much information technology was so short, over time, the economy could not accumulate nearly as much productive capacity as would be the case if the investment were put into more durable capital goods.

The unproductive investment in the already-saturated network of fiber-optic cable is a stark reminder of the market's inability to allocate resources efficiently. This insight motivated by research for my next book, The Natural Instability of Markets: Expectations, Increasing Returns, and the Collapse of Markets, which I finished in the

following year, 1999. In this work, I compared the way evolution works in biological systems with the evolution of capital structures.

Biological evolution typically takes place in a relatively stable environment in which small adaptations accumulate resulting in superior fitness. From the standpoint of a population, these small incremental changes do not represent much of a commitment. Some mutations will turn out to be useful; most will not, but for the population as a whole, a few such experiments generally does not represent a big risk, especially in a stable environment.

Investments in capital goods represent economic adaptations in an environment that is not stable. Investors can only guess about what the future environment will be. New technology can rearrange much of the economic landscape within a short period of time, often well before many investments can repay their initial outlay.

In biological systems a few unhelpful mutations means that a small number of members of a population will fall by the wayside. As Keynes explained, because of the absence of knowledge about the future, investors in capital goods tend to rely on either habitual decision-making or succumb to the influence of the general business climate. This latter option means something like irrational herd behavior.

In the meantime, I had begun to rework my book on primitive accumulation. Duke University offered me a contract, but then changed its orientation away from the history of economic thought. The publisher strung me along for 14 years, while I kept reworking the book and integrating new information. By the time the book finally appeared as The Invention of Capitalism: The Secret History of Primitive Accumulation in 2000, it was much improved and completely new.

I published another book that year, Transcending the Economy: On the Potential of Passionate Labor and the Wastes of the Market, which put me on entirely different path, although market wastes had been a recurrent theme in my earlier work. The expression, passionate labor, came from a French utopian named Charles Fourier. The idea is that when people have the opportunity to do something they love, they can accomplish wonders.

Each semester, I tell my class that everybody in the room has the potential to be the best in the world at something. The most important thing they can do in school is to find out what that something is.

I believe a successful economy would help place people where they could perform passionate labor. I am one of the exceptions, who have the opportunity to have a job that is more play than work.

In any case, although I enjoyed working on the research for this part of book, its importance is merely that the examples of passionate labor that I discuss offer a stark contrast to the typical outcomes for people in the job market.

In contrast to the idea of passionate labor, I estimated that perhaps one half of the labor force was engaged in activities that produce no real benefits in terms of maintaining or improving the standard of living. I included much of jobs in finance, advertising, marketing, and certain kinds of supervision. This last category should be easily recognizable in light of the explosion of resources devoted to academic administration. In addition, the jobs of many people who are doing work that should be of social benefit are, in reality, supporting the superfluous workers. Of course, my catalog of unproductive work was far more inclusive.

Seeing the extent of unproductive labor and the growing financialization of the economy was especially important in being able to recognize the increasing fragility of the US economy, a subject to which I next returned in The Pathology of the U.S. Economy Revisited: The Intractable Contradictions of Economic Policy, which appeared in 2001. My intention was originally to republish my earlier book, The Pathology of the U.S. Economy, but new ideas and information led to a very different book. One idea that remained in place was the danger of a low-wage economy, what I called "The Haitian Road to Development." Seeing what was in store for the future of the economy, I wanted to use the title, Down the Tubes, but the publisher refused my wish.

Although the economy was giving every sign of weakening, the false hope of an information economy remained strong. In response, I began work on Steal this Idea: Intellectual Property Rights and the Corporate Confiscation of Creativity, which appeared in 2002. This book paid little attention to the cultural side of intellectual property rights, concentrating on the commercialization of research in science and technology. As mentioned earlier, the quest for intellectual property rights put a premium on secrecy rather than cooperation.

This kind of environment provided a rich ground for wasteful litigation. People would file patents willy-nilly, just to be able to find somebody to sue. Such efforts consumed considerable scientific, as well as legal and administrative personnel. Also, much research was devoted not devoted to anything new, but to find a way to work around existing intellectual property rights. Finally, the military was consuming an excess amount of scientific energies.

Universities were an important part of the story. Basic research is what fuels long-term economic development. Applied research can lead to useful applications, but not the sort of revolutionary changes that you made a modern standard of living possible. Previously, along with the universities, the private labs of IBM and AT&T were major sources of pathbreaking scientific work. These private labs turned away from basic research, emphasizing short-term applied technologies. University administrations began to see their scientific facilities as a major profit center. Two factors were important here. First, inspired by the Lewis Powell memo, political forces severely limited public support of higher education. Second, the corporatization of the university infected leaders with an inquisitive spirit, which would have made the most ruthless CEO proud. This

environment also orphaned institutions that emphasized undergraduate education, as well as departments in major universities without a moneymaking potential.

