

Chapter 3 From Capitalism to Corporatism

Economics is an extractive science. The discipline of economics addresses the allocation of scarce resources among competing ends – the transformation of basic resources into consumer goods and services. All economics is capable of doing, even under the ideal assumptions of perfect competition, is to ensure that resources are “used up” in ways that accurately reflect the tastes and preferences of individuals as consumers. There is nothing in economics to ensure the regeneration or sustainability of the stocks of resources, either natural or human, which are required to support future production of consumer goods and services for either current or future generations.

Economics is a science for managing scarcity. Resources have no economic value unless or until they become scarce. Economics provides no guidance in the use of vital resources, such as air and water, until they are degraded in quantity and quality to a point where they become scarce. Drinking water was free to be wasted -- it had no economic value -- until it became scarce.

Our current economic paradigm is based on times past, which characterize neither the present nor the likely future. Adam Smith’s economic paradigm of the invisible hand probably was a fairly accurate representation of how the world worked 200 years ago, and perhaps was not a bad model until a few decades ago. But the paradigm based on the world of 200 years ago holds little relevance to the world of today.

Today, most sectors of the U.S. economy are dominated by large corporate enterprises. Corporations are non-human entities, regardless of the nature of their stockholders. Corporations allow the separation of ownership from management, not just among households and organizations, but also in many cases, even among nations. Corporate profits are far larger than any concept of “normal profit” envisioned in classical economics. While such profits may or may not be sinful, they most certainly distort the allocation of resource use so as to cripple, if not amputate, Smith’s invisible hand.

Actions of people in pursuit of self-interests are no longer ecologically benign -- if they ever were. The pressures of growing populations and rising per capita consumption are now depleting resources of the land far faster than they can be regenerated by nature. Cultural, moral, and social values now seem to present few constraints to decisions of self-interest. Today, there is little that people will not do to further their narrow self-interests. If it is possible, legal, and profitable, they do it. The erosion of social norms

and ethical values has been closely correlated with a growing belief in the goodness of greed – perhaps reflecting more than mere coincidence.

By John Ikerd, from “Toward an Economics of Sustainability,” a discussion paper for an ad-hoc national “Economics of Sustainability” project, presented in a symposium at the American Agricultural Economics Association Annual Meetings, August 1998.

In the fall of 1965, I left Wilson and came back to the University of Missouri to graduate school. I had inquired about admission to the graduate program; and I was offered an assistantship in Agricultural Economics. That was all the encouragement I needed. When I returned, the University of Missouri was much the same as it had been four years earlier, but I was a very different person. I wanted to learn something useful rather than just get another degree. I had thought about becoming a high school teacher, but getting a teaching certificate would have taken as long as getting a Master’s in agricultural economics. At first, I thought I might focus my master’s program on advertising, become an *educated* advertising agent, but my first course in journalism drove me back to the mainstream of agricultural economics. Five negative points for each misspelled word (there were no spell checkers in those days) left me with no chance for a positive score – no matter how creative my writing might have been. I dropped out of the course to avoid the embarrassment. I opted for a specialty in agricultural marketing instead.

My years in industry had completed my indoctrination into the *religion* of free market economics. I was both a political and economic conservative. Goldwater had been my candidate in the last presidential election – “in my heart I knew he was right,” to repeat his campaign theme. I believed in equal justice for all, but I didn’t believe we could “legislate conscience,” as Goldwater put it. We needed a government to maintain an army, build roads, and to ensure that everyone was educated. But government worked best when it left most things to the markets. At that time, the meat packing business was considered to be fairly highly concentrated – the big four packers controlled a significant portion of total market. But I knew first hand that we had operated in a highly competitive market environment. You could lose the sale of a load of beef if you were as little as a half-cent-a-pound higher than your competitor’s price. The lowest cost supplier got the sale. As far as I was concerned, the markets worked.

It wasn’t easy going back into the classroom after four years in the real world. I struggled my first semester, particularly with the fact that graduate

school required more mathematics than I had ever learned and I had forgotten most of that. I had barely salvaged a C out of college algebra and that was eight years ago. Graduate economics courses increasingly were relying on calculus rather than simple equations and graphs, and the brightest students were considered to be those with the best math skills. A specialty in mathematical economics or statistics greatly enhanced the market value of a graduate degree in economics. Economics was struggling to free itself from the stigma of being a *social science*. With the rigor of mathematics and statistics, it was finally becoming a true science. Economics was ready to take its rightful place in the age of reason.

After the first semester, I began to find my academic legs. I discovered that learning, while challenging, actually could be fun. I started work on my master's research project – relating the value of pork carcasses to their back-fat and weigh measurements. I was back in a packinghouse, but this time to learn rather than work. To me, research was tedious but exciting. After the study was completed, I was quoted in a local newspaper as saying: “someday the value of all hogs will be determined by measuring back-fat and weight of pork carcasses on the packinghouse rail.” Forty years later, that prediction had pretty much come true. The study resulted in my first professional journal article – a mark of distinction for a graduate student at the time. I was on my way to becoming an academic.

I took time from study to find a wife and to get married, as I was finishing my master's requirements. I felt I had found my professional niche in the economics of agriculture and decided to stay in school. My new wife, Gerry, finished the last year of her undergraduate degree, after we were married, and she began teaching school in a small town nearby. We rented a small apartment in university housing and lived well on less than \$10,000 per year.

My Ph.D. program was pretty much a continuation of my Masters work – just *Piled higher and Deeper*, as they say. I retook freshman algebra for no credit, and followed with a calculus course designed for social scientists. I struggled a bit with the freshmen but, finally, math began to make sense. I aced the calculus course the next semester – finished ten percentage points ahead of the rest of the class – because I finally understood algebra. From then on learning economics came fairly easily. I wrote two more journal articles while I worked on my Ph.D. I was considered one of the best, but certainly not the brightest, among the Missouri graduate students at the time.

Back then, graduate students were expected to work, if not on class work, then on research. Most of us would arrive at the office around seven in the morning, spend all day in classes or working on our research, take off an

hour or so for dinner, and then come back to the office to work until ten or later at night. We would take off early Friday afternoon to party a bit and would spend most Saturdays at home. But we were back in the office by Sunday afternoon to start the new week. We all felt like we were a part of a special group of people - we had been given an opportunity to learn.

Faculty and graduate students socialized together back then. The graduate student association sponsored events such as the Great Goat Barbecue, which drew nearly a hundred students, faculty, and family members, and the Last Big Christmas party, where we students stereotyped various faculty members in a comical skit. We graduate students spent long hours in discussion among ourselves – and long coffee breaks in discussions with the faculty. Occasionally the discussions would drift to sports or politics, but mostly it was about economics. We were there to learn.

Unfortunately, a lot of the things we worked hardest to learn turned out to be of little use in understanding the real world. Much of our work was designed to establish the credibility of economics as a science rather than to address the economic problems and opportunities of society. Economics is no different in this respect from the other academic disciplines. Each scientific discipline establishes its own language – its means of making sure that only those who have been appropriately educated can participate in its discussions. This right to participate in professional dialogue is acquired by earning a doctorate in the discipline.

Each area of specialization within each discipline has its own set of prestigious *scholars* who have defined the current state of knowledge in that area, through their articles in various professional journals. No one is taken seriously unless they pay proper respect, through appropriate citations, to the true scholars in their area of work. Thus, no one is taken seriously in academic discussion of economics unless they show proper respect to those economists who have been *anointed* to maintain the discipline. This artificial and unnecessary exclusivity characterizes all academic disciplines in this current age of reason. Academic disciplines intentionally and purposefully exclude discussions that are based on common sense.

However, it is possible for a person to learn a good bit in graduate school, even though a lot of time is wasted on becoming *educated*. I not only learned that markets work, but I also learned how they work, and what real world conditions were necessary in order for them to work. I also learned why we are so willing to allow corporations to make our business decisions for us and why we are reluctant to restrain corporate consolidation – even when only a handful of firms control whole sectors of the economy. I also learned how the discipline of economics provides the scientific foundation

for contemporary American society – a society in which greed is good and might is right.

To economists, it's all a simple matter of economics. No matter if something doesn't make common sense, as long as it makes economic sense, it's right. We all know that if something is not economical, it simply will not be done. And if there is an economic benefit to be gained from something, someone will do it. If it exists, by definition, it's good, because if it exists, it must have made economic sense to create it, and therefore, it's good. That's just the way it is – so I was told. To economists, somehow, this all makes sense.

The roots of most contemporary economic thinking can still be traced back to Adam Smith. The full title of Smith's classic book is, An Inquiry into the Nature and Sources of the Wealth of Nations.¹ Apparently, it was not Smith's intention to write a book outlining a theory of economics that would remain true for all times. He was only attempting to draw some conclusions concerning what seemed to be working to create wealth in the late 1700s, by observing the world of that time. He undoubtedly hoped that his observations would be of use to those currently in positions of power for some reasonable period thereafter. But it was the 20th Century economists, not Smith, who turned Smith's observations into economic theory and eventually turned economics into a religion.

Economic theory, developed by others, spelled out the assumptions under which Adam Smith's invisible hand might be expected to transform individual self-interests into the common good. Among the most important of these is the assumption of consumer sovereignty – the consumer is king, as economists put it. In economics, consumers' tastes and preferences are taken as a given – as a God-given quality with which no man has a right to tinker. The fundamental purpose of all economic activity is to allocate resources in such a way as to satisfy consumers' needs and wants. Economists claim to make no judgment concerning whether consumers' tastes and preferences are good or bad, or right or wrong. However, economists accept consumers' tastes and preferences as if they were inherently good and right – a peculiar kind of economic non-ethic. Economists accept the premise that consumers should be able to be able to choose as much as they want of whatever they want. In economics, the consumer is sovereign.

A second critical economic assumption is that markets are truly competitive. The economic meaning of competitive markets goes far beyond the common assumption that competition exists if two or more people are trying to buy or sell the same basic good or service. For markets to be

competitive, in the economic sense, there must be many buyers and sellers – so many that no single buyer or seller can have any measurable effect on either the total quantity sold or its price in the marketplace. In a truly competitive market, the largest seller or buyer could either double their sales or purchases or withdraw from the market entirely, and the other buyers and sellers would never notice the difference. This type of competitiveness is necessary to ensure that any benefits from reduced production costs are quickly passed on to consumers and changes in consumer demand are quickly reflected in the demand for productive resources – rather than retained as excess profits.

In economics only products that are identical, or at least identical in the minds of consumers, are considered to be competing in the same market. If products are different, they are assumed to represent different markets, and each such market must have a sufficient numbers of buyers and sellers to be competitive. If a producer successfully differentiates their product so as to make its value different in the mind of the consumer, the seller has created a separate economic market. That market will not be competitive until a sufficient number of other producers supply identical products so that consumers may choose freely among alternative suppliers.

In economically competitive markets, producers must have freedom of entry and exit – it must be easy to get into and out of the business. If prices rise to profitable levels, new suppliers must be able to enter the market quickly, to increase overall supplies, and bring prices back down to the level of marginal production costs. If prices fall to unprofitable levels, current suppliers must be able to leave the market quickly, to reduce supplies, and bring prices back up to the level of marginal cost of production. Market entry and exit are the means by which productive inputs and resources are reallocated to meet changes in consumer demand. Without freedom of entry and exit, profits or losses can persist, markets don't respond to changing needs and wants of consumers, and producers won't produce enough the things consumers need and want most.

Economically competitive markets also require perfect market information. Consumers must be able to anticipate the benefit they are going to derive from a good or service at the time they decide to buy it. The economic value of a good or service is determined by the amount of utility or benefit derived from it by the consumer. If the ultimate value is either less or more than anticipated at the time of purchase, the price of a good or service will not reflect its actual value to consumers. In the absence of good information, people buy things that ultimately do not meet their needs, market prices send the wrong signals to consumers and producers, and the

things that consumers would actually prefer are not produced, at least not in the quantities desired.

In the late 1700s, these basic assumptions of *perfect competition* were pretty well reflected in the world into which Adam Smith made his inquiry. Consumer tastes and preferences could be accepted as given. There may have been strong efforts to bend people's tastes and preferences to make them better citizens, better husbands and wives, or to save their souls, but their material needs and wants were pretty much accepted as given. There was little if any advertising designed to create wants and needs that did not previously exist.

The economy was made up almost entirely of individual buyers and sellers. Most businesses were private enterprises, operated by a single individual or a family, possibly with a few hired workers. Corporations were rare in those days, mainly restricted to government granted monopolies. European craft and merchants guilds were still around, but Smith criticized them soundly because of their undesirable influence on competition. Most guilds were abolished by the early 1800s.