When I visit the well-appointed biology library in Berkeley, I compare it with the shabby public health library, which had not changed since I attended the school in the 1960s, until it was moved into the dingy basement of an administration building. A similar contrast exists between the business and economics library and anthropology library.

These distorted values do not make for a healthy intellectual or scientific environment. Increased tuition, which turns away talented students, only make matters worse.

My increasing recognition of the thoroughness of the economic rot that was underway set me to work on my next book, The Perverse Economy: The Impact of Markets on People and Nature, which appeared in 2003. My emphasis here was the perverted incentives in the economy. I began with what I called "The Farm Worker Paradox," in which the people who do the work that is most vital for society get paid the least, while the superfluous are among those who prosper the most. The book also explored the mispricing of resources.

According to economic theory, prices are supposed to reflect scarcity. I used the example of the passenger pigeon to question this notion. These pigeons flew in flocks that were so thick that they could block out the sun. Hunters would shovel their birds into wagons and bring their bounty to market. Even as the bird became scarcer, the price remained virtually unchanged until the population was reduced to a single bird in a Cincinnati zoo.

Along with the continual deterioration of the underlying economy, virtually all forms of public support for ordinary people were deteriorating. The prevailing rhetoric of the so-called Ownership Society was that people had to take responsibility for their own welfare. At the same time, corporate benefits were accelerating.

In effect then, people had to accept all of the risks economic, while business could count on government support in hard times. To explore this plutocratic arrangement, I published Manufacturing Discontent: The Trap of Individualism in a Corporate Society, 2005. I explained how financial institutions were playing a game of hot potato with their risky assets, foisting the risk onto unsuspecting public agencies and pension funds. Sooner or later, the piper would have to be paid. Of course, the reckoning came sooner in 2007.

Part of that outcome was to be expected. A mania for tax cuts deprived public agencies and pension funds of adequate financial support. To meet their responsibilities, they had little choice but to look for high yields. I was not aware at the time of the kickbacks that distorted the decision-making, but I suspect that these kickbacks merely served to shift money from one bad investment to another.

I felt the need to revisit the material that I studied for The End of Economics. The result was published in 2006 as Railroading Economics: The Creation of the Free Market Mythology. The book was a historical survey of the interplay between economists and the different phases of the economy. As the economy faltered, economists would express more doubt about the way markets functioned, but, once the economy recovered, challenges to market fundamentalism would become rare. Of course, the exclusion of dissident voices from academic departments played a role in this process.

I should pause for a moment to express my gratitude to my department, my school, and the university for never once taking any actions to prevent me from expressing obviously unpopular views.

I want to skip ahead to my two most recent projects before discussing The Confiscation of American Prosperity. I am currently working on the copyediting of The Invisible Handcuffs of Capitalism: How Market Tyranny Stifles the Economy by Stunting Workers. This book analyzes how economists, beginning with Adam Smith, went to great lengths to emphasize economic transactions rather than the production side of economics. I found that those few times when leading economists strayed into the subject of work and working conditions, they were soundly rebuked. I discovered Adam Smith's dishonesty in his famous story of the pin factory. The purpose could only be to turn his readers' attention away from the question of work and working conditions.

Economists' stubborn resistance to addressing work and working conditions helped to create an environment in which society-at-large, and business in particular, pay inadequate attention to nurturing of the creative potential of their workforce; instead, concentrating on squeezing as much as they can from their workers. Some of you here tonight might understand how this perspective can be extended to other parts of the economy.

My most recent project is provisionally titled Sex, Lies, and Economics: The Amazing Story of Economics and Economists Before Adam Smith. To give you a flavor of where my new book is heading, here is the first and only sentence I have so far for the introduction of the book:

"Besides describing some of the brilliant accomplishments of the colorful founders of economics, this book will also discuss their dark side, including a few murders, over and above crimes more commonly associated with economists. At the same time, these economists' lives and work will throw light on both contemporary economics and economies."

Here is the first sentence of the first chapter:

"Before discussing the work and life of William Petty (1623-1687), it might be of interest to note that he has the unique distinction of being the only economist in history credited with having brought a person back from the dead. We will get back to that feat later."

The wild and entertaining lives of these early economists will hopefully open people up to reading about the economic conditions in which they work. Because people are less committed to economic policies of three centuries ago, if I am successful in getting readers interested in the stories, I may be able to offer valuable lessons that are applicable to the current economy.