In Smith's day, it was easy to get into or out of a business. The enterprises were small, so the investments were small. It was easy to acquire enough money to get into a business that looked promising and not too painful to liquidate one that didn't. Most buildings and equipment could be used for a number of different uses, so no one was locked into doing just one thing. Since most processing and manufacturing activities were pretty basic, there were few patents or copyrights to prevent competition from new or existing producers.

Most trade involved undifferentiated commodities – each baker's bread, brewer's beer, and butcher's beef was pretty much the same as others' bread, beer, and beef. Information concerning the usefulness and reliability of goods and services was pretty simple – but pretty accurate. Most transactions took place face to face between buyer and seller – most traders knew each other and did business on a regular basis. If buyers wanted to know something about a product, they could ask the producer, face-to-face. If a product didn't live up to expectations, they could take it back, and the seller would have to make it right. Outside of a few outrageous claims for patent medicines, advertising was very limited, and thus, did not create unrealistic expectations.

Smith's observations concerning the nature and the sources of differences in wealth among nations of the time were probably pretty much on target considering the nature of the world into which he *inquired*. But, he didn't claim that he had developed a theory of economics that would hold

true for all nations for all times. Economists took Smith's observations from one point in time, discerned the conditions under which Smith's conclusions would be valid regardless of time, and derived classical economic theory. This process of developing economic theory was perfectly logical and reasonable. The problem is that none of the assumptions derived from Smith's observations of the economy of the 1700s is reflected in the economy of the 2000s. The world has changed dramatically in the past 200 years, but economists still cling to classical economic in their defense of free market capitalism.

Economic theory is divided into microeconomics and macroeconomics – microeconomics being the theory of the *firm* and macroeconomics being the theory of the overall *economy*. I actually didn't begin to understand what macroeconomics was about until I was nearly through graduate school. I kept thinking macroeconomics should somehow focus on ensuring that the national economy functions to serve the economic interests of society as a whole. However, all of my macro courses seemed to be about economic growth – measuring growth, restoring growth, stimulating growth, constraints to growth, etc. It seemed to be taken as an article of faith that if the economy was growing at its maximum rate, the economic interests of society were being served.

It wasn't until Professor Mona Dingle's class on monetary policy that it began to dawn on me that macroeconomics is not about enhancing the economic wellbeing of society as a whole; it is about enhancing the wealth of individuals within society. One of the wisest of my economics professors, Dr. Harold Breimyer, was fond of saying that the concept of macroeconomic theory was a myth, because there is no economic theory relating to the economy as a whole. The macro-economy is nothing more than the sum of all of the micro-economies – thus, macroeconomics adds nothing beyond microeconomics in the way of theory. In economics, the national economy has no characteristics other than those embodied in the separate economic entities, the individuals and organizations, of which it is composed. The macro-economy quite simply is the sum of its individual economic entities – the *economic whole* is nothing more than the sum of its parts. Eventually, I began to understand that macroeconomic policy is not about managing the overall economy; it is about encouraging and facilitating the generation of wealth by individuals.

We agricultural economists took a lot more courses in micro than in macro and I remember struggling to understand macroeconomic policy. On the third floor of Mumford Hall, in the graduate student offices, our discussions would go on late into the night. Macroeconomic policy includes

monetary and fiscal policy. One deals with management of the money supply and the other with management of the federal budget. The primary role of the monetary policy is to facilitate private market transactions among individual economic entities. The primary role of fiscal policy is to ensure that government borrowing and spending help to stabilize, rather than destabilize, the private economy.

Somehow, economic policy always seemed to make more sense to me when it was put into a historical context. Before money, for example, there was barter and trade and money simply makes it easier to barter and trade. In economic terms, the functions of money, which includes all forms of currency, are to serve as a medium of exchange and to facilitate saving or storing of economic value. Without money, barter would be a very inefficient means of trading in a specialized, complex market economy. It's not always easy to find people who want the things you have to offer in trade, who also have the things you want and need in return. In a monetary economy, people can sell – trade for money – the things they have to offer, including their time, and can buy – trade money for – the things they want and need. The government is the logical entity to coin a common currency needed to serve as a medium of exchange.

People also must have confidence that money will retain its value from the time they receive it until the time they spend it, in order for a monetary economy to function effectively. People who save and invest money, rather than spend it, must have confidence that money will retain its value between the time they decide to set it aside and the time they expect to get it back and spend it. Money must retain its value, even over a period of many years, in order to be an effective means of saving or storing value. The government is the logical entity to ensure that money retains its value.

I also came to realize that the relationships between lending, borrowing, and interest rates are no different in concept from the relationships between supply, demand, and market prices. Interest is the price of money. Interest is a reward for those who save instead of spend and a cost to those who spend or invest money that someone else has saved. Interest rates reward lenders of money, ration loans among borrowers, and thus, balance savings with investment – just as other prices balance supply with demand. But interest rates are meaningful only if money retains its basic value. If the interest rate you earn on money in your savings account is no higher than the rate of increase in overall prices, i.e., inflation, you won't be able to buy any more a year from now that you could have bought today. You will have received no reward for saving rather than spending. The drop in value of money, i.e. inflation, will have wiped out all of your expected reward. The value of

money must be stable, or at least change at a predictable rate, if interest is to serve as an effective price of money. The government is the logical institution to keep inflation in check and to ensure that interest rates reflect a reasonable price for saving and investing money.

Prior to the Great Depression of the 1930s, the primary economic role of government was to manage the supply of money. Economists assumed that a free market economy would always be self-correcting. The economy was expected to go through cycles of expansion and contraction in business activity but would always return to some long run equilibrium. When businesses became unduly optimistic, economic reality would bring forth a recession to dampen the optimism. When businesses became overly pessimistic, the economy would respond with an automatic recovery. Lower prices and profit would clear the markets of surpluses caused by overly-optimism production and higher prices and profits would spur added production during periods of scarcity induced by undue pessimism.

The government's responsibility was to make sure there was enough money in circulation to facilitate market transactions, but not so much as to diminish the value of money. To bolster public confidence, coins were initially minted in gold and silver and paper money was backed by an equivalent amount of these precious metals. Regardless of the nature of the currency, the government is ultimately responsible for maintaining public confidence in the nation's money supply. Money is valuable only if people believe in the integrity of the government that stands behind it.

The depression of the 1930s shook the foundations of macroeconomic policy. Most of the money in circulation then, as is still true, was neither coins nor paper currency, but was money in the form of bank deposits. Banks are allowed to *create money* by making loans while holding only a fraction of the total amount of loans in the form of customer deposits. For example, a bank with a million dollars worth of customer deposits might have five times this amount in outstanding loans. Borrowers are free to spend the full amount of money lent to them by the bank. So in this case, the bank *creates* four additional dollars for each dollar it has on deposit.

My economic professors seemed to agree that the government had caused, or at least contributed to the depth of, the Great Depression of the 1930s by not keeping enough money in circulation. A downturn in the overall economy, highlighted by the collapse of the stock market in October of 1929, signaled an end to a decade of economic prosperity. Most likely, there was no single cause of the economic downturn. However, by the late 1920s numerous warning signs signaled that the post-war economic boom quite simply was not sustainable.

As the economy slowed, workers lost their jobs and began to draw on their deposits in banks to cover their living expenses. Banks had loaned all the law would allow, and thus, had to call in loans to maintain the required loan to deposit ratios. Since a bank might have loaned out four dollars for each dollar of deposits, a thousand dollars drawn out of depositors' savings could force a bank to reduce its outstanding loans by four thousand dollars. Banks that *create* money when they receive new deposits must *destroy* a like amount of money when those deposits are withdrawn.

The government has a number of means of putting new money in circulation, or of taking money out of circulation, as needed to maintain the overall money supply, and thus, to maintain the value of money. However, during the Great Depression, the government failed to provide enough money to banks to offset the sharp decline in money triggered by customer withdrawals. In fact, the federal government chose this time to reduce government spending in order to balance its budget, which took still more money out of circulation.

I remember my Mother talking about *runs* on the banks and bank failures, back when I was a just a kid. The banks couldn't call in their loans fast enough to meet the withdrawal demands of depositors and were forced to close their doors. There was no Federal Deposit Insurance Corporation back then, so depositors simply lost whatever money they had in the bank. A few bank failures triggered still more withdrawals, as customers scrambled to withdraw their deposits before their bank failed. As the depression deepened, increasing numbers of borrowers were forced to default on their loans, leaving banks with no means of recovering enough money to pay off their depositors. Panic set in, causing runs on banks nationwide. Eventually, more than forty-percent of the banks in the country failed. The bank failures were but one symptom of the depression that engulfed the nation for more than a decade, but these bank failures most clearly symbolized a failed economic policy of the government.

The Great Depression, we young economists were told, had caused economists to rethink the whole concept of macroeconomic policy. The government had failed to maintain an adequate supply of money, and thus, had not been able to stabilize the value of money. The economy did not correct itself automatically. In the depths of the depression, there was virtually no demand for money to invest at any positive interest rate. With no new investment, there was no new employment, and with no new employment, there was no new income to spend, and thus, no reason to invest. The economy didn't bounce back. It was caught in a downward spiral from which it was incapable of recovering on its own.

The Great Depression sparked the beginning of a number of new government banking programs, including the Federal Deposit Insurance Corporation, in an attempt to restore confidence in the integrity of the nation's currency. The Federal Reserve System was reorganized and Franklin Roosevelt's New Deal programs included a number of government spending projects designed to stimulate the economy. The government would kick-start the economy by providing government jobs, spending more money than it had collected in taxes, and *creating* new money to make up the difference. Government jobs would create new income for workers, new income would create new demand for goods and services, the new demand for goods and services would trigger new private investment, and the downward spiral would be broken. The government would take an active role in restoring health to a national economy that obviously was incapable of recovering on its own.

In the mid-1930s, a British Economist, John Maynard Keynes, published his book, The General Theory of Employment, Interest, and Money.² In it, he outlined his theories concerning why economies were not necessarily self-correcting and suggested macroeconomic policies that could be implemented by governments to bring about the necessary corrections. Keynes's basic conclusion was that monetary policy alone could not ensure recovery from deep recessions. The government would have to take the lead in spending money to stimulate economic recovery – government *fiscal policy* was a necessary tool for managing the macro-economy. Keynes' theories supported policy directions that had already been initiated by President Roosevelt as well as by the leaders of Great Britain. It took the massive deficit spending by governments in financing World War II finally to pull the U.S. and world economies out of the Great Depression. Keynesian Economics was validated, and it survives still today as the foundation for contemporary macroeconomic theory.

The Federal Reserve System (The Fed) remains a mystery to most people, even though when the Chairman of the Fed speaks, all of Wall Street certainly listens. The Fed's primary function is to formulate and carry out monetary policy. The Fed can stimulate the economy by putting more money in circulation, before anything new has been produced or anyone has actually earned more money. But increases in *real* economic activity eventually must validate such monetary initiatives. Otherwise, increases in the money supply only lead to inflation and a devaluing of the currency – prices of everything go up. The Fed can dampen inflation by decreases in the money supply, even though the economy is expanding, by making less

money available for spending or investment. However, overly restrictive monetary policy may trigger a recession.

The Fed, unlike the Office of the President or Congress, is an independent government agency, made up of a Central Bank and 12 member banks serving various regions of the country. The most common method by which the Fed changes the money supply is by changing the interest rates it charges to member banks and rates that member banks charge to their borrowers. Higher interest rates by the Fed make money more expensive to borrowers throughout the banking system, which reduces borrowing and reduces the amount of money in circulation. Lower interest rates, conversely, tend to increase borrowing and increase the supply of money in circulation. The Fed can also change the reserve requirements, which affect the ability of banks to create money; but uses this strategy far less often than it changes interest rates. The Fed also carries out *open market* activity, by which it borrows money or pays off debts on behalf of the federal government, also affecting the supply of money in circulation. When the Fed speaks, investors listen.

Fiscal policy, the second half of macroeconomic policy, is another mystery to most people – apparently including many Presidents and members of Congress, who are jointly responsible for its development and execution. Fiscal policy is about budgets, taxes, and spending. The President proposes, collects, and spends, but the Congress must approve, tax, and appropriate.

The federal government can either run a national budget deficit, meaning that it spends more than it takes in, or run a surplus, meaning that it takes in more than it spends. Of course, it could also balance the budget, but that rarely happens. The Fed borrows or lends money on behalf of the government, but does not participate directly setting in fiscal policy. The President and Congress are responsible for fiscal policy, but federal budget deficits seem to be more a result of lack of will to balance the federal budget than of any intentional fiscal policy. Likewise, federal budget surpluses seem to be far more accidental than planned. Nonetheless, budget deficits tend to stimulate the national economy by putting more money in circulation and budget surpluses dampen the economy by taking money out of circulation.

The conventional wisdom seems to be that the federal government should simply balance its budget, as families and state governments are expected to do. Some have proposed a constitutional amendment requiring a balanced federal budget. However, an effective balanced budget amendment would eliminate fiscal policy as a tool for managing the national economy. I certainly cannot defend federal fiscal policy as it has been practiced, or more

accurately, not practiced, over the past several decades. However, in times of deep recession, we have no means other than deficit spending to stimulate economic recovery. The federal government is responsible for maintaining stability of the national economy. To fulfill this responsibility, it must be allowed to run deficits and surpluses. In reality, individuals, families, and state governments also need to be able to borrow in times of need and save in times of plenty.

The size of the federal budget deficit or surplus can have a significant impact on the ability of the Federal Reserve System to manage the money supply. If the government is running a large deficit, interest rates may have to be pushed so high as to seriously distort the value of money relative to other assets in order to restrain inflation. And if the government runs a large surplus, it may be impossible to drop interest rates low enough to stimulate investment. So, monetary and fiscal policy must work together to ensure effectiveness of either.

However, neither monetary nor fiscal policy deals with the interests of society as a whole or the interests of the nation in any sense other than as a collection of individual economic enterprises. Nothing in macroeconomic policy protects the social fabric of our society from the stresses and strains of pursuing of our economic self-interests. Nothing in macroeconomic policy protects our natural resources from economic exploitation. Macroeconomic policies simply facilitate our pursuit of our individual, short-run, self-interests.

When I finished my Ph.D. in early 1970, I accepted a faculty position with North Carolina State University (NCSU), in Raleigh, North Carolina. The Department of Economics at NCSU was a hotbed of conservative economic thinking in the early 1970s. Free market economics was the departmental *religion*, most faculty members were of the University of Chicago *diocese*, and Milton Friedman, the ultra-conservative Chicago economist, was their *bishop*. However, the problem of contemporary economics is not with economists, but instead with the discipline of economics. Some of the best people I know – the most intelligent, caring people, with the greatest integrity – are economists. Economists simply practice what they have been taught and what they sincerely believe to be true. Many good economists truly believe in free-market economics. The economists I knew in North Carolina were no exception.

Perhaps there weren't as many buyers and sellers as one might like, but most NCSU folks believed there were enough to ensure competition. After all, business firms had to be larger now to achieve economies of scale. If we limited the size of firms, costs would be higher, and consumer prices would

have to be higher as well. Perhaps market information wasn't perfect, but it costs money to provide information, so consumers are probably better off with less information and lower costs.

It may not be as easy to get into or out of business as we might prefer from a competitive standpoint, but again we have to consider the tradeoffs. Large investments are necessary because firms have to be big to keep costs down. Patents, copyrights, licensing, etc. are necessary because research and development is costly. Firms must be granted a monopoly on new discoveries, at least for a while, or they won't make adequate investments in research and development.

The issues of advertising and differentiated products was adequately addressed, they thought, by economic theorists, such as Chamberlin and Robinson, who had shown that *imperfect competition* was almost as good as *perfect competition*. Most economists at NCSU didn't even want to discuss the issue of advertising and consumer sovereignty – consumers were smart enough, by assumption, to be unaffected by advertising, no matter what the motive. In the world of the free market economics, *the markets work* – it's a matter of faith.

My years in North Carolina were bittersweet – personally as well as professionally. My twin daughters, Sheri and Laura, were born the first summer after we arrived in North Carolina. My wife, Gerry, didn't particularly like North Carolina, mostly the southern culture, but we made some good friends in our housing complex. Charlie Lloyd was a young lawyer with the North Carolina Attorney General's office. He and his wife Sherry had a daughter born at about the same time as our twins. Charlie and I shared a lot of beer, a lot of laughs, and a lot of long conversations about how the world worked, how it ought to work, and what we wanted to do to make it work better. I have always remembered the motto of the NC AG consumer protection division: "the first amendment was never intended to imply a right to intentionally deceive the public."

My starting salary at NCSU was nearly twice as much as I was making when I left Wilson and Co. four years earlier. We certainly were not rich, but we had more money than either of us had ever had in our lives, and life wasn't bad. The illusion of economic affluence is created by increases in income, rather than absolute levels of income, as I would verify for myself several times in my life. Whenever, all of a sudden, you can buy things that you couldn't afford before, you feel rich, no matter how little you have relative to someone else. When you have time to get used to a more affluent lifestyle, you begin to look around at others who have a lot more and begin to feel deprived again. Certainly, poverty is absolute in some situations – when

people are hungry, cold, and unable to fulfill their basic physical needs. But for most of us most of the time, wealth and poverty truly are relative – matters of mind rather than of money.

Eventually, we were able to buy a house in a decent neighborhood and Gerry became president of the community garden club. She led the battle with the developer to get him to dredge the community lake. He had allowed it to fill with sediment while he developed the lots around it, and left the community with growing mud flats where the lake used to be. We helped develop a park on a lake front lot and put up new signs at the entrance to the community. We socialized regularly with the people in the neighborhood, and I played golf occasionally with people on the faculty. We were seemingly settling down to suburban life, but neither of us was actually happy. Somehow, we just didn't fit in North Carolina. We wanted to go back to the Midwest.

I applied for positions at several mid-western universities and in mid-1976 landed a faculty position with Oklahoma State University (OSU) in Stillwater, Oklahoma. Again, I got a nice boost in salary, and we were able to find a nice house at an affordable price in a neighborhood with a community swimming pool and lots of common green space. We experienced a new round of affluence. The kids loved the pool. To them it was like being at an amusement park all summer. Gerry returned to teaching school. Life seemed good again.

OSU was only slightly less conservative than NCSU and I still had no real incentive to question the prevailing economic *wisdom* of free markets. After a couple of years, however, a few economists with liberal leanings began to infiltrate the faculty, increasing the interest of coffee room discussions. One day while checking out a sidewalk bin of discounted books, I came across a copy of The Communist Manifesto by Karl Marx.³ Believe it or not, I had a Ph.D. in Economics but had never been read anything by Karl Marx. Buying such a book in Oklahoma was a bit like buying pornography, but my mind was beginning to open, at least a crack, and I wanted to see what Marx had actually said.

As I began to read Marx's description of the ultimate consequences of capitalism, I began to see the ills of modern American society unfolding in my mind. To my surprise, Marx sang the praises of capitalism, with its specialized production systems, ownership of private property, and reliance on free markets. He called it the most efficient method of organizing the means of production that humanity had ever devised. He wrote that the achievements of capitalism in one century had exceeded the material achievements of humanity in all previous times. But he also wrote of the

inevitable consequences of capitalism's insatiable need for continual innovation and growth and of its necessity to reduce all human relationships to monetary transactions.

Marx claimed that capitalistic industrialization would reduce the role of workers to little more than sophisticated machines, with little, if any, consideration given to their uniquely human qualities. He wrote of the necessity for capitalistic industry to break the ties of people within families, within communities, even within nations, so that people would respond appropriately to economic incentives for innovation and growth. Marx wrote of the insatiable need for industry to grow and always to produce more, not just to meet the needs of the present, but always, to promise more for the future, thus providing incentives for continual change and unending growth. Simply stated, the industrial capitalist must continually search for new resources to be exploited and new people to be brought into the labor force, in a never-ending quest for *more and cheaper stuff*.

If a capitalistic economy stops growing, incentives for new investment are diminished, employment declines, incomes decline, demand for new goods and services decline, profits decline, production declines, and investments decline still further. The economy falls into recession, and eventually sinks into depression – if nothing is done to stimulate new growth. A capitalistic economy must either grow or die. Thus everything else, including people and natural resources, must be sacrificed to maintain economic growth.

Marx claimed that exploitation of workers by capitalists, in this pursuit of continual growth, eventually would create a two-class society. The Bourgeois, the capitalists, who control the means of production, and the Proletarians, the working class, who must either work, for whatever wage under whatever condition they are offered, or starve. Marx claimed the Proletarians eventually would find life intolerable and would revolt against the Bourgeois – thus, opening the door for revolution and political and economic reform.

Marx's solution to all of the ills of capitalism was communism, of course. He was wrong, at least on this count. During the twentieth century, Marxism provided the philosophical foundation for communist revolutions around the world. With the collapse of the former Soviet Union, however, communism lost its credibility as an economic and social system. The failure of communism, however, does not nullify the logic of Marx's observations concerning the ultimate outcome of capitalism. I was never a communist – I never thought that communism could work – but I could see a lot of wisdom in what Marx had to say about capitalism. I always felt, and still

feel, that any wise capitalist should heed Marx's warnings. We must address the basic weakness of capitalism if we are to build a sustainable capitalistic economy.

In a departmental seminar at OSU, I presented my thoughts on Marx and expressed my concern for the sustainability of our current capitalistic economy. This was perhaps my first real digression from the path of conservative economic thinking, a path I had traveled since leaving home as a teenager. I contended that capitalism had survived and succeeded in the U.S. only because we had had the wisdom to moderate capitalism with some strong socialistic influences. Our government had taken some bold steps in the past to restrain the capitalistic corporations and had moderated their impacts both on workers and on society as a whole. In the U.S., some economic functions, such as transportation and education, had always been carried out under government control, if not outright ownership. When the economy had failed to serve society, as in the early 1900s, we had broken up the corporate trusts and encouraged the formation of labor unions. We had protected workers against excessive exploitation by establishing worker health and safety standards and provided for unemployment compensation. For old people without adequate savings who were unable to work, we had established Social Security. In principle at least, neither workers nor consumers in the U.S. were to be exploited for the sake of profit and growth – a principle difficult to enforce but nonetheless important.

Perhaps even more important, we had established a general principle that we would redistribute income and wealth, as necessary, to preclude the development of a two-class society, and thus, unknowingly, perhaps, heading off revolution. It had taken the Great Depression of the 1930s to bring home the reality of a possible economic collapse. But the government eventually had responded wisely, intervened in the economy, and thus, had preserved capitalism – at least for another generation. Without these socialistic influences of our form of capitalism, Marx's predictions quite likely would have come true. In the seminar, I said I thought we were now beginning to move toward Marx's vision of an unrestrained capitalistic society. We were living through the early years of Reaganomics. If we did not reaffirm our commitment to moderating the forces of capitalism, I said, we would again move toward depression, chaos, and revolution.

But I was an agricultural economist, so I didn't dwell much on the theories of Marx in my day-to-day world. The farm financial crisis of the 1980s was falling hard on Oklahomans. Oklahoma's economy at the time was highly dependent on oil, wheat, and cattle. Prices for oil, natural gas, wheat, and cattle had all boomed during the inflationary years of the 1970s.

OPEC's squeeze on global oil supplies had created as much wealth, relatively speaking, in Oklahoma as in the Middle East. Booming export markets took wheat prices to unprecedented highs and the *hamburger society*, led by McDonald's, had boosted the demand and prices for beef cattle.

During the early 1980s, however, it all came crashing down. OPEC lost its grip on oil supplies, agricultural export markets dried up, and Kentucky Fried Chicken took a big bite out of the hamburger market. Oklahoma businessmen and farmers had borrowed heavily at high interest rates to expand production of energy and foodstuffs, and now they were unable to pay back their debts. The Oklahoma economy was in crisis.

I worked mostly with Oklahoma cattlemen. My main job was to help cattlemen anticipate changes in cattle prices so they could make appropriate adjustments in their operations to maximize profits while avoiding large losses. After learning that no one, including me, could forecast cattle prices with any degree of accuracy, I taught cattlemen to use the cattle futures markets to hedge against unexpected adverse price changes, by taking risk positions in future markets to offset the risks they were taking on cattle prices. I was paid by the taxpayers, so I was always aware that taxpayers, not just farmers, were supposed to benefit from my work. If I did my job well, cattlemen would expand production to lower the peaks of rising prices and cut production to raise the valleys when prices were falling. Prices would be more stable, benefiting both consumers and producers. By hedging their prices, cattlemen could manage their production more effectively, and thus, reduce their overall costs of production and keep down the price of beef at retail. I was helping the markets work better for the good of the public – I was a public servant.

At the time, agricultural commodity markets were still pretty competitive, even in the classical economic sense of competitiveness. There were so many farmers and ranchers that no one producer of any single commodity had any measurable impact on the overall markets for the things they sold. Consumer food markets are inherently competitive because there are millions of food buyers. There were far fewer sellers and buyers in the agribusiness sector, where farmers bought their inputs and sold their raw commodities, but farm level markets exhibited many of the characteristics of economic pure competition.

It was relatively easy to get into and out of the farming business. Farm products, wheat, corn, soybeans, hogs, were relatively homogenous. Commodities were sold on the basis of uniform grades and standards, thus one cattleman's Choice beef was pretty much the same as another's, and one

farmer's #1 hard red winter wheat could be mixed with another's. There was very little advertising of basic agricultural commodities. Price information was reported by the government and was spread almost instantly around the country to all buyers and sellers. During the 1980s, the farm economy was not all that different from the economy in general during the days of Adam Smith. Agriculture was the closest thing we had to a true free-market economy.

As an economist, I could see first hand how this kind of market benefited consumers, at least in the short run, but it sure was hard on farmers. Farmers were being driven out of business, farm families were being driven off the land, and rural communities were withering and dying, all as a natural consequence of free-market competition. Only later would I realize that what I saw happening in agriculture, the trend toward ever fewer farmers and ever-larger farms, had already happened in most other sectors of the economy. I knew the same thing had happened to the *mom and pop* grocery stores, but it had also happened to every type of individually owned, family operation that had ever existed in the past. They had all been replaced with large-scale, corporate businesses. Unfortunately, however, economists simply are not taught about this natural evolution of free-market capitalism into industrial corporatism.

Families – moms and pops, and the kids – had all ended up working for large corporations. Families no longer worked together and often didn't even work in the same communities. Individuals no longer made the important decisions concerning what to produce, how to produce, or how much to produce; the important decisions were all made at some corporate headquarters. Industrialization replaced workers with machines and reduced the demand for labor relative to capital. Corporatization consolidated ownership and decision-making and reduced the demand for management and increasing the demand for capital.

Thus, the value of labor was diminished and the value of capital rose as management and control were centralized. Those who had gained access to more capital, the machine operators and the corporate managers, continued to earn more and more while common laborers or owner-operators earned less and less. But, the number of good paying positions also had to shrink as the span of control of each corporate manager continued to grow. There was no logical end to the substitution of capital and labor and the consolidation of management. Those who owned capital found it relatively easy to accumulate still more capital, while those without capital found capital harder and harder to come by.

I was seeing first hand what Marx had written about, capitalism left to pursue its natural course leads to a two-class society – those with capital and those without. Marx thought that capitalism ultimately would be destroyed by revolution, by a struggle between classes. What Marx, and apparently few others, had anticipated was that capitalism, left to pursue its natural course of development, ultimately would use up its natural and human resources and thus eventually would destroy itself. Unbridled capitalism quite simply is not sustainable.

Somehow, I was predisposed to see what was taking place in the economy of agriculture from a perspective different from most of my colleagues – at least during the last half of my professional career. I was willing to question and to doubt the inevitability and desirability of the capitalistic industrial process, while most others were not. I had grown up on a farm, I had operated a small business, and I had worked for a large corporation. All of these things helped shape my later thinking. I also had been able to gain some unique insights from agriculture that I am confident apply to the rest of the American economy as well. I see no reason to believe that other sectors of the economy have not previously followed the same path that agriculture is traveling today.

The promise of profits provides the motive for change in a capitalistic economy. Farmers saw the opportunity to profit from adopting new agricultural technologies – new machines, fertilizers, pesticides, or business management strategies. Each new technology promised lower costs, and thus greater profits, since any farmer's individual actions had no effect on overall market prices. However, these new technologies inevitably allowed each farmer to produce more than before – to farm more land, produce more per acre, to manage more workers, or use more capital. So, as more farmers adopted these new technologies individually, their collective production, which made up total market supply, inevitably began to increase. As total supplies increased, market prices began to fall. The potential for profits likewise declined.

Profits went primarily to the innovators – those willing and able to take the risks of adopting unproven technologies. The early adopters followed the innovators. They realized some profits but less than the innovators as prices continued to fall. The laggards eventually are forced to adopt – not for profits, but for survival – as prices drop below their old, higher costs of production. Those who were unable to adopt, or attempt to adopt too late, were forced out of business by falling prices as production continues to increase. The failure of some was a necessity, so the others could acquire

their land – the land survivors needed to reap the full benefit of the economies of scale offered by the new technologies.

Before farmers had time to adjust, each round of technology was followed by yet another. Each new round of technology resulted in another period of expanding production, falling prices, farm failures, and another round of consolidation. Agricultural economists refer to this process as the technology treadmill. Economists have been aware of this phenomenon for decades, but they have not been overly concerned about it – at least not lately. It's simply the normal process by which gains in efficiency, i.e. benefits from new cost reducing technologies, are passed on to consumers by means of lower prices, so they say.

Economists assume that those who are displaced by any new technology will always be able to find another job elsewhere, where they will be more productive, will be able to contribute more to society, and thus, will be better off than before. Many agricultural economists don't seem all that concerned about displaced farm families or dying rural communities – to economists, these are signs of economic progress. The thing that matters most in economics is how well the economy serves the needs of consumers – how much more *new cheap stuff* the economy is able to produce. Economists, as people, are no less, or more, compassionate than any other group of people. However, as professionals, they are not supposed to allow their personal feelings to interfere with their *economic objectivity*.

During the 1980s, I saw farmers going broke; I saw farm families forced off land that had been farmed by the same families for generations. I met with groups of farmers who were angry with their government, with their universities, and seemingly with everyone, because they felt they had been betrayed. They had done the things that people of influence, including we university people like me, had been telling them to do. They had attempted to adopt the new technologies as quickly as they could, they had borrowed money to mechanize, modernize, and expand, but now they were going broke. I heard about farmers who had committed suicide. I couldn't understand how a farmer could care more about owning a piece of land that they cared about life. But they did.

I saw the boarded up storefronts in rural communities as I traveled about the state. I saw rural communities that were literally withering and dying. Farmers were still producing as much or more than ever before. But, there were no farm profits to be spent in town to buy new machinery, production supplies, new cars or pickups, or new shoes and clothes for the kids. Anything that wasn't deemed absolutely necessary would have to wait for better times. Many eventually came to realize that better times were not

going to return – at least not for them, at least not there. Families who were forced off the farm first looked for work in town, further depressing the local labor market. But eventually they were forced to leave the local community for somewhere else – anywhere they could find a job.

The land is still farmed, but by larger, more industrialized farm operations. Larger operations buy and sell in larger quantities than do smaller family farms. They get premium prices for sales and quantity discounts for purchases when they bypass the local community and deal directly with the large agribusiness processors and input suppliers. So, the local equipment dealers, feed and fertilizer dealers, and marketing agencies suffer along with the family farmers. Soon there aren't enough kids to keep a school open, not enough people to justify a medical clinic, or even a doctor, not enough families to support the churches, or to run for the city council or volunteer for the fire department. The communities dies, or rather is killed. But it's nobody's fault; it's all simply a matter of free-market economics, so they are told.

Why should people in general be interested in the things I have seen happen to farmers? Because over the years, nearly every other segment of the American economy has experienced these same things. The craftspeople of the past were replaced by factory workers because they couldn't keep up with the industrial technology treadmill. The mom and pop grocery stores were replaced by supermarkets, small dry goods and hardware stores were replaced by the giant discount stores, and locally owned restaurants were replaced by franchised fast food joints, because of relentless economic pressures to specialize and standardize to achieve economies of scale. But, this process is not about enhancing the quality of life of people – it is about producing *more cheap stuff*. The underlying assumption is that consumption is all that matters, and if people in total have *more cheap stuff*, society, in general, will be better off. But, this is a belief, not a fact.

This process is about production, not people. It doesn't seem to matter that people suffer from clinical depression, or even commit suicide, because their businesses have failed. Such people are simply assumed to be sick, and thus, irrational. “Why don't they just accept the inevitable and get on with life?” It doesn't seem to matter that families are destroyed through disappointment and conflict emerging out of economic failure. It doesn't seem to matter that communities are destroyed by economic *progress*. No one seems to recognize that quality of life may be diminished, even for those who are able to hang on and weather the latest economic *adjustment*. It doesn't seem to matter that people abuse each other and abuse the land, in their desperate attempts to survive the turmoil that is not of their own

making. Consumer prices fall, and the overall economy keeps growing. That's all that seems to matter to those who are in positions of influence and power. The process of consolidation is a fundamental characteristic of the capitalistic economic system, and America seems committed to the illusion of sustainable capitalism.

But perhaps more important, specialization, standardization, and consolidation are the processes by which an economy comes under corporate control – by which the economy moves from capitalism to corporatism. The corporatization of agriculture would not become apparent until the 1990s, but it should have been anticipated from the earlier industrialization of other sectors of the economy. As consolidation leads to larger and larger business organizations, it becomes more and more difficult to amass sufficient capital to achieve potential economics of scale. Thus, surviving businesses are forced to incorporate in order to accumulate sufficient capital.

At first corporations will tend to be family corporations, thus making capital accumulated during one generation available to the next generation. As the enterprises become still larger, it becomes difficult for most family operations to accumulate sufficient capital to finance further expansion. Eventually, the successful corporation will have to go public, by selling shares to the public to raise more investment capital. As the now public corporation continues to grow, it begins to look to consolidation with some other corporation as a means of expanding even faster. And as corporations grow still larger and fewer, through the process of consolidation, fewer firms will control an increasing share of total output, and markets will become less competitive. Beyond some point, the market will no longer be competitive – at least not in an economic sense.

This is precisely the process by which the U.S. economy has gone from capitalist to corporatism. In Adam Smith's day business enterprises were almost entirely small individual proprietorships, with families providing the management and, oftentimes, most of the labor. As production practices became more specialized and standardized, the optimum size of business operations expanded to achieve economies of scale. Larger businesses required more capital – often more than could be supplied by a single family. The corporate business structure allowed virtually unlimited access to capital as businesses continued to grow ever larger. Increasingly, the sole motivation of corporate investors became profits and growth – with little, if any, sense of social or ethical responsibilities of ownership.

Today, huge multi-national corporations dominate national and global economies, with the majority of their stock held by pension funds, mutual funds, and other forms of impersonal investment. Many such investors have

no clue as to how many shares of what companies they own. They are concerned with maximizing the growth in value of their hard-earned investments. Today's economy doesn't even vaguely resemble the economy of Adam Smith's free-market capitalism. Capitalism has been transformed into corporatism.

The corporatization of agriculture today is being achieved primarily through contractual arrangements between producers and corporate agribusiness; but corporations are nonetheless gaining control of agricultural production. Agriculture today seems to be following the corporate franchising model, with corporations making all of the important decisions – they decide what is produced, how much is produced, and who gets to produce it – and the franchisee taking most of the local investment risks. As more and more agricultural commodities are produced to fulfill corporate contracts, fewer commodities change hands in open markets, corporations gain increasing market power, and independent producers lose access to competitive markets.

Economically competitive markets provide the conceptual foundation for the economic concept of capitalism. Without competitive markets, individual ownership of resources will not ensure that resources are developed and allocated for the benefit of society. Without economic competition, markets cannot transform the pursuit of self-interest into the greatest public good. Without competitive markets, less involvement by the government simply allows a capitalistic economy to deteriorate more rapidly into corporatism. Competitive markets in agriculture represented the last vestiges of free market capitalism, and now they are quickly disappearing. Clearly, the U.S. economy is no longer has a capitalistic economy.

Capitalism has been replaced by corporatism. The prevailing belief that a corporatist economy is capable of meeting the long run needs of society has no theoretical economic foundation. Corporations are designed to amass capital – to generate profits and to grow. Corporations facilitate industrialization, and thus, facilitate production of ever-increasing quantities of *cheap stuff*, but there is no reason to believe that they are producing the *right stuff*. The *invisible hand* works only with competitive capitalism, not with corporatism.

There is no reason to believe that corporations will show any consideration for the social and ethical values of a society, unless to do so somehow contributes to the profit and growth of the corporation. The government is the only logical source of social and ethical constraints on antisocial and unethical corporate behavior. Such constraints inevitably limit the corporation's ability to make profits and to grow. Thus, corporations will

seek every means available to reduce or remove such constraints – including the buying and selling of elections, politicians, and appointed public officials.

With growing numbers of multi-national corporations, the global economy is coming under the control of a system of economic organization that no one understands or knows how to control. There is no theoretical foundation for the corporatist system to be found in any economics textbook and probably not even among obscure journal articles. Economists deal with the economy today as if it were competitive capitalism. Clearly, it is no longer either competitive or capitalistic. We are currently in the midst of a great economic experiment – an experiment being carried out under the influence, if not outright control, of non-human corporate entities. For humans to regain control of this experiment, we quite likely will have to dismantle the corporations, and we are seemingly unwilling even to consider such an action, at least not in response to anything short of a global catastrophe. It's time for revolution.

¹ Adam Smith. An Inquiry Into The Nature and Causes of Wealth Among Nations. Edited by J.R. M'Culloch. Edinburgh: Adam and Charles Black; and Longman, Brown, Green & Longmans. London, England.

² J. M. Keynes. 1936. General Theory of Employment, Interest, and Money. Harcourt Brace. New York, NY.

³ Karl Marx. 1848. The Communist Manifesto. Republished in 1964 by Pocket Books, Simon Schuster, New York, NY